

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

Resolution No. R16-011

**Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate
Stakeholder-Developed Groundwater Quality Management Measures for Salts and
Nutrients in the Raymond Basin**

December 8, 2016

WHEREAS, the California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) finds that:

1. The State Water Resources Control Board (State Water Board) adopted the Policy for Water Quality Control for Recycled Water (Recycled Water Policy or Policy) (State Water Board Resolution No. 2009-0011) in February 2009, which was amended in January 2013 (State Water Board Resolution No. 2013-0003). The goal of this Policy is to increase the use of recycled water from municipal wastewater sources that meet the definition in Water Code section 13050(n) in a manner that implements State and federal water quality laws.
2. The Recycled Water Policy is intended to support the State Water Board's priorities in the 2008-2012 Strategic Plan to promote sustainable water supplies. Increasing the acceptance and promoting the use of recycled water is a means toward achieving sustainable water supplies and can result in the reduction of greenhouse gases, a significant driver of climate change. The Policy is also intended to encourage beneficial use of recycled water, rather than solely discharging it to receiving waters.
3. In developing the Policy, the State Water Board recognized that increased use of recycled water, in conjunction with other applications/discharges, may result in salt and nutrient loads to groundwater basins that could result in exceedances of groundwater quality objectives. Therefore, the Policy contains a requirement that salts and nutrients from all sources be managed on a basin-wide scale or watershed scale through the development of Salt and Nutrient Management Plans (SNMPs).
4. Per the Recycled Water Policy, SNMPs must be developed for every groundwater basin/sub-basin in California. The plans should identify water quality concerns in each basin/sub-basin and identify management strategies for all sources of salts and nutrients to groundwater basins, including recycled water irrigation projects and groundwater recharge projects that will be implemented.
5. The SNMPs are to be developed by local water and wastewater entities, together with local salt/nutrient contributing stakeholders through a collaborative process open to all interested persons. The SNMPs are to be completed and proposed to the Regional Water Boards no more than seven years of the effective date of the Policy (or by May 14, 2016). The Policy also directs the Regional Water Board to consider incorporating the implementation programs contained in these SNMPs into its water quality control plan within one year of their submission to the Regional Water Board.

6. The SNMPs are required to contain: (i) water recycling and stormwater recharge goals and objectives, (ii) salt and nutrient source identification, (iii) implementation measures to manage salt and nutrient loading in the basin on a sustainable basis, (iv) an anti-degradation analysis demonstrating that the projects included within the plan will collectively satisfy the requirement of State Water Board Resolution No. 68-16 (“Statement of Policy With Respect to Maintaining the High Quality of Waters in California”, the State’s anti-degradation policy), (v) a basin/sub-basin wide monitoring plan that includes the appropriate network of monitoring locations, and (vi) a provision for annual monitoring of Constituents of Emerging Concern.
7. For purposes of regulation by the Regional Water Board pursuant to its authority under the California Water Code, the groundwater basins in the Los Angeles Region are identified in Chapter 2 of the Water Quality Control Plan for the Los Angeles Region (Basin Plan). Chapter 2 of the Basin Plan also sets forth the beneficial uses of these groundwater basins (primarily municipal and domestic supply (MUN) and agricultural supply (AGR), but also industrial process supply (PROC) and industrial service supply (IND)). Water quality objectives to protect these uses and to prevent degradation of existing water quality are set forth in Chapter 3 of the Basin Plan. Programs of implementation to attain the water quality objectives are set forth in Chapter 4 of the Basin Plan.
8. In November 2010, consistent with a State Water Board directive to Regional Water Boards to initiate and facilitate the SNMP development process, Regional Water Board staff conducted the first region-wide stakeholder SNMP workshop. At this workshop, stakeholders were provided with information regarding the SNMP requirements of the Recycled Water Policy, and had the opportunity for discourse with different groundwater basin stakeholder groups. Regional Board staff has continued to hold annual region-wide stakeholder SNMP workshops since then.
9. Stakeholders and interested persons for the Raymond Basin collaborated to develop the SNMP for their basin. Planning efforts were led by the Raymond Basin Management Board working in conjunction with the Los Angeles County Sanitation Districts, the Los Angeles County Department of Public Works and the Metropolitan Water District of Southern California. Groundwater producers in the Basin were also kept abreast of the SNMP development process. Regional Water Board staff has actively participated in the Raymond Basin’s SNMP development process.
10. The Raymond Groundwater Basin underlies the north westerly portion of the San Gabriel Valley in Los Angeles County. It is bounded on the north by the San Gabriel Mountains, on the west by the San Rafael Hills and on the southeast by the Raymond Fault which separates the basin from the Main San Gabriel Basin which is down-gradient. Raymond Basin has a surface area of approximately 40.9 square miles and consists of three sub-units: (i) the Monk Hill Subarea which underlies the City of La Canada Flintridge and the northwestern portion of the City of Pasadena, (ii) the Pasadena Subarea which underlies most of the City of Pasadena and the unincorporated county area of Altadena, and (iii) the Santa Anita Subarea which underlies the Cities of Arcadia and Sierra Madre. The land area overlying the Raymond Basin is largely urbanized with little agricultural lands.
11. The Raymond Basin provides about fifty percent of the potable water demands for water suppliers in the basin, and is actively managed by the Raymond Basin Management Board (Management Board) which consists of ten representatives appointed by water

purveyors within the Basin. The Management Board is charged with the powers and responsibilities of managing the Raymond Basin and protecting the long-term quantity and quality of the groundwater supply.

12. Natural recharge to the basin consists of direct rainfall, percolation of streamflow from the northern and western sides, underflow from the Verdugo Basin and mountain front recharge. Artificial recharge of the Raymond Basin occurs via infiltration of stormwater runoff in all three subareas and, to a lesser degree, injection of treated imported water in the Monk Hill and Pasadena subareas.
13. On average, groundwater quality in each subarea is currently below Basin Plan objectives for TDS, chlorides, sulfates, and nitrate, and assimilative capacity is available for all constituents. However, review of available data suggests an increasing trend for TDS, chloride and sulfate concentrations in the Monk Hill and Pasadena subareas. Also, there is considerable annual variation in water quality for each constituent. Generally, water quality concentrations vary with many environmental factors, including the volume of groundwater in storage. The water quality concentrations in the Raymond Basin appear to be inversely related to groundwater in storage, increasing as groundwater levels decrease, and vice versa.
14. Existing salt and nutrient management measures in the Raymond Basin include actions/programs that are intended to sustain groundwater recharge, monitor water quality conditions, and control salinity in waters imported into the basin. Potential management measures include increasing groundwater recharge and promoting onsite stormwater capture and retention.
15. Raymond Basin stakeholders have prepared a detailed technical planning document containing all the elements outlined by the Recycled Water Policy. The document titled "Raymond Basin Salt and Nutrient Management Plan" is an integral part of this Regional Water Board action and was reviewed, considered and accepted by the Regional Water Board before acting. Further, this technical document provides the detailed factual basis and analysis supporting the assessment of current water quality conditions, the identification of salt and nutrient management measures, and the projected water quality impacts for this groundwater quality management tool.
16. The public has had reasonable opportunity to participate in the review of the amendments to the Basin Plan. A Notice of Hearing was published in the Los Angeles Times on September 30, 2016, and circulated for 45 days preceding the Regional Water Board's proposed action. Drafts of the Salt and Nutrient Management Plan, Substitute Environmental Document, proposed Basin Plan amendment language, and staff memorandum were released for public comment on September 30, 2016 to allow a 45-day public comment period in advance of the public hearing. The Regional Water Board responded to written and oral comments received from the public on the proposed action. On December 8, 2016, the Regional Water Board held a public hearing to consider incorporation of salt and nutrient management measures for the Raymond Basin into the Basin Plan. The public had an opportunity to provide oral comments and testimony during the hearing.
17. The salt and nutrient management strategies developed by the Raymond Basin stakeholders are measures designed to provide a framework for the long-term management of salts and nutrients in the Raymond Basin, while encouraging and

allowing for increased use of recycled water areas. Use of an assimilative capacity assessment tool developed during the process demonstrated that recycled water projects may be developed and applied within the basin while still maintaining groundwater quality that is supportive of beneficial uses. Given these considerations, the amendment is consistent with State Water Board Resolution No. 68-16 ("Statement of Policy With Respect to Maintaining High Quality of Waters in California"), and is also consistent with the policy of the State established in California Water Code section 106.3 that everyone has the right to safe, clean, affordable, and accessible water.

18. This Basin Plan amendment meets the "necessity" standard of the California Administrative Procedures Act, Government Code section 11353(b), because the Recycled Water Policy requires that Regional Water Boards incorporate salt and nutrient management measures for groundwater basins into their respective basin plans within one year of the receipt of stakeholder developed salt and nutrient management plans. Also, Water Code section 13240 requires each regional water board's basin plan to conform with State policy for water quality control.
19. Pursuant to Public Resources Code section 21080.5, the Resources Agency has approved the Regional Water Boards' basin planning process as a "certified regulatory program" that adequately satisfies the California Environmental Quality Act (CEQA) (Public Resources Code, § 21000 et seq.) requirements for preparing environmental documents (14 Cal. Code Regs. § 15251(g); 23 Cal. Code Regs. § 3782). A "substitute environmental document" (SED) was prepared for this project. The SED contains the required environmental documentation under the State Water Board's CEQA regulations. (23 Cal. Code Regs. § 3777.) The SED includes the Salt and Nutrient Management Plan, a staff memorandum entitled "Groundwater Quality Management Measures for Salt and Nutrients in the Raymond Basin of Los Angeles County", the CEQA environmental checklist, the comments and responses to comments, the basin plan amendment language, and this resolution. The project itself is a program of implementation of salt and nutrient management measures for the Raymond Basin. The CEQA checklist and other portions of the SED contain significant analysis and numerous findings related to impacts and mitigation measures.
20. A CEQA Scoping meeting was conducted on March 8, 2016, in the city of Azusa (Los Angeles County), to solicit input from the public and interested stakeholders in determining the appropriate scope and content and management options of the proposed Salt and Nutrient Management Plan. This meeting fulfilled the requirements under CEQA (Public Resources Code, Section 21083.9). A notice of the CEQA Scoping meeting was sent to interested persons on February 12, 2016.
21. The analysis considered the potential impacts of salt and nutrient management measures in the Raymond Basin. Foreseeable methods, including both nonstructural and structural management measures, would not cause significant impacts that cannot be mitigated through commonly used construction, design and operational practices. The SED identifies mitigation methods for impacts with potentially significant effects and finds that these methods can mitigate potentially significant impacts to levels that are less than significant. To the extent that there are significant adverse effects on the environment due to the implementation of this Salt and Nutrient Management Plan, there are feasible alternatives and/or feasible mitigation measures that would substantially lessen significant adverse impacts in most cases. The foreseeable salt and nutrient

management methods under consideration include increased recycled water use, which is considered a significant environmental benefit.

22. Consistent with the Regional Water Board's substantive obligations under CEQA, the SED does not engage in speculation or conjecture, and only considers the reasonably foreseeable environmental impacts, including those relating to the methods of compliance, reasonably foreseeable feasible mitigation measures to reduce those impacts, and the reasonably foreseeable alternative means of compliance, which would avoid or reduce the identified impacts.
23. The SED incorporates mitigation that reduces to a level that is insignificant any adverse effects on the environment. From a program level perspective, incorporation of the mitigation measures described in the SED will reduce impacts to less than significant levels.
24. While the proposed Basin Plan amendment incorporates management measures into the Basin Plan that are designed to attain and/or maintain compliance with already existing water quality objectives, it does not establish or seek to modify any regulatory level, standard, or other requirement for the protection of public health or the environment. As such, it is not "a policy...that has the effect of a regulation and that is adopted in order to implement or make effective a statute"; and is therefore not subject to the requirements of Health and Safety Code section 57004 regarding external scientific peer review.
25. The Basin Plan amendment incorporating groundwater quality management measures for salts and nutrients in the Raymond Basin will be submitted for review and approval by the State Water Board and thence to the State Office of Administrative Law (OAL) for review of the regulatory portions.
26. If during the State Water Board's approval process Regional Water Board staff, the State Water Board or State Water Board staff, or OAL determine that minor, non-substantive modifications to the language of the amendment are needed for clarity or consistency, the Executive Officer should make such changes consistent with the Regional Water Board's intent in adopting these groundwater quality control measures, and should inform the Board of any such changes.

THEREFORE, BE IT RESOLVED THAT:

1. The Regional Water Board approves and adopts the CEQA SED, which includes the Salt and Nutrient Management Plan, staff memorandum entitled "Groundwater Quality Management Measures for Salt and Nutrients in the Raymond Basin of Los Angeles County", the CEQA environmental checklist, the comments and responses to comments, the basin plan amendment language, and this resolution, which was prepared in accordance with the requirements of the State Water Board's certified regulatory CEQA process (as set forth in California Code of Regulations, title 23, section 3775, et seq.), Public Resources Code section 21159, and California Code of Regulations, title 14, section 15187, and directs the Executive Officer or designee to sign the environmental checklist.

2. After considering the entire record, including oral testimony at the hearing, pursuant to Water Code sections 13240 and 13242, the Regional Water Board hereby approves and adopts the groundwater quality management measures for salts and nutrients in the Raymond Basin, as developed by stakeholders, reviewed by Regional Water Board staff and set forth in the proposed Basin Plan amendment. These measures are designed to protect long-term quantity and quality of the groundwater supply, while allowing for increased use of recycled water.
3. The salt and nutrient management strategies developed by local water entities in the Raymond Basin are voluntary measures that are designed to maintain water quality that is protective of beneficial uses while increasing recycled water use and supports the sustainable use of groundwater. These strategies will be applied in conjunction with already existing groundwater quality protection measures in the planning area (e.g. cleanup operations).
4. The Regional Water Board is taking this action pursuant to the State Water Board's Recycled Water Policy (Resolution No. 2009-0011 as amended by Resolution No. 2013-0003) in which the State Water Board directs the regional water boards to amend their basin plans to incorporate salt and nutrient management measures for each basin within 12 months of receipt of a Salt and Nutrient Management Plan.
5. The Executive Officer is directed to forward copies of the Basin Plan amendments to the State Water Board in accordance with the requirements of California Water Code section 13245.
6. The Regional Water Board requests that the State Water Board approve the Basin Plan amendments in accordance with the requirements of California Water Code sections 13245 and 13246, and forward them to OAL for approval.
7. If during the approval process, Regional Water Board staff, the State Water Board or State Water Board staff, or OAL determines that minor, non-substantive modifications to the language of the amendments are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Regional Water Board of any such changes.

I, Samuel Unger, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of the resolution adopted by the California Regional Water Quality Control Board, Los Angeles Region, on December 8, 2016.


Samuel Unger, P.E.
Executive Officer