

ATTACHMENT A

FACT SHEET FOR

RENEWED WASTE DISCHARGE REQUIREMENTS AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR STORM WATER/URBAN RUNOFF DISCHARGES FROM EL DORADO COUNTY, PLACER COUNTY, AND THE CITY OF SOUTH LAKE TAHOE

**ORDER NO. R6T-2017-0010
NPDES NO. CAG616001**

Pursuant to the requirements of section 124.8 and 124.56 of title 40 the Code of Federal Regulations (CFR), this Fact Sheet briefly sets forth the principal facts and the significant factual, legal, methodological and policy questions considered in preparing the draft permit.

Background

In 1972, the federal Water Pollution Control Act (also referred to as the Clean Water Act [CWA]) was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a NPDES permit. The 1987 amendments to CWA added section 402(p), which established a framework for regulating storm water discharges under the NPDES Program. Subsequently, in 1990, the U.S. Environmental Protection Agency (U.S. EPA) promulgated regulations for permitting storm water discharges from industrial sites (including construction sites that disturb five acres or more) and from municipal separate storm sewer systems (MS4s) serving a population of 100,000 people or more. (40 C.F.R. 122.26.) These regulations, known as the Phase I regulations, require operators of medium and large MS4s to obtain storm water permits. On December 8, 1999, U.S. EPA promulgated regulations, known as Phase II, requiring permits for storm water discharges from Small MS4s and from construction sites disturbing between one and five acres of land. (40 C.F.R. 122.30 - 122.37.) The Phase I regulations provide that States, such as California, with approved NPDES programs, may require any discharger who contributes to a violation of water quality standards or is a significant contributor of pollutants to waters of the United States to obtain storm water permits regardless of population size. (40 C.F.R. 122.26(a)(v).)

Portions of El Dorado County and Placer County and the entire jurisdiction of the City of South Lake Tahoe (hereafter referred to as “municipalities,” “urban jurisdictions” or “Permittees”) lie within the Lake Tahoe Hydrologic Unit. Because Lake Tahoe is an Outstanding National Resource Water negatively impacted by urban runoff discharged from these municipalities, the Lahontan Regional Water

Quality Control Board adopted Order 6-92-02 in January 1992 as part of the Phase I NPDES program to regulate MS4s on the California side of the Lake Tahoe watershed. The NPDES Storm Water Permit provided the Water Board a mechanism to work with the local municipalities to improve storm water management practices in the Tahoe area.

Legal Authority

The CWA authorized the USEPA to permit a state to serve as the NPDES permitting authority in lieu of the USEPA. The State of California has in-lieu authority for the NPDES program. The Porter-Cologne Water Quality Control Act authorized the State Water Resources Control Board (State Board), through the Water Boards, to regulate and control the discharge of pollutants into waters of the State. The State Board entered into a Memorandum of Agreement with the USEPA on September 22, 1989 to administer the NPDES Program governing discharges to waters of the United States.

The terms of this permit solely implement the federal requirements under the CWA sections 402(p) and 303(d), and the associated regulations.

Lake Tahoe Total Maximum Daily Load

Lake Tahoe is designated an Outstanding National Resource Water (ONRW) by the State Board and the USEPA due to its extraordinary deep water transparency. However, the lake's deep water transparency has been impaired over the past four decades by increased fine sediment particle inputs and stimulated algal growth caused by elevated nitrogen and phosphorus loading.

The Water Board, and the Nevada Division of Environmental Protection (NDEP) developed the bi-state Lake Tahoe Total Maximum Daily Load (TMDL) to identify the pollutants responsible for deep water transparency decline, quantify the major pollutant sources, assess the lake's assimilative capacity, and develop a plan to reduce pollutant loads and restore Lake Tahoe's deep water transparency, as measured by the Secchi depth, to the annual average levels recorded in 1967-1971.

The ongoing decline in Lake Tahoe's water quality is a result of light scatter from fine sediment particles (primarily particles less than 16 micrometers in diameter) and light absorption by phytoplankton. The addition of nitrogen and phosphorus to Lake Tahoe contributes to phytoplankton growth. Fine sediment particles are the most dominant pollutant contributing to the impairment of lake waters, accounting for roughly two thirds of the lake's impairment. Consequently, fine sediment particles, total nitrogen, and total phosphorus are the pollutants of concern at Lake Tahoe.

To achieve the transparency standard, estimated fine sediment particle, phosphorus, and nitrogen loads must be reduced by 65 percent, 35 percent, and 10 percent, respectively. Given the magnitude of the needed load reductions and the current available understanding of load reduction options, achieving the load reductions needed to meet the transparency standard is expected to take 65 years. A 20-year interim transparency goal, known as the Clarity Challenge, requires basinwide pollutant load reductions to be achieved within 15 years, followed by five years of monitoring to confirm that 24 meters of Secchi depth transparency has been reached. Implementation efforts must reduce basin-wide fine sediment particle, phosphorus, and nitrogen loads by 32 percent, 14 percent, and 4 percent, respectively, to achieve this goal.

The TMDL pollutant source analysis identified runoff from urban land uses as the primary source of fine sediment particle loading to Lake Tahoe, and the pollutant load allocations establish needed pollutant load reductions as a percent reduction from baseline pollutant load levels. The most significant and currently quantifiable load reduction opportunities are within the urban land uses. Because urbanized areas discharge the overwhelming bulk of the average annual fine sediment particle load reaching Lake Tahoe, much of the load reductions must be accomplished from this urban upland source. Even if it were feasible to completely eliminate the fine sediment particle load from the other three sources, (forest upland, atmospheric deposition, and stream channel erosion), the transparency standard would never be met.

Consequently, the Lake Tahoe TMDL implementation plan emphasizes actions to reduce fine sediment particle and associated nutrient loading from urban storm water runoff. Due to the magnitude of both the pollutant source and related control opportunities, the Water Board has devoted time and resources to develop detailed tools and protocols to quantify, track, and account for pollutant loads associated with urban runoff.

This NPDES Storm Water Permit is an important implementation tool that holds the municipal jurisdictions on the California side of the Lake Tahoe Basin accountable for achieving water quality improvements required by the Lake Tahoe TMDL. The Permit is also critical for maintaining consistency with the implementation tracking effort on the Nevada side of Lake Tahoe.

The renewed NPDES Storm Water Permit implements the second five-year pollutant load reduction milestone established by the Lake Tahoe TMDL. To ensure progress at achieving water quality improvement goals, the renewed Permit includes an interim compliance point at the second year of the permit term. The renewed permit also accelerates the TMDL five-year target into a four-year compliance point to ensure load reductions can be verified within the permit term.

Baseline Load Estimates

The Lake Tahoe TMDL expresses waste load allocations for the urban upland source as percent reductions from a basin-wide baseline pollutant load. The basin-wide baseline pollutant load reflects conditions as of water year 2003/2004 (October 1, 2003 – September 30, 2004). To translate basin-wide waste load allocations for urban runoff into jurisdiction-specific waste load allocations for each of the municipalities, the Water Board required each of the municipalities to conduct a jurisdiction-scale baseline load analysis as the first step in the TMDL implementation process. To ensure comparability between the basin-wide baseline pollutant load estimates and the jurisdiction-scale baseline pollutant load estimates, municipalities have used a set of standardized baseline condition values consistent with those used to estimate the 2003/2004 basin-wide pollutant loads. Specifically, baseline pollutant load estimate calculations reflect infrastructure, land development conditions, and operations and maintenance practices that were in effect in October 2004. Due to the differences in analyzing hydrology at basin-wide and jurisdiction-specific scales, different modeling tools were needed to estimate average annual baseline pollutant loads.

The Pollutant Load Reduction Model (PLRM) provides pollutant load estimates at an appropriate scale for assessing jurisdiction-specific baseline fine sediment, total nitrogen, and total phosphorus loads. With guidance in support from the Permittees, the PLRM was revised during the previous permit term to better align roadway assessment methods with model variables and to address identified user inefficiencies. The Permittees re-assessed previously developed jurisdiction-specific baseline pollutant load estimates using the updated model version and provided revised values to the Water Board for inclusion in the renewed permit. The updated baseline load numbers were used to re-calculated needed load pollutant load reduction using percentages specified by the Lake Tahoe TMDL. In most instances the overall adjustment was minor.

Table IV.B.1 of the permit identifies the most recent baseline pollutant load estimates for each municipality and sets out the allowable load.

Lake Clarity Crediting Program

The Lake Clarity Crediting Program provides a system of tools and methods to allow urban jurisdictions to link projects, programs, and operations and maintenance activities to estimated pollutant load reductions. In addition to providing a consistent method to track compliance with TMDL pollutant load reduction requirements, the Lake Clarity Crediting Program provides specific technical guidance for calculating jurisdiction-scale baseline load estimates. The Lake Clarity Crediting Program makes use of cutting-edge numeric modeling tools and field inspection methods to estimate water quality benefits and link modeled estimates to actual on-the-ground conditions. This program, the first of its kind in the nation, provides a robust method to hold municipalities responsible

for required water quality improvements and offers transparent protocols for demonstrating progress.

This NPDES Storm Water Permit requires the municipalities to use the Lake Clarity Crediting Program Handbook (Attachment D) to assess compliance with load reduction requirements specified in the Lake Tahoe TMDL (Attachment B).

Pollutant Load Reduction Plans

The Lake Tahoe TMDL requires Lake Tahoe basin municipalities to develop and implement comprehensive Pollutant Load Reduction Plans (PLRPs) describing how proposed operations and maintenance activities, capital improvements, facilities retrofit projects, ordinance enforcement, and other actions will meet required pollutant load reduction requirements. PLRPs provide the Permittees the opportunity to prioritize pollutant load reduction efforts and target sub-watersheds, or catchments that generate the highest annual average pollutant loads in a cost effective manner.

By necessity, the PLRPs are expected to provide only a general implementation plan that identifies specific catchments targeted for implementation and expected load reduction measures. The Permit requires the municipalities to estimate the anticipated cumulative water quality benefit over a five year period and support those estimates with representative modeling results. As implementation progresses, these estimates will be refined as the municipalities declare credits pursuant to the Lake Clarity Crediting Program. Over time, the Permittees will likely need to adjust their individual PLRPs to reflect updated information regarding implementation progress and load reduction estimate refinement.

This NPDES Storm Water Permit implements the requirement to develop and submit PLRPs consistent with Lake Tahoe TMDL requirements. While the PLRPs do not alter pollutant load reduction requirements or other performance standards, they do describe the municipalities' proposed methods and plans to achieve compliance with pollutant load reduction requirements and associated mass- and particle-based effluent limits listed in Section IV.B of the Permit.

Order R6T-2011-0101A required the Permittees to develop and submit detailed PLRPs consistent with Lake Tahoe TMDL requirements. The Permittees submitted the necessary documents by March 15, 2013. Water Board staff reviewed the submitted PLRPs, circulated them for public comment, and brought them before the Water Board for approval at its June 2013 meeting.

Order R6T-2011-0101A also required the Permittees to submit preliminary PLRPs prior to the 2016 permit expiration date. Although the preliminary plans provide a framework for achieving the next load reduction milestone, the renewed permit requires the Permittees to conduct a more robust update during the first year of the permit term.

Section IV.A of the Monitoring and Reporting Program requires the Permittees to annually assess PLRP progress and, if necessary, propose changes.

Control of Pollutants of Concern

The CWA provides that storm water permits for MS4 discharges shall contain controls to reduce the discharge of pollutants to the “maximum extent practicable including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.” (CWA 402(p)(3)(B)(iii).) Under this provision, the Water Board has the authority to include requirements for reducing pollutants in storm water discharges as necessary for compliance with water quality standards. (*Defenders of Wildlife v. Browner*, 191 F.3d 1159, 1166 (9th Cir. 1999).)

Where MS4 discharges have the reasonable potential to cause or contribute to a water quality standard excursion, EPA recommends that MS4 permits “place a greater emphasis on clear, specific measurable permit requirements” and, where feasible, that MS4 permits include numeric effluent limitations.” (“Revisions to the November 22, 2002 Memorandum ‘Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs’,” November 26, 2014 (hereafter referred to as “US EPA 2014 Memorandum”), at pp. 2, 5.)) “[N]umeric’ effluent limitations refer to limitations with a quantifiable or measurable parameter related to a pollutant (or pollutants). Numeric WQBELs may include other types of numeric limits in addition to end-of-pipe limits. Numeric WQBELs may include, among others, limits on pollutant discharges by specifying parameters such as on-site storm water retention volume or percentage or amount of effective impervious cover, as well as the more traditional pollutant concentration limits and pollutant loads in the discharge” (US EPA 2014 Memorandum at p. 4, fn. 5.). The purpose of including numeric requirements is “to establish a more objective and accountable means for reducing pollutant discharges that contribute to water quality problems” (US EPA 2014 Memorandum at p. 5.). The numeric load reduction requirements in this NPDES Storm Water Permit provide the referenced “objective and accountable means” that effectively link Permittee actions to expected water quality benefit and track progress in restoring Lake Tahoe’s historic transparency.

Where a State or EPA has established a TMDL for an impaired water that includes WLAs for storm water discharges, permits for MS4 discharges must contain effluent limits and conditions consistent with the requirements and assumptions of the WLAs in the TMDL. (40 CFR 122.44(d)(1)(vii)(B).) U.S. EPA recommends that WLAs for NPDES-regulated storm water discharges should be disaggregated into specific categories, as was done for the Lake Tahoe TMDL (US EPA 2014 Memorandum at p. 7). WLAs were established for four source categories – urban uplands, forest uplands, atmospheric deposition, and stream

channel erosion. This permit maintains particle- and mass-based effluent limits for fine sediment particles, total nitrogen, and total phosphorus based on requirements in the Lake Tahoe TMDL. By defining water quality improvement requirements in terms average annual loading of the pollutants of concern, this renewed permit is consistent with recent US EPA guidance and provides a direct link to the transparency impairment, the Lake Tahoe TMDL, and all associated research and monitoring findings.

Heavy metals, pesticides, and pathogens are typically of concern in MS4 discharges. Extensive monitoring conducted as required by previous NPDES Storm Water Permits concluded these common storm water pollutants are not prevalent in Lake Tahoe urban runoff. Furthermore, the receiving waters in the Lake Tahoe Hydrologic Unit are in attainment with all applicable water quality standards and there is no evidence storm water discharges are causing or have reasonable potential to cause or contribute to beneficial use impairment other than transparency loss. The stringent control actions required to achieve pollutant load reductions for fine sediment particles, total nitrogen, and total phosphorus will prevent any unanticipated increase in the discharge of metals, pesticides, and pathogens.

Under State Water Board precedent, MS4 permits must include numeric receiving water limitations (Order WQ 99-05 (*Environmental Health Coalition*)). Where dischargers need time to meet receiving water limitations, a permit can allow permittees to meet those limitations through an alternative compliance path that ensures an appropriate level of “rigor, transparency and accountability.” (Order WQ 2015-0075 (*MS4 Discharges Within the Coastal Watersheds of Los Angeles County*), p. 33.) The alternative compliance path must be as short as possible. (See *id.*, pp. 34-35, 60.) Order WQ 2015-0075 recognizes that the alternative compliance path approach in the Los Angeles permit is not appropriate for every situation.

This permit is unique in California as the only MS4 Permit that primarily regulates discharges to an ONRW. The TMDL load reduction effluent limitations and associated requirements already incorporate a compliance path toward meeting the water quality standards for lake clarity, total nitrogen and phosphorus. Dischargers in Nevada and California are implanting this program through a cooperative, bi-state process with U.S. EPA. The TMDL program requires compliance with interim load reduction requirements based on estimates of BMP performance developed through the Lake Clarity Crediting Program, and not on in-stream or end-of-pipe water quality measurements. These requirements are equivalent to the alternative compliance path the State Water Board upheld in Order WQ 2015-0075. No alternative compliance path is necessary or appropriate for meeting receiving water limitations for non-TMDL constituents. The Permittees are already in compliance with those limitations and do not need time to implement new stormwater controls to avoid immediate non-compliance.

Storm Water Management Plans

To provide consistency with federal regulations (40 CFR 122.26(d)(2)(iv)) and address deficiencies noted by a United States Environmental Protection Agency audit of Order 6-00-82, the primary goal of the previous NPDES Storm Water Permits (R6T-2005-0026 and R6T-2011-0101A) was to require the Permittees to develop and implement comprehensive storm water management programs. The previous permits required the jurisdictions to prepare and implement a Storm Water Management Plan to (1) continue erosion control and storm water treatment project implementation; (2) inspect and control runoff from construction, industrial, commercial, and residential sites; (3) develop a storm water education program for municipal staff and the public; (4) detect and eliminate illicit discharges; (5) provide for public participation; (6) assess program effectiveness; (6) inspect roadways and other municipal storm water facilities; (7) manage traction abrasive and deicing application and recovery; and (8) evaluate program funding needs and provide fiscal management plan.

Order R6T-2011-0101A required the Permittees to submit updated Storm Water Management Plans to align programmatic efforts with permit requirements. The three Permittees submitted plans by October 1, 2013 as required. Water Board staff reviewed the submitted material and found the plans compliant with permit requirements, posted the plans on the Water Board website for public access, and accepted the plans as submitted.

The 2013 Storm Water Management Plans provide the needed programmatic framework for implementing necessary storm water management activities, and Section III.B of this renewed permit requires the Permittees to continue implementing current programs and revisit and update their existing Storm Water Management Plans as needed.

Monitoring Requirements

The Lake Clarity Crediting Program relies on numeric modeling tools to provide estimates of average annual pollutant loading and of water quality benefit associated with various management strategies. A series of condition assessment methods have been developed to link on-the-ground field conditions to model input variables to determine whether actual treatment facility and roadway conditions are consistent with modeled assumptions. Monitoring and Reporting Section I.E requires Permittees to conduct condition assessments of all roadways and runoff treatment facilities consistent with established methods for all catchments registered under the Lake Clarity Crediting Program. By emphasizing field condition assessments, the Permit requires the Permittees to focus limited staff resources on gathering meaningful information to verify model estimate parameters. If field conditions are consistent with modeled variables, then it is more likely that actual pollutant loading is consistent with modeled pollutant load estimates.

Effective implementation and pollutant load reduction tracking requires a well-designed water quality monitoring program that can be applied with an adaptive management framework. The Lake Tahoe Regional Storm Water Monitoring Program (RSWMP) was developed to meet this purpose for urban storm water. In collaboration with Lake Tahoe basin stakeholders and agency representatives, the RSWMP established a series of goals and objectives to guide urban storm water monitoring, crafted a detailed Framework and Implementation Guidance document, and prepared and implemented an effective monitoring program on behalf of the Permittees.

The Permit requires Permittees to continue supporting the RSWMP effort to gather data at a catchment scale to help assess whether modeled water quality improvements are being realized and monitor the effectiveness of selected water quality improvement practices to inform model input parameters and improve treatment facility design and operations and maintenance efforts. Data collection conducted by RSWMP with Permittee support provides critical data to inform future TMDL and NPDES Storm Water Permit programmatic adjustment and evaluate long-term load reduction accomplishments.

Anti-degradation Objective

On October 28, 1968, the State Water Resources Control Board adopted Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California," establishing a policy for the protection of water quality. This policy, referred to in the Basin Plan as the Anti-degradation Objective, requires continued maintenance of existing high quality waters.

Under the Anti-degradation Objective, whenever the existing quality of water is better than that needed to protect all existing and probable future beneficial uses, the existing high quality shall be maintained until or unless it has been demonstrated to the State that any change in water quality will be consistent with the maximum benefit of the people of the State, and will not unreasonably affect present and probable future beneficial uses of such water. Therefore, unless these conditions are met, background water quality concentrations (the concentrations of substances in natural waters as they existed in 1968, when the degradation policy was adopted, that are unaffected by waste management practices or contamination incidents) are appropriate water quality goals to be maintained. In accordance with 40 CFR 131.12(a)(3), no permanent or long term reduction in water quality is allowed in areas, like Lake Tahoe, that have been given special protection as Outstanding National Resource Waters.

Storm water discharges from the municipal jurisdictions are contributing to the degradation of Lake Tahoe's transparency, which violates the above-referenced objective, as documented by the Lake Tahoe TMDL. This NPDES Storm Water

Permit is intended to improve storm water quality and reduce the negative impacts associated with urban runoff.

Public Participation

The Lahontan Water Board encourages public participation in the Permit adoption process. This proposed Municipal NPDES Permit has been developed for review and comment by the public. As a step in the Water Board approval process, the Lahontan Water Board staff developed a “tentative” Permit for circulation and engaged directly with co-permittees and interested stakeholders during the 45-day comment period.

Notification of Interested Parties

On January 6, 2017 the Water Board notified dischargers, interested agencies, and other interested parties of its intent to renew the Municipal NPDES Permit for storm water discharges from the City of South Lake Tahoe and portions of El Dorado and Placer Counties within the Lake Tahoe Hydrologic Unit. The Water Board provided interested parties with the opportunity to submit written comments and recommendations on the draft tentative permit by February 20, 2017. Notification was provided through electronic mailing, list serve system emails, and posting on the Lahontan Water Board website. Lahontan Water Board staff made non-substantive adjustments to the permit based on comments received on the tentative draft. On February 24, 2017 the Lahontan Water Board notified dischargers, interested agencies, and other interested parties of the Water Board’s intent to consider adopting the revised permit at its March 9, 2017 meeting in South Lake Tahoe. Notification was provided through mailing, list serve system emails, newspaper notifications, and posting on the Lahontan Water Board website.

Public Workshop

The Lahontan Water Board conducted a public workshop on November 10, 2017 to discuss issues relating to the Permit renewal process with the Board and interested parties.

Public Hearing

The Lahontan Water Board has scheduled a public hearing to consider adopting the renewed permit. The Board meeting is scheduled as follows:

Date: March 9, 2017
Time: 8:30 AM
Location: Lahontan Water Board Annex Hearing Room
971 Silver Dollar Avenue
South Lake Tahoe, CA 96150

Interested persons are invited to attend. At the public meeting, the Lahontan Water Board will hear testimony, if any, pertinent to the discharge and the Permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. The public can access the current agenda for changes in dates and locations at the Water Board website: www.waterboards.ca.gov/lahontan

Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Lahontan Water Board regarding the final Permit. The petition must be submitted within 30 days of the Lahontan Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

Information and Copying

The proposed Permit, comments received, and other information are on file and may be inspected at the Lahontan Water Board at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday, at 2501 Lake Tahoe Boulevard, South Lake Tahoe, CA 96150. Copying of documents may be arranged through the Lahontan Water Board by calling (530) 542-5400.

Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Lahontan Water Board, reference this Permit, and provide a name, email address, and phone number.

Additional Information

Requests for additional information or questions regarding this order should be directed to Robert Larsen, Senior Environmental Scientist, at 530-542-5439 or by email at Robert.Larsen@waterboards.ca.gov.