

State of California  
Regional Water Quality Control Board  
San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT  
April 15, 2015

- ITEM: 8
- SUBJECT: Basin Plan Amendment: A Tentative Basin Plan Amendment to incorporate the *State Water Quality Control Policy for Onsite Wastewater Treatment Systems* (OWTS Policy), to change nitrate water quality objectives for groundwater basins in the San Diego Region, and to make necessary non-substantive changes to the Basin Plan. (Tentative Resolution No. R9-2015-0008) (*Jody Ebsen and Fisayo Osibodu*)
- PURPOSE: To consider adopting Tentative Resolution No. R9-2015-0008 (Tentative Resolution) which will amend the *Water Quality Control Plan for the San Diego Basin (9)* (Basin Plan) by incorporating the OWTS Policy, changing the nitrate water quality objective for groundwater basins, and making non-substantive changes to the Basin Plan.
- RECOMMENDATION: Adoption of Tentative Resolution No. R9-2015-0008 (Supporting Document No. 1) is recommended.
- KEY ISSUES:
1. The Basin Plan Amendment incorporates the OWTS Policy (Supporting Document No. 2) including a waiver of the requirement to obtain waste discharge requirements (WDRs) for OWTS that comply with applicable sections of the OWTS Policy.
  2. The Basin Plan Amendment changes the nitrate water quality objective for groundwater to 45 mg/L nitrate as NO<sub>3</sub>, which makes the Basin Plan consistent with the level of groundwater quality protection included in the OWTS Policy. The proposed change will facilitate implementation of the OWTS Policy and is also anticipated to facilitate broader uses of recycled water in the San Diego Region.
  3. The Basin Plan Amendment adds implementation measures in Chapter 4, which apply to various types of discharges to prevent the discharges from adversely affecting surface water quality where groundwater and surface water are interconnected.

**PRACTICAL VISION:** This project is part of the San Diego Water Board's Practical Vision chapter on the need to create a sustainable local water supply. This project also follows the goals of the Practical Vision chapter on public outreach and communication by ensuring that the Basin Plan contains updated information consistent with the values of transparency and communication.

**DISCUSSION:** The proposed Amendment makes the following revisions to the Basin Plan (see attachment to the Tentative Resolution):

1. Revises Chapter 4 (Implementation) to incorporate the OWTS Policy into the Basin Plan.
2. Revises Chapter 3 (Water Quality Objectives) to establish the groundwater quality objective for nitrate in all hydrologic areas/subareas with numeric objectives, except in the Warner Valley Hydrologic Area, at 45 mg/L nitrate as NO<sub>3</sub>, which is the maximum contaminant level for drinking water. This will affect hydrologic areas/subareas where the numeric objectives are currently less than 45 mg/L nitrate as NO<sub>3</sub>.
3. Revises Chapter 4 (Implementation) to add implementation provisions to protect surface water quality where groundwater and surface water are interconnected.
4. Revises Chapter 5 (Plans and Policies) to include descriptions of various State Water Board policies.
5. Deletes the expired conditional waivers of waste discharge requirements from the Basin Plan, updates the "Discharges of Waste to Land" section to incorporate references to applicable requirements from California Code of Regulations;<sup>1</sup> and makes other minor non-substantive changes to the Basin Plan.

The proposed key modifications to the Basin Plan are described below:

#### **Incorporation of the OWTS Policy in the Basin Plan**

The OWTS Policy establishes a statewide risk-based, tiered approach for the regulation, management, design, and operation of OWTS. OWTS are used to treat domestic wastewater from residences and commercial and industrial establishments that are not connected to community sewer systems and/or municipal wastewater treatment plants. OWTS are typically used in residential and commercial developments located in rural parts of

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<sup>1</sup> California Code of Regulations: Title 27 – discharges of non-hazardous wastes to land and Title 23, Chapter 15 – discharges of hazardous wastes to land.

San Diego County outside the County Water Authority service area. Southern Riverside County (e.g., the Temecula Wine Country, Anza, and Aguanga) is also dependent upon OWTS to treat and dispose of domestic wastewater.

Implements State Policy. The OWTS Policy requires the Regional Boards to consider a Basin Plan Amendment to incorporate the policy in their Basin Plans. The proposed Basin Plan Amendment incorporates the OWTS Policy into the Basin Plan, and amends the criteria to be used by the San Diego Water Board and local agencies to regulate OWTS in the San Diego Region.

Conditional Waiver of WDRs. An OWTS that meets the criteria of one of the five tiers in the OWTS Policy is eligible for the conditional waiver of WDRs, which defers regulation of the OWTS to a qualifying local county agency. The proposed Basin Plan Amendment also allows the San Diego Water Board to waive WDRs for advanced or supplemental treatment systems, provided they meet applicable design criteria for these systems.

Local Agency Management Plans (LAMPs). Local agencies may prepare Local Agency Management Plans (LAMPs) for approval by the affected Regional Water Board. LAMPs allow qualifying local agencies to regulate the installation of new and replacement OWTS, up to a design flow of 10,000 gpd or less. The County of San Diego Department of Environmental Health (San Diego DEH) submitted a LAMP that has been released for public comment and is under consideration for approval by the San Diego Water Board Executive Officer. The County of Riverside Department of Environmental Health is developing a LAMP for Riverside County.

The OWTS Policy establishes minimum criteria for siting, operation and design requirements for OWTS. The San Diego DEH LAMP also requires that supplemental or advanced treatment systems be utilized that must achieve at least a 50 percent total reduction in nitrogen for larger projects with estimated design flows between 3,500 to 10,000 gpd. Use of conventional OWTS for projects with design flows between 3,500 to 10,000 gpd will only be allowed by the San Diego DEH LAMP, if the Discharger submits an evaluation to the San Diego DEH completed by a qualified professional that demonstrates that the discharge from the OWTS will not adversely affect groundwater quality.

**Changes Groundwater Quality Objective for Nitrate to 45mg/L**

The Basin Plan Amendment (in Table 3-3 of Chapter 3) proposes to make the groundwater quality objective consistent with the State maximum contaminant level (MCL) for drinking water at 45 mg/L nitrate as NO<sub>3</sub> in all but one of the hydrologic areas/subareas in the San Diego Region. This would raise the groundwater quality objective where it is currently established below 45 mg/L nitrate as NO<sub>3</sub>, with the exception of the Warner Valley Hydrologic Area. Groundwater quality objectives for nitrate in hydrologic areas/subareas with numeric water quality objectives are set at 5, 10, 15, or 45 mg/L nitrate as NO<sub>3</sub>. The proposed change to the groundwater quality objective for nitrate is necessary in order to:

1. Allow the San Diego Water Board to incorporate the OWTS Policy into the Basin Plan and utilize the conditional waivers of WDRs contained in the OWTS Policy. The State Water Board's environmental analysis for the OWTS Policy evaluated nitrate impacts using the State's MCL for drinking water at 45 mg/L nitrate as NO<sub>3</sub>. If the more stringent nitrate water quality objectives in the Basin Plan are not relaxed to the MCL, the San Diego Water Board would have to develop justification for keeping those water quality objectives and develop its own waiver for OWTS capable of achieving the more stringent water quality objectives in receiving groundwater or issue WDRs for these systems.
2. Encourage the wider use of recycled water by reducing the cost to produce recycled water. Raising the groundwater quality objectives for nitrate is expected to facilitate increased use of recycled water as it will reduce or eliminate additional costs incurred by dischargers to meet the more stringent water quality objectives for nitrate in groundwater and install supplemental treatment processes at water reclamation facilities. Raising the groundwater quality objective for nitrate would also allow the San Diego Water Board to streamline permitting by developing WDRs that establish consistent discharge specifications that can be reasonably achieved for nitrogen.

**Protection of Surface Water and Groundwater Quality**

For areas where groundwater and surface water are interconnected (e.g., with gaining streams), the Basin Plan Amendment proposes additional implementation measures to Chapter 4, which apply to various types of discharges that may contribute nitrate to groundwater. The purpose of the proposed

implementation measures is to give permit writers guidance on example management measures that may be useful to prevent the identified discharges from adversely affecting groundwater and/or interconnected surface water quality. Discharges that may contribute nitrogen to groundwater include: discharges to land from wastewater treatment systems, discharges from agricultural and nursery operations, discharges from animal feeding operations, and discharges of recycled water for landscape irrigation operations.

In other areas where sensitive water quality issues exist (e.g., proximity to surface water reservoirs, groundwater recharge basins), the San Diego Water Board may develop WDRs that require a reduction in total nitrogen loads, implementation of best management practices/management measures, and/or compliance with more stringent discharge specifications to protect local surface water quality.

### **Substitute Environmental Document/CEQA Compliance**

The San Diego Water Board is the lead agency for this project under CEQA and is responsible for evaluating the environmental impacts of the project and preparing the necessary environmental documents.

In compliance with State Water Board's CEQA implementation regulations for this project, a Substitute Environmental Document (SED) has been prepared (Supporting Document No. 3). The SED only assesses environmental impacts from the proposed action to raise water quality objectives for nitrate in groundwater to 45 mg/L nitrate as NO<sub>3</sub>. The SED supports a conclusion that the proposed Basin Plan Amendment will not result in any significant impacts to the environment. Environmental impacts from implementation of the OWTS Policy by the Regional Water Boards and local agencies were assessed in a separate SED<sup>2</sup> prepared by the State Water Board.

The San Diego Water Board conducted a CEQA scoping meeting on July 31, 2014 and a public workshop on January 23, 2015 to get verbal input and solicit comments from the public on the proposed Basin Plan Amendment.

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<sup>2</sup> The State Water Board's SED for the OWTS Policy can be found online at: [http://www.swrcb.ca.gov/water\\_issues/programs/owts/docs/owts\\_sed\\_061912.pdf](http://www.swrcb.ca.gov/water_issues/programs/owts/docs/owts_sed_061912.pdf)

### **Written Comments and Response to Comments**

The San Diego Water Board received two written comment letters on the initial Draft Environmental Checklist (Supporting Document No. 4) released in 2014 and eight comments letters/emails (Supporting Document No. 5) on the Basin Plan Amendment and the SED. Written responses to the comments are included as Supporting Document No. 6. Revisions made to the proposed language in Chapter 4 as a result of the written comments are identified in Supporting Document No. 6.

### **Issues/Topics for Further Consideration**

Issues raised in comment letters on the Basin Plan Amendment include the following:

1. The San Diego County Water Authority (Water Authority) asserted that recycled water discharges represent a much lower threat to groundwater quality than OWTS discharges due to uptake of nutrients by vegetation in the end use sites and efficient fertilizer management practices implemented by end use site supervisors. As a result, the Water Authority is opposed to including nitrogen discharge specifications in WDRs and feels some of the implementation measures added to Chapter 4 are redundant.
2. The Water Authority suggested sample language to include in Chapter 4 to explain that recycled water discharges propose a low threat to groundwater quality. The San Diego Water Board staff concluded that proposed recycled water projects should evaluate impacts to water quality, particularly in areas where groundwater and surface water are interconnected. However, some of the proposed implementation measures have been modified in Chapter 4 to address the Water Authority's comments.
3. The South County Orange Wastewater Authority (SOCWA) expressed similar concerns to those expressed by the Water Authority and its member agencies. SOCWA expressed concerns that the proposed implementation measures pertaining to recycled water discharges such as requiring recycled water agencies to track application of fertilizers and prepare fertilizer management plans places an unnecessary regulatory burden on the recycled water agencies (particularly those that have thousands of use sites). The implementation measures in Chapter 4 of the proposed Basin Plan

Amendment have been modified in response to SOCWA's and the Water Authority's comments.

4. A number of comments from the Water Authority and SOCWA concern the implementation of the OWTS Policy; Salt and Nutrient Management Plans (SNMPs); and implementation of the State Water Board's Recycled Water Policy. It is important to note that the proposed action is not intended to incorporate the SNMPs and other requirements of the Recycled Water Policy.<sup>3</sup> The proposed Basin Plan Amendment incorporates the OWTS Policy as adopted by the State Water Board. The primary purpose of changing the groundwater quality objective for nitrate to 45 mg/L nitrate as NO<sub>3</sub> is to accommodate regional implementation of the OWTS Policy as adopted by the State Water Board. The San Diego Water Board will amend its Basin Plan to incorporate requirements of the Recycled Water Policy at a future date.

LEGAL CONCERNS: None.

SUPPORTING DOCUMENTS:

1. Tentative Resolution No. R9-2015-0008 and Attachment A: Revisions to Chapters 3, 4, 5, and Appendix D of Basin Plan
2. Water Quality Control Policy for Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems (OWTS Policy)
3. Draft Substitute Environmental Document which includes the CEQA Environmental Checklist
4. Initial Draft Environmental Checklist
5. Comment Letters
6. San Diego Water Board Response to Comments
7. Public Notice and Newspaper Notices

SIGNIFICANT CHANGES:

1. The Basin Plan Amendment incorporates the OWTS Policy, which replaces the previous San Diego Water Board policy on regulation of OWTS and allows dischargers to use the conditional waiver in the OWTS Policy.

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<sup>3</sup> See Recycled Water Policy, section 6(b)2:

[http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/resolutions/2013/rs2013\\_0003\\_a.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2013/rs2013_0003_a.pdf)

2. The Basin Plan Amendment revises all numeric groundwater quality objectives for nitrate to 45 mg/L nitrate as NO<sub>3</sub>, with the exception of the Warner Valley Hydrologic Area.
3. The Basin Plan Amendment adds implementation measures to protect groundwater and surface water quality, where groundwater and surface water are interconnected.

**PUBLIC NOTICE:**

Notice of this action was provided to interested parties via the San Diego Water Board email subscription lists and posted on the San Diego Water Board website on December 23, 2014 (Supporting Document No. 7). Notice was also published in the Orange County Register on February 26, 2015, and in the San Diego Union Tribune and the Riverside Press Enterprise on February 28, 2015 (Supporting Document No. 7).