

**STATE WATER RESOURCES CONTROL BOARD  
BOARD MEETING SESSION – DIVISION OF WATER QUALITY  
DECEMBER 6, 2016**

**ITEM 6**

**SUBJECT**

CONSIDERATION OF A PROPOSED RESOLUTION REAFFIRMING SUPPORT FOR DEVELOPMENT OF SALT AND NUTRIENT MANAGEMENT PLANS AND DIRECTING STAFF TO INITIATE STAKEHOLDER PROCESS FOR UPDATING THE RECYCLED WATER POLICY

**DISCUSSION**

The Policy for Water Quality Control for Recycled Water (Recycled Water Policy) was adopted by the State Water Board on February 3, 2009. The Recycled Water Policy was amended on January 22, 2013 to require the Regional Water Quality Control Boards (Regional Water Boards) to include monitoring requirements for constituents of emerging concern (CECs) in recycled water used for groundwater recharge. The Recycled Water Policy includes provisions that require staff to reconvene a science advisory panel every five years to provide guidance on future actions related to CECs in recycled water. Since the Recycled Water Policy was last updated in 2013, there have been significant advancements in recycled water research, including new information on the feasibility of the use of recycled water for surface water augmentation and direct potable reuse. The Recycled Water Policy also encourages the development of salt and nutrient management plans for each basin or sub-basin in California. The deadlines set forth in the Recycled Water Policy for salt and nutrient plan development have passed and many groundwater basins do not yet have Regional Water Board-approved salt and nutrient management plans.

State Water Board staff is proposing a resolution for consideration by the State Water Board that would direct staff to initiate stakeholder outreach to solicit input on proposed changes to the Recycled Water Policy, convene a science advisory panel, and present an amendment to the Recycled Water Policy by December 2019 for consideration by the State Water Board. The proposed resolution also reaffirms the State Water Board's interest in and support for salt and nutrient plan development, and encourages collaboration among salt and nutrient management planning groups, the agricultural community, and Groundwater Sustainability Agencies established per the Sustainable Groundwater Management Act.

**POLICY ISSUE**

Should the State Water Board:

1. Support the continued development of regional or subregional salt and nutrient management plans?
2. Direct staff to convene a science advisory panel on Constituents of Emerging Concern?
3. Direct staff to present, for consideration by the State Water Board, an amendment to the Recycled Water Policy by December 2019 after conducting stakeholder outreach?

## **FISCAL IMPACT**

State and Regional Water Board staff work and contracting associated with this action can be accomplished within budgeted resources.

## **REGIONAL BOARD IMPACT**

Yes. As more salt and nutrient management plans are developed, the Regional Water Boards must review the plans and consider adopting revised implementation plans that are consistent with Water Code section 13242.

## **HUMAN RIGHT TO WATER**

The actions proposed under this item are consistent with the established policy of the State recognizing the human right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes (human right to water; Water Code section 106.3). The proposed actions are also consistent with Resolution No. 2016-0010, in which the State Water Board adopted the human right to water as a core value and top priority. As directed by the State Water Board in Resolution No. 2016-0010, staff has determined that the proposed actions support the human right to water by continuing to support the development of new and underutilized water supplies such as recycled water and by protecting groundwater quality from salt and nutrient contamination.

## **STAFF RECOMMENDATION**

Staff recommends that the State Water Board adopt the proposed resolution.

<p>State Water Board action on this item will assist the Water Boards in reaching Goal(s) 2, 3, 4, and 6 of the Strategic Plan Update: 2008-2012. In particular, approval of this item will assist in fulfilling Objective 3.2 to increase the acceptance and promote the use of recycled water and the reuse of stormwater as locally available, sustainable water supplies consistent with the Climate Change Draft Scoping Plan developed pursuant to the California Global Warming Solutions Act of 2006 (AB 32) and other relevant State and regional efforts.</p>
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## STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 2016-

### REAFFIRMING SUPPORT FOR THE DEVELOPMENT OF SALT AND NUTRIENT MANAGEMENT PLANS AND DIRECT STAFF TO INITIATE A STAKEHOLDER PROCESS TO UPDATE THE RECYCLED WATER POLICY

#### WHEREAS:

1. The State Water Resources Control Board (State Water Board) encourages the development of new and underutilized water resources to mitigate the effects of long-term drought, climate change, and water supply uncertainty, including improved conservation and water use efficiency, conjunctive water management (i.e., coordinated management of surface and groundwater), stormwater capture, brackish and seawater desalination, groundwater remediation, and production and use of recycled water. The development of these new and underutilized water resources should be done in a manner that is consistent with the State Water Board's mission, "To preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations."
2. The Strategic Plan Update 2008-2012 for the Water Boards includes a priority to increase sustainable local water supplies available for meeting existing and future beneficial uses by 1,725,000 acre-feet per year, in excess of 2002 levels, by 2015, and ensure adequate water flows for fish and wildlife habitat. The Strategic Plan Update 2008-2012 also includes a goal to improve and protect groundwater quality in high-use basins by 2030.
3. The State Water Resources Control Board (State Water Board) adopted the Policy for Water Quality Control for Recycled Water (Recycled Water Policy) in 2009 ([Resolution No. 2009-0011](#)) to promote the development of recycled water projects by streamlining the permitting, while still ensuring protection of water quality and beneficial uses.
4. The Recycled Water Policy includes goals to increase the use of recycled water over 2002 volumes by at least one million acre-feet per year by 2020 and by at least two million acre-feet per year by 2030. The State Water Board also included a mandate in the Recycled Water Policy to increase the use of recycled water by 200,000 acre-feet per year by 2020 and an additional 300,000 acre-feet per year by 2030.
5. Some groundwater basins in the state contain salts and nutrients that exceed or threaten to exceed water quality objectives established in the applicable Water Quality Control Plans (Basin Plans), and not all Basin Plans include adequate implementation procedures for achieving or ensuring compliance with the water quality objectives for salt and nutrients.
6. It is the intent of the State Water Board that every groundwater basin or sub-basin in California has a salt and nutrient management plan that is protective of water quality. The Recycled Water Policy states that salt and nutrient management plans shall be completed and proposed to the Regional Water Quality Control Board (Regional Water

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Board) within five years from the date of the Recycled Water Policy (by 2014) and in no case the period for the completion of a plan shall exceed seven years.

7. The Recycled Water Policy states that within one year of the receipt of a proposed salt and nutrient management plan, the Regional Water Boards shall consider for adoption revised implementation plans, consistent with Water Code section 13242, for those groundwater basins within their regions where water quality objectives for salts or nutrients are, or threaten to be exceeded.
8. The deadlines set forth in the Recycled Water Policy for salt and nutrient management plan development have passed. Many groundwater basins do not yet have Regional Water Quality Control Board-approved salt and nutrient management plans or adequate implementation procedures for achieving or ensuring compliance with the water quality objectives for salt and nutrients in their Basin Plans.
9. The 2009 Recycled Water Policy directed State Water Board staff to convene a science advisory panel to provide recommendations on future actions related to constituents of emerging concern (CECs) and to reconvene a science advisory panel to update the report every five years.
10. In 2010, the science advisory panel submitted a report titled, "[Monitoring Strategies for Chemicals of Emerging Concern in Recycled Water – Recommendations of a Science Advisory Panel](#)", which presented recommendations for monitoring CECs in municipal recycled water used for groundwater recharge.
11. The Recycled Water Policy was amended in 2013 ([Resolution No. 2013-0003](#)) to specify requirements for monitoring CECs in recycled water. Since the Recycled Water Policy was last updated in 2013, there have been significant advancements in recycled water research, including new information on the feasibility of the use of recycled water for surface water augmentation and direct potable reuse.
12. On April 25, 2014, the Governor proclaimed a continued State of Emergency due to severe drought conditions and directed the State Water Board to adopt statewide general waste discharge requirements to facilitate the use of treated wastewater.
13. On June 3, 2014, the State Water Board adopted General Waste Discharge Requirements for Recycled Water Use ([Order WQ 2014-0090-DWQ](#)) to streamline permitting of recycled water use statewide.
14. On September 16, 2014 (amended on September 3, 2015), the Governor signed into law the Sustainable Groundwater Management Act. The act establishes local tools and authorities to maintain groundwater levels and storage, prevent land subsidence and significant depletions of surface waters, and protect water quality.
15. On November 4, 2014, California voters approved Proposition 1 to enact the Water Quality, Supply, and Infrastructure Improvement Act of 2014. This bond measure included \$725 million for water recycling and advanced water treatment technology projects, a portion of which was allocated to recycled water research and development.

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16. Water Code section 13562 required the California Department of Public Health (CDPH) to adopt uniform water recycling criteria for indirect potable water reuse for groundwater recharge on or before December 31, 2013, and to develop and adopt uniform water recycling criteria for surface water augmentation by December 31, 2016. Uniform water recycling criteria for indirect potable reuse for groundwater recharge became effective on June 18, 2014. Effective July 1, 2014, CDPH Drinking Water Program was transferred to the State Water Board. The legislative mandates to develop and adopt uniform water recycling criteria for surface water augmentation were also transferred to the State Water Board.
17. On February 16, 2016, the State Water Board recognized the human right to water as a core value and that the human right to water is a high priority for the Water Boards under [Resolution No. 2016-0010](#).
18. On June 7, 2016, the State Water Board adopted Water Reclamation Requirements for Recycled Water Use ([Order WQ 2016-0068-DDW](#)) that established standard conditions for recycled water use and conditionally delegated authority to an Administrator to manage a Water Recycling Program and issue water recycling permits to recycled water users. Order WQ 2016-0068-DDW permits non-potable reuse of treated municipal wastewater as a source of recycled water. Enrollees under Order WQ 2014-0090-DWQ have been transferred for coverage under Order 2016-0068-DDW.
19. Water Code sections 13560 to 13569 acknowledge that there are a number of significant unanswered questions regarding direct potable reuse of recycled water and require the State Water Board to convene an expert panel to assess whether additional research is needed to establish uniform regulatory criteria for direct potable reuse. Water Code sections 13560 to 13569 also require the State Water Board to investigate and report to the Legislature on the feasibility of developing uniform water recycling criteria for direct potable reuse by December 31, 2016.
20. In August 2016, an expert panel convened pursuant to Water Code section 13565 provided research recommendations related to the feasibility of developing uniform water recycling criteria for direct potable reuse in a report titled "Evaluation of the Feasibility of Developing Direct Potable Reuse Regulatory Criteria for the State of California." The expert panel stated that no additional research was needed to establish uniform water recycling criteria for direct potable reuse, but recommended several areas of research that would enhance the understanding and acceptability of direct potable reuse in California. These research recommendations include monitoring the literature on potential health risks of specific CECs likely to be present in recycled water, improving monitoring of pathogens in raw wastewater, and developing comprehensive analytical methods to identify unknown compounds.
21. In September 2016, the State Water Board released a draft report titled "Investigation on the Feasibility of Developing Uniform Water Recycling Criteria for Direct Potable Reuse" for public review and comment.
22. There is a continued need for research to enhance the understanding and acceptability of all types of water reuse in California. Research topics include, but are not limited to, developing bioanalytical tools, developing methods to analyze a range of unknown constituents (non-targeted analytical tools), monitoring and treatment of pathogens,

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monitoring and treatment of CECs, evaluating CECs for their impact on human health and the aquatic environment, and antibiotic-resistant bacteria and genes.

THEREFORE BE IT RESOLVED THAT THE STATE WATER BOARD:

A. Supports and encourages:

1. Sustainable use of recycled water to promote conservation of water resources;
2. Local water and wastewater entities, together with local salt and nutrient contributing stakeholders, to continue locally driven and controlled, collaborative processes open to all stakeholders that will result in the development of salt and nutrient management plans for groundwater basins in California, including compliance with CEQA and participation by Regional Water Board staff;
3. Collaborative work among salt and nutrient management planning groups, the agricultural community, and Groundwater Sustainability Agencies formed under the Sustainable Groundwater Management Act to achieve the goals of groundwater sustainability, recycled water use, and water quality protection;
4. Regional Water Boards to work with stakeholders to prioritize development of salt and nutrient management plans in basins where salts and/or nutrients are a threat to water quality, and to consider adopting amendments to the Basin Plans, consistent with Water Code section 13242, to incorporate the elements of salt and nutrient management plans as appropriate;
5. Non-potable reuse projects and indirect potable reuse projects, implemented in accordance with existing regulations, to help meet the growing water supply requirements of the state, and projects to sustain aquatic habitats and mitigation areas in times of drought and severe water shortage;
6. The use of recycled water by providing funding support for research projects that will fill critical knowledge gaps.

B. And directs staff to:

1. Coordinate implementation of the respective regulatory authorities of the Division of Drinking Water, Division of Water Quality, and Regional Water Boards in order to achieve the statewide goal of encouraging the use of recycled water while avoiding potential public health impacts and ensuring the protection of water quality for current and future beneficial uses.
2. Initiate stakeholder outreach, including outreach to environmental justice and impacted community stakeholders to solicit input on proposed updates to the Recycled Water Policy;
3. Convene a science advisory panel as specified in the Recycled Water Policy to update the 2010 report titled, "Monitoring Strategies for Chemicals of Emerging Concern in Recycled Water – Recommendations of a Science Advisory Panel" and to guide future actions relating to CECs;

## **D R A F T**

4. Develop a proposal for an efficient, statewide reporting program and data management system that will allow online reporting of the volume, quality, and use(s) of recycled water on an annual basis, or more frequently, including consideration of adding requirements to recycled water producer, distributor, and/or user monitoring and reporting programs;
5. Evaluate the challenges and benefits of salt and nutrient management plan development, and update the Recycled Water Policy consistent with the findings of that evaluation;
6. Update the Recycled Water Policy to reflect the increased and varied uses of recycled water, including but not limited to consideration of the following potential elements:
  - a. Revised goals and mandates for statewide volume of recycled water
  - b. Clarification of monitoring and reporting requirements to protect water quality for different uses of recycled water consistent with California Code of Regulations, title 22, Water Recycling Criteria
  - c. Recommendations for the development of a framework for representative basin-wide monitoring networks to support implementation of salt and nutrient management plans
  - d. An evaluation of the requirements and frequency of monitoring for priority pollutants and CECs, considering recommendations from the Science Advisory Panel
  - e. A recommendation for a time schedule for Regional Water Boards to review orders and permits issued to recycled water projects prior to the adoption of Water Reclamation Requirements for Recycled Water Use (Order WQ 2016-0068-DDW) to ensure compliance with the Recycled Water Policy and to make a determination on whether they should be renewed and if appropriate enroll them under the statewide general order
  - f. The nexus between the provisions of the Recycled Water Policy, Sustainable Groundwater Management Act requirements, groundwater recharge regulations, and surface water augmentation regulations; and
7. Present, for consideration by the State Water Board, an updated Recycled Water Policy by December 2019.

### **CERTIFICATION**

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on December 6, 2016.

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Jeanine Townsend  
Clerk to the Board