Decision 14-08-058 August 28, 2014

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking on the Commission's own Motion to Consider a Comprehensive Policy Framework for Recycled Water.	Rulemaking 10-11-014 (Filed November 19, 2010)

DECISION ADOPTING A COMPREHENSIVE POLICY FRAMEWORK AND MINIMUM PROJECT CRITERIA REQUIREMENTS FOR RECYCLED WATER PROJECTS

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DECISION ADOPTING A COMPREHENSIVE POLICY FRAMEWORK AND MINIMUM PROJECT CRITERIA REQUIREMENTS FOR RECYCLED WATER PROJECTS

1. Summary

This decision adopts the Commission's policy framework for the production, distribution and use of treated municipal effluent by investor-owned water and sewer utilities and provides minimum criteria requirements both for applications that seek approval of larger recycled water projects and for advice letters relating to smaller size recycled water projects. The decision closes the rulemaking.

2. Background

2.1. The Order Instituting Rulemaking

The California Public Utilities Commission (Commission or CPUC) , on November 19, 2010 opened Order Instituting Rulemaking (OIR or Rulemaking) 10-11-014[1] for the purpose of developing a comprehensive policy framework for recycled water for Class A and B regulated water utilities and comparably-sized sewer utilities (referred to herein as Investor-Owned Water and Sewer Utilities (IOWSUs).[2] The initial goals outlined in the Rulemaking were to:

- Establish the guiding principles for the rate design and rate setting parameters for setting recycled water rates;
- Reduce and/or eliminate barriers to collaboration between public agency and investor-owned wholesale and retail recycled water purveyors;

[1] Order Instituting Rulemaking on the Commission's own motion to consider a comprehensive policy framework for recycled water.

[2] Class A and B water utilities are companies with more than 10,000 and 2,000 service connections, respectively.

- Facilitate and/or incentivize the use of cost-effective recycled water where it is or can be made available; and
- Examine current goals, policies, legislation, and regulations governing the production, distribution and use of recycled water, as well as interagency coordination and collaboration related to their implementation.

2.2. Procedural Background

In response to the Commission's instructions in the OIR, in early December 2010, the participating IOWSUs identified public agencies involved in recycled water production and those agencies were invited to join the IOWSUs as respondents to the proceeding. Respondents commented on the OIR through pre-conference statements in mid-January 2011 which helped frame the Prehearing Conference conducted by the assigned Administrative Law Judge (ALJ) on April 7, 2011. Party's comments were summarized in an attachment to the ALJ's Ruling of March 30, 2011.

The June 16, 2011, Assigned Commissioner's Ruling and Scoping Memo set out a schedule for the proceeding which included workshops conducted by staff from the Division of Policy and Planning and the Division of Water and Audits (DWA). Over the next sixteen months a total of five workshops were held (August 30, 2011; November 21, 2011; January 19 and 20, 2012; June 27, 2012; and October 23 and 24, 2012). Power Point presentations from those workshops were placed on DWA's website for public access.[3]

For discussion at the fifth workshop, the DWA staff developed draft policies, minimum criteria requirements (MCRs) for reviewing and evaluating

[3] Accessible at http://www.cpuc.ca.gov/PUC/Water/WaterEvents/ as of the time of this writing.

recycled water projects, and an advice letter template with corresponding MCRs for reviewing smaller recycled water projects. Parties' comments on the draft documents were filed and served on November 14, 2012, and parties' replies to those comments followed on November 30, 2012. The DWA Workshop Report, covering all five of the workshops, with revised versions of the recommended policies, MCRs for recycled water projects, and advice letter format, was served on February 1, 2013. Parties responded with comments on the Workshop Report on March 1, 2013.

Written party comments in this ratemaking and the DWA's staff February 1, 2013 Recycled Water Workshop Report are part of the record on which this decision is based.

2.3. Recycled Water Defined

As used in this decision the term "recycled water" means treated municipal effluent.[4] This definition is somewhat narrower than the definition provided in the Water Code which references a broader spectrum of treated

[4] At the August 30, 2011 workshop representatives of the Drinking Water Program of the California Department of Public Health offered a shorthand and more general "recycled water" definition: "Water which, as a result of treatment of wastes, is suitable for direct beneficial use." ftp://ftp.cpuc.ca.gov/r1011014Workshops/August3011Workshop

The phrase "direct beneficial use" means "the use of recycled water that has been transported from the point of treatment or production to the point of use without an intervening discharge to the waters of the State." 22 CCR § 60301.200. The terms "reclaimed water" and "water reuse" are sometimes used in the literature to comprehend both treated municipal effluent and treated industrial waste. For example, CDPH's regulations provide: "'Reclaimed Water' is a wastewater which as a result of treatment is for uses other than potable use," 17 CCR § 7583(i). Also noteworthy is the fact of "de facto reuse," namely reliance on "a drinking water supply that contains a significant fraction of wastewater effluent, typically from upstream wastewater discharges, although the water supply has not been permitted as a water reuse project, "National Research Council, Water Reuse (National Academy of Sciences, 2012) at 2, fn. 2.

waste.[5] As used here the term recycled water covers four types of treated municipal effluent, each distinguished by its level of treatment. The levels of treatment range from undisinfected secondary treatment to disinfected tertiary treatment. The four types of treated municipal effluent are: 1) undisinfected secondary recycled water, 2) disinfected secondary-2.2 recycled water, 3) disinfected secondary-23 recycled water, and 4) disinfected tertiary recycled water. A more detailed description of these types of recycled water and allowable uses is provided in Section 4.0 of this decision.

2.4. The Importance of Recycled Water

Against the backdrop of urbanization, population growth, climate change and water scarcity, recycled water is recognized as an increasingly important component of the urban water supply portfolios of both publicly-owned and investor-owned water utilities. Nationally, about 7% to 8% of municipal wastewater is reused; and an estimated one-third has the potential to be reused.[6] California is a leader in municipal wastewater recycling, using over 600,000 acre-feet (AF) annually,[7] mostly in Southern California. The amount of recycled

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[5] *See* Water Code §§ 13050(d)(f) and (n).

[6] *See* current version of United States Environmental Protection Agency, 2012 Guidelines for Water Reuse at 5-1, retrieved February 2013 at: http://www.waterreuseguidelines.org/images/documents/2012epaguidelines.pdf.

The Guidelines, at 1-5, reference: "…the potential municipal water supply offset by reuse for a community of 1 million people will be …27,400 million gallons…per year." According to the Guidelines, *Id.*, "[m]unicipal wastewater generation in the United States averages 75 gpcd…."

[7] *Ibid*. at 5-42. A 2009 Water Board estimate was 669,000 AF, whereas the statewide goal set by the 1991 Water Recycling Act was "a total of 700,000 acre-feet of water per year by the year 2000 and 1,000,000 acre-feet of water per year by the year 2010," Water Code § 13577.

water distributed by Commission-regulated IOWSUs in 2012 and 2013 was about 11,500 AF and 11,996 AF, respectively.[8]

The State of California is strongly committed to promoting and facilitating growth in the production, distribution, and use of recycled water, where compatible with the protection of public health and safety. In 2010 the Legislature declared:

> The use of recycled water for indirect potable use is critical to achieving the state board's goals for increased use of recycled water in the state. If direct potable reuse can be demonstrated to be safe and feasible, implementing direct potable use would further aid in achieving the state board's recycling goals.[9]

The State Water Resources Control Board (SWRCB) Recycled Water Policy, adopted in May 2009, and amended in April 2013, calls for a significant increase in the use of recycled water and storm water. The SWRCB policy goals include the substitution of local recycled water supplies for potable water, and a joint effort to develop interagency guidance for the economic analyses of recycling water project proposals.[10] Nationally there is a growing recognition of the importance of recycled municipal waste water. This is reflected in the US Environmental Protection Agency (USEPA) publication of guidelines for water reuse[11] and a 2012 study published by the National Research Council.[12]

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[8] *See* Table 1, *infra. One acre-feet (AF) is equal to 325,851 gallons or 435.6 hundred cubic feet (ccf).*

[9] Cal. Water Code § 13560(c); *see also* Cal. Water Code §§ 13510 and 13550.

[10] Resolution 2013-0003 (April 25, 2013).

[11] *Op. Cit., supra,* at fn. 5.

2.4.1. Commission Recycled Water Policy

The Commission's existing recycled water policy is set forth in the 2010 Commission Water Action Plan (WAP) which, among other things, affirms the 2005 WAP objective of promoting infrastructure investment to support an increase in the use of recycled water. In the 2010 WAP the Commission stated its intention to develop rules to increase the use of recycled water, adding:

> Recycled water is an important water resource to meet water demands by increasing population. Use of recycled water reduces the need for potable water and increases available supplies. To the extent that recycled water is available, the CPUC will require its use, when practicable, as another supply source.

The comments and discussions in this proceeding, re-affirm the need for the Commission's recycled water policy, which promotes recycled water use and identifies the following necessities, principles and objectives:

Necessities[13]

- Remain flexible and adaptable to changes in supply;
- Work closely with sister agencies, the legislature and other regulatory bodies;
- Utilize our resources (water, land, energy) more efficiently;
- Stay abreast of technological discoveries and advances;
- Recognize changing population-related demands;

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[12] National Research Council's Committee on Water Reuse, Water Reuse: Potential for Expanding the Nation's Water Supply through Reuse of Municipal Wastewater (National Academy of Sciences).

[13] WAP at 1.

- Recognize our role in educating the consuming public about the true value of water and the consequences of declining water availability.

Principles[14]

- Safe, high quality water;
- Highly reliable water supplies;
- Efficient use of water;
- Reasonable rates and viable utilities.

Objectives[15]

- Maintain the highest standards of water quality;
- Promote water infrastructure investment;
- Streamline CPUC regulatory decision-making;
- Set rates that balance investment, conservation, and affordability.

2.4.2. State Recycled Water Policy

On March 1, 2014, Senate Bills (SB) 103 and 104 were signed by the Governor of California and chaptered by the Secretary of State. These bills provide $687.4 million to support drought relief and identify recycled water as an integral part of California's drought relief plans. Among other things, the new legislation: 1) Requires the California Department of Public Health (CDPH) to adopt emergency regulations for groundwater replenishment using recycled water by June 30, 2014; 2) calls for the adoption of "requirements for groundwater replenishment using recycled water" and; 3) facilitates the

[14] WAP at 2.

[15] *Id*.

development of requirements for groundwater replenishment using recycled water.[16]

The recently enacted drought legislation accelerates many of the policies and proposals set forth in the 2014 State Water Action Plan (State WAP). For example, the State WAP provides that "the administration will also develop criteria for direct potable reuse [of recycled water] and will seek to consolidate the state's recycling programs in the SWRCB to promote program efficiencies."[17] The State WAP also provides that "the administration will develop a water financing strategy that leverages various sources of water-related project funding and proposes options for eliminating funding barriers, including barriers to co-funding multi-benefit projects."[18]

On April 25, 2014, the Governor issued both an executive order to foster further efforts in water conservation, and a proclamation of a continued state of emergency as a result of severe drought conditions. The Governor's Office noted that the water content of the snowpack was 16% of average.[19] Among the directives in the Proclamation[20] and the Executive Order[21] was a charge for the SWRCB to adopt statewide general waste discharge requirements for the use of treated wastewater, the drafting of which already had been underway. One of

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16 *See* SB 104 sections 8,10, and 15, respectively.

17 State WAP at 7.

18 State WAP at 19.

19 Press Release of April 25, 2014.

20 Accessible at: http://gov.ca.gov/news.php?id=18496

21 Accessible at: http://www.waterboards.ca.gov/water_issues/programs/land_disposal/docs/wd/wdr_general_order.pdf.

the most significant changes directed by the Executive Order is referred to in the following paragraph of the SWRCB's newly revised draft requirements:[22]

> On April 25, 2014, the Governor issued an Executive Order declaring a continued state of emergency due to severe drought conditions. Directive No. 10 of the Executive Order directs the State Water Board to adopt statewide general waste discharge requirements to facilitate the use of treated wastewater that meets standards set by the Department of Public Health, in order to reduce demand on potable water supplies. This General Order is intended to satisfy the directive No. 10 requirement. Directive No. 19 of the Executive Order provides that the California Environmental Quality Act requirement to conduct an environmental review is suspended to allow the State Water Board to adopt this General Order as quickly as possible.

The directives approved in this decision are consistent with and promote the objectives of the Governor's Proclamation and the SWRCB's revised draft requirements.

3. Multi-agency Governance Over Recycled Water

3.1. Government Agencies Other Than the Commission

The Federal Water Pollution Control Act (hereinafter, the Clean Water Act), which is the primary authority for the regulation of wastewater, requires states to set water quality standards and establishes the states' rights to control pollution from waste water treatment plants, as long as the state regulations are at

[22] Paragraph 34 (CEQA and Public Notice"), at page14. *See* at: http://www.waterboards.ca.gov/water_issues/programs/land_disposal/docs/wd/wdr_general_order.pdf.

least as stringent as federal rules.[23] The Clean Water Act has led to centralized waste treatment in urban settings, which in turn has facilitated recycled water distribution and use. Also, the USEPA has provided guidelines for the reuse of water for more than three decades.[24]

In California the oversight of recycled water is primarily conducted by the CDPH and the SWRCB (which includes the nine California Regional Water Quality Control Boards). Though the CDPH is primarily responsible for the regulation of drinking water, it also sets standards for recycled water and monitors cross control connections between potable and non-potable water systems. The SWRCB consults with and applies the criteria of CDPH in regulating recycled water projects through permit processes.[25] The SWRCB has adopted a recycled water policy that: 1) encourages the streamlining of the permit process for recycled water projects; and 2) promotes a state-wide increase in the use of recycled water through mandated goals for 2020 and 2030.[26] Detailed information

[23] The major objectives of the Clean Water Act are to eliminate all pollutant discharges into navigable waters, stop discharges of toxic pollutants in toxic amounts, develop waste treatment management plans to control resources of pollutants, and encourage water reclamation and reuse through delegation agreements.

[24] *Op. Cit. supra,* fn. 8.

[25] Per Health and Safety Code Section 116279, in July of 2014, various functions pertaining to regulating recycled water's safety were transferred to the SWRCB when the Drinking Water Program moved from CDPH to SWRCB. Therefore, the references originally made to CDPH in this decision now refer to SWRCB. However, recycled water's potential impacts on food crops will be under the purview of the food and drug branch at CDPH.

[26] Resolution No. 2009-0011 (May 14, 2009) as amended by Resolution 2013-0003 (April 25, 2013).

about the recycled water programs of the CDPH and SWRCB was presented during the workshops and is available on line.[27]

3.2. The Role of the Commission in Relation to Other Public Agencies and the IOWSUs

The Commission regulates water service provided by IOWSUs without regard to the source of the water (e.g., well water, surface water, water purchased from other utilities, recycled or desalinated water). The Commission is responsible under Public Utilities (Pub.Util.) Code § 451 for seeing to it that the IOWSUs:

> … furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities…as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public.

The Legislature has enacted two sets of provisions concerning recycled water ratesetting that are specific to the Commission and the IOWSUs, Water Code § 13580.8 and Pub. Util. Code § 455.1. Water Code § 13580.8 allows the Commission to set rates and conditions of service for certain retail water suppliers and provides the Commission discretion to offer incentives for ratepayers to use recycled water in lieu of potable water.[28] Where "appropriate," the Commission can incentivize recycled water use by allowing a pass through of any net reduction in cost involved or through a uniform discount from the

[27] *See* http://www.cpuc.ca.gov/PUC/Water/WaterEvents/.

[28] See P.U. Code § 13580.8(d).

general metered potable service rate.[29] More information regarding customer incentives and discounts for recycled water is provided in Subsection 5.8 of this decision.

The procedure for setting IOWSU recycled water rates by advice letter is specified in Pub. Util. Code § 455.1. Section 455.1 provides for an automatic rate take-effect after forty days, in the absence of a protest or finding that the filed schedule is "not justified."[30] As set forth in Pub. Util. Code § 455.1(d), written protests trigger a hearing. Because Pub. Util. Code § 455.1 provides for a discretionary finding as to whether a filed recycled water rate schedule is "justified"[31] and calls for a hearing in response to a protest, it does not strictly conform to the Commission's usual advice letter process for recycled water rates which is set out in GO 96-B.[32]

With regard to recycled water quality, the Commission's oversight of the IOWSUs is guided and governed by criteria promulgated by CDPH (*See* Section 4.0 below) and the SWRCB. The SWRCB has taken the lead in setting recycled water policy for the state. In its most recently adopted recycled water policy the SWRCB calls for "local and regional water agencies to move toward clean, abundant, local water for California by emphasizing appropriate water recycling, water conservation, and maintenance of supply infrastructure…."

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[29] Ibid. at § 13580.8(d)(1) and (2).

[30] After thirty days the filed schedule takes effect on an interim basis, with provision for a possible refund if that rate is later determined to be too high.

[31] Tiers 1 and 2 are reserved for ministerial actions under General Order (G)) 96-B, Water Industry Rules 7.3.1 and 7.3.2.

[32] We expect that this difference will warrant special attention when any modifications in GO 96-B are next considered.

Among other things, the SWRCB notes that such "sources of supply are drought-proof, reliable, minimize our carbon footprint, and can be sustained over the long-term."[33]

3.3. Evolving Pattern of Public-Private Partnerships

Currently, California public agencies are the primary entities treating municipal waste in the state. Many of these publicly-owned waste water treatment entities operate at a regional scale and the recycled water they produce is commonly allocated to multiple water purveyors, both public and investor-owned. This often involves multi-lateral delivery and pricing agreements that are critical to providing for the reliability of supply, the repayment of capital investment, and the coverage of operating and maintenance costs. The conveyance of recycled water can also involve a network of recycled water distribution systems that are separately constructed and owned but integrated through agency partnership agreements. Because most IOWSUs' recycled water projects are part of a larger or associated public agency projects, they fall into the category of public-private partnerships (PPPs) and require additional interagency cooperation and collaboration.[34]

The complexity of the PPPs necessitates a thorough reasonableness review of proposed recycled water projects and/or contractual agreements. As part of its reasonableness review, the Commission's recommended MCRs[35] requires full disclosure of the key terms of contracts and partnerships entered into by the

[33] Preamble, January 22, 2013, SWRCB Recycled Water Policy.

[34] Examples of these types of evolving partnership with the IOWSUs are provided in Attachment D.

[35] *See* Attachment A.

IOWSUs in the areas of project cost allocation and sharing, as well as information on responsibility for the construction, operation, and maintenance of the recycled water infrastructure facilities.

3.4. California's Recycled Water Goals

The SWRCB's recently adopted recycled water policy establishes a goal of increasing California's use of recycled water over 2002 levels by at least one million acre-feet per year (AFY) by 2020 and by at least two million AFY by 2030. The SWRCB's policy goals also include substituting as much recycled water for potable water as possible by 2030. The SWRCB has recognized the Commission's role in approving rates and terms of service for the use of recycled water by IOWSUs, and its ability to encourage the use of recycled water.[36]

While the Commission does not find it practical at this time to set a specific volumetric goal or target for the production, distribution, and use of recycled water by the IOWSUs, it acknowledges its shared role in the state-wide effort for meeting the recycled water goals set out by the SWRCB for 2020 and 2030. We therefore encourage the IOWSUs to be more proactive in their pursuit of recycled water project opportunities in their respective service areas and to participate meaningfully in the state's Integrated Regional Water Resource (IRWR) planning and management of recycled water.

3.4.1. Recycled Water Distributed and Sold by IOWSUs in 2013

There are six IOWSUs that currently provide tariffed recycled water service to their customers: Golden State Water Company, San Gabriel Valley Water Company, Suburban Water Company, San Jose Water Company,

[36] *Id.*

California Water Service Company and Park Water Company. Table 1 below provides the amount of recycled water produced, distributed, and/or sold by the IOWSUs in 2013.[37]

Table 1

Investor-Owned Water Utility	**2013 recycled water distributed/sold/used in one-hundred cubic feet (CCF)**	**2013 recycled water distributed/sold/used in acre-feet (AF)**
Golden State Water Company 1. Region 2	459,335	1,054
San Gabriel Valley Water Company 1. Rose Hills Project	319,816	735
2. Whittier Narrows/Rosemead	378,848	868
3. Whittier Narrows/Rosemead Extension	315,368	724
4. Central Basin	48,889	113
Suburban Water Company	256,742	589
San Jose Water Company	890,600	2,045
California Water Services	2,555,950	5,868
Park Water Company	145,000	332
Total[38]	5,225,548	11,996

[37] The information for Table 1 was obtained by DWA staff via data requests served on the relevant IOWSUs.

[38] This represents a slight increase in recycled water sales from 2012 by 6.28 % in 2013.

In order to track and monitor the amount of recycled water each IOWSU sells to its customers, each IOWSU shall report in their respective general rate cases (GRCs), the amount(s) of recycled water being sold annually by treatment type, the wholesale and retail price(s) and identify the recycled water supplier(s).

3.4.2. Increased Interagency Cooperation and Coordination in the Exercise of Concurrent Jurisdiction

The PPP's associated with recycled water projects and programs result in oversight by multiple state and federal agencies. Therefore, additional inter-agency cooperation and coordination is critical to the success of those projects and programs in order to further advance the production and use of recycled water. Consistent with the 2010 WAP objective of fostering the production and use of recycled water,[39] we adopt a policy of promoting increased interagency coordination concerning: 1) the development and implementation of recycled water regulations;[40] 2) the use of recycled water in the state's integrated regional resource planning and management; 3) public funding for recycled water projects; 4) developments in water treatment technologies; 5) changes in permitting requirements for recycled water projects; and 6) appropriate changes in the development of interagency guidelines for the economic analysis and evaluation of recycled water projects. We intend to actively increase our coordination and collaboration efforts with federal, state, and local public

[39] Water Action plan at 8.

[40] In 1996 the CDPH, SWRCB and Regional Water Quality Control Boards (RWQCBs) entered into a Memorandum of Agreement to divide tasks and promote coordination related to the regulation of recycled water use. This can be found at: http://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/docs/1996_moa.pdf

agencies having jurisdiction over recycled water regulations (governing water quality, production, and use) to more efficiently increase the production, distribution, and use of recycled water in support of a more sustainable use of ground and surface water.

4. Public Health Parameters for the Use of Recycled Water

As noted in Section 2.3 of this decision, the recycled water policies established by this decision are intended to apply to the four types of municipal effluent discussed below.

4.1 Recycled Water Quality Regulation in California

To protect the public health, the CDPH has established uniform statewide criteria for recycled water use[41] that are set out in the California Code of Regulations.[42] These criteria identify the following four types of recycled water and their allowable uses, based on level of water treatment:

- Undisinfected secondary recycled water:[43] This type of recycled water is usable for orchards and vineyards (where there is no contact with the edible portion of the crop), non-food-bearing trees, fodder/fiber/non-milk animal pasture, non-ingested seed crops, food crops undergoing commercial pathogen-destroying processing, and ornamental stock and sod farms (with

[41] Pursuant to Water Code § 13521, CPHD's "recycling criteria" are the "levels of constituents of recycled water, and means for assurance of reliability under the design concept which will result in recycled water safe from the standpoint of public health, for the uses to be made.

[42] Title 22, Division 4, Chapter 3, § 60301 et seq.

[43] 22 CCR § 60301.90:

> "Undisinfected Secondary recycled water means oxidized wastewater, Title 22, Division, 4, Chapter 3, Article 1."

a waiting period before harvest, sale and public access).[44]

- Disinfected secondary-2.2 recycled water:[45] This type of recycled water is usable for the "surface irrigation of food crops where the edible portion is produced above ground and not contacted by the recycled water."[46]
- Disinfected secondary-23 recycled water:[47] This type of recycled water is usable for the surface irrigation of cemeteries, freeway landscaping, restricted access golf courses, ornamental nursery stock, sod, pasture for milk producing animals, controlled-access nonedible

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[44] 22 CCR § 60304(d).

[45] 22 CCR § 60301.220:

> "Disinfected secondary-2.2 recycled water" means recycled water that has been oxidized and disinfected so that the median concentration of total coliform bacteria in the disinfected effluent does not exceed a most probable number (MPN) of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed, and the number of total coliform bacteria does not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30 day period.

[46] 22 CCR § 60304(b).

[47] 22 CCR § 60301.225:

> "Disinfected secondary-23 recycled water" means recycled water that has been oxidized and disinfected so that the median concentration of total coliform bacteria in the disinfected effluent does not exceed a most probable number (MPN) of 23 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed, and the number of total coliform bacteria does not exceed an MPN of 240 per 100 milliliters in more than one sample in any 30 day period.

vegetation; industrial boiler feed, nonstructural firefighting, consolidated backfill around nonpotable piping, soil compaction, concrete mixing, street and road dust control, cleaning of roads, sidewalks and outdoor work areas, and non-worker-contact industrial process water.[48]

- Disinfected tertiary recycled water:[49] This type of recycled water is usable under specified conditions for surface irrigation of food crops (where recycled water

[48] 22 CCR §§ 60304(c) and 60307(b).

[49] 22 CCR § 0301.230:

"Disinfected tertiary recycled water" means a filtered and subsequently disinfected-wastewater that meets the following criteria:

(a) The filtered wastewater has been disinfected by either:

(1) A chlorine disinfection process following filtration that provides a CT (the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow; or

(2) A disinfection process that, when combined with the filtration process, has been demonstrated to inactivate and/or remove 99.999 percent of the plaque forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.

(b) The median concentration of total coliform bacteria measured in the disinfected effluent does not exceed an MPN of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed and the number of total coliform bacteria does not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30 day period. No sample shall exceed an MPN of 240 total coliform bacteria per 100 milliliters.

> comes in contact with edible portion of crop), parks, playgrounds, school yards, residential landscaping, unrestricted access golf courses and other irrigation uses not specifically prohibited;[50] as well as for flushing toilets/urinals, priming drain traps, worker-contact industrial process water, structural firefighting, decorative fountains, commercial laundries, backfill consolidation around potable water pipelines, artificial snow making for commercial outdoor use, and commercial car washes where the general public is excluded.[51]

Additional types of recycled water and related criteria are likely under development. In 2010, as part of Senate Bill (SB) 918, the Legislature declared that:

> The use of recycled water for indirect potable use is critical to achieving the state board's goals for increased use of recycled water in the state. If direct potable reuse can be demonstrated to be safe and feasible, implementing direct potable use would further aid in achieving the state board's recycling goals.[52]

At the same time the Legislature directed the CDPH to adopt uniform water recycling criteria for indirect potable reuse for groundwater recharge on or before December 31, 2013, and for surface water augmentation on or before December 31, 2016.[53] The Legislature also mandated that the CDPH investigate the feasibility of developing uniform water recycling criteria for direct potable

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[50] 22 CCR §§ 60304 and 60307.

[51] 22 CCR § 60307(a).

[52] *See* Water Code § 13560(c).

[53] *See* Water Code §13562(a)(2)(A). CDPH indicates that given the required time for the formal regulation adoption process, the groundwater criteria will most likely be proposed in the later part of 2014.

use and complete a public review draft report by June 30, 2016, followed by a final report on or before December 31, 2016.[54]

When additional uniform water recycling criteria are adopted by the CDPH, the Commission will likely need to revisit the findings, conclusions and orders of this decision to determine whether any modifications will be needed. The Commission's DWA shall monitor the developments and changes in recycled water regulation and advise the Commission of any necessary modifications to the policies adopted by this decision.

4.2 The Ongoing Regulation of Recycled Water Quality

Consistent with the CDPH's health and safety standards for recycled water use, all recycled water being distributed, used, and/or sold by IOWSUs must have a permit for its intended use from the appropriate State and/or Federal agencies. The US-EPA regulates surface and drinking water through the Clean Water Act and the Safe Drinking Clean Water Act (respectively). Through the Safe Drinking Clean Water Act the US-EPA delegates authority to the CDPH to set the public health criteria for recycled water quality and treatment requirements which are incorporated into the waste discharge or water reclamation permits issued by the SWRCB to producers and users of recycled water.

The Commission will continue to exercise its concurrent jurisdiction to regulate water quality in conjunction with the CDPH, SWRCB, and local public health agencies by monitoring and ensuring IOWSU compliance with the water quality standards and regulations governing recycled water management and

[54] See Water Code §13563(a)(1)-(3).

use. In particular, General Order (GO) 103-A requires that all recycled water meet the applicable CDPH's recycled water requirements.[55] We will examine whether GO 103-A is adequately supporting the Commission's role in regulating recycled water quality when modifications of GO 103-A are next considered by the Commission.

5. Additional Recycled Water Policy Guidelines

5.1. Promoting the Comparative Analysis of Recycled Water Energy Costs and Savings

Potential energy costs and savings should be considered in the comparative analysis of recycled water and alternative sources of water supply where the data needed for such analysis exist or can be reasonably produced.[56] Subject to data and methodology limitations, IOWSUs should incorporate the comparative analysis of energy costs and savings into the cost-benefit analysis for each proposed recycled water project.[57] Further, DWA, DPP and the

[55] GO 103-A, Section II.2.A.(9).

[56] The larger energy-water nexus issues associated with the production, treatment, and conveyance of the water supplies, while receiving increased attention in energy and water circles, exceed the scope of this Rulemaking. See, Order Instituting Rulemaking (R.) 13-12-011 granting Division of Ratepayer Advocates' May 22, 2013 petition to the Commission to commence a rulemaking proceeding to develop a partnership framework between energy investor owned utilities and the water sector, both privately owned water utilities regulated by the Commission and public water and wastewater agencies to co-fund programs that reduce energy consumption by the water sector in supplying, conveying, treating, and distributing water.

[57] Currently there is no general consensus on a specific method or tool for doing the analysis of energy costs and savings associated with alternative water supplies compared against recycled water projects. In its Workshop Report, at 18, the DWA staff does recommend, however, that the IOWSUs consider using Pacific Institute's Water-Energy Simulator for their comparative energy and GHG analyses. We agree and encourage the IOWSUs to use the most advance analytical tools available.

Commission's Energy Divisions should monitor, and contribute to efforts at collecting relevant data and developing and improving the tools and methodologies for the comparative analysis of recycled water energy costs and savings.

5.2. Promoting Comparative Analyses of Greenhouse Gases[58]

Assembly Bill (AB) 32 caps statewide greenhouse gas (GHG) emission levels at 1990 levels by 2020. Any reduction in water-related-energy consumption would contribute to the AB 32 GHG reduction emission goals.

Subject to limitations in data availability and methodology, IOWSUs should conduct a comparative analysis of the effect of recycled water and alternative sources of water supply on GHG emissions. This analysis should be considered in the cost-benefit analysis for each proposed recycled water project, provided the required data exist or can be reasonably produced or collected.[59] Further, DWA, DPP and the Commission's Energy Divisions shall monitor, and where feasible contribute to, efforts aimed at collecting relevant data and developing and improving the tools and methodologies for analyzing GHG emissions for recycled water related projects.

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[58] Greenhouse gas (GHG) emissions issues associated with the energy used in the production, treatment, and the conveyance of water supplies generally extend beyond the scope of this Rulemaking.

[59] *Id*. Fn. 49. The GHG comparative analysis should be provided as an informative component of the cost-benefit analysis and not a mandatory requirement.

5.3. Recycled Water Project Environmental Review Requirements

The Commission remains committed to the environmental review requirements that are applicable to recycled water. The Commission affirms its policy requiring proposed recycled water projects to comply with the California Environmental Quality Act (CEQA) and/or National Environmental Protection Act (NEPA) as a condition of Commission approval.

5.4. Integrated Regional Water Resource (IRWR) Management and Planning[60]

IRWR management has been authorized[61] and funded by the state since 2002.[62] Recycled water is an important part of the State's IRWR management program. Where reasonable, IOWSUs should be given the opportunity to participate in the "development and implementation" of IRWR plans under the Water Code for recycled water projects. It is in the ratepayers' and IOWSUs' interest for the IOWSUs to participate in IRWR planning to: 1) advance the State's recycled water policies and goals; 2) ensure the avoidance of recycled water service duplication; and 3) develop a greater understanding of how the

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[60] As described by the Department of Water Resources at http://www.water.ca.gov/irwm/grants/index.cfm:

> Integrative Regional Water Management (IRWM) is a collaborative effort to manage all aspects of water resources in a region. IRWM crosses jurisdictional, watershed, and political boundaries; involves multiple agencies, stakeholders, individuals, and groups; and attempts to address the issues and differing perspectives of all the entities involved through mutually beneficial solutions.

[61] SB 1672.

[62] *See* for example Proposition 50 (providing for $500 million in 2002) and Proposition 84 (providing for $1 billion in 2006).

recycled water project(s) being considered fit the regional water supply plans. Therefore, we require the IOWSUs to actively participate in the State's IRWR planning.

We also require the IOWSUs, to explore and take advantage of appropriate opportunities for joint recycled water projects and arrangements with other public water supply and wastewater treatment agencies when embarking on a recycled water project. To the extent feasible, these activities should be compatible with IRWR planning in the applicable region, and where practicable, each IOWSU should conduct its water supply planning for recycled water in a manner consistent with the IRWR plan for its region. The Commission is committed to protecting IOWSU ratepayers by ensuring that ratepayers do not assume an unjust share of recycled water project costs when public and private partnerships are involved in regional projects. Also, consistent with Pub. Util. Code § 1501 et seq., in coordination and collaboration with CDPH, SWRCB and other public agencies, the Commission is committed to avoiding the duplication of recycled water service within the service territory of each IOWSU.

The OIR identified competition among beneficial uses of water as an issue that might be relevant to the development of recycled water. While this was not a factor identified in comments or workshops, this is a long-standing issue in California water rights law generally.[63] The Commission recognizes that the

[63] In adjudicated streams and groundwater basins, individual water right claims have been validated and often quantified within the context of an ongoing water master management structure that includes incentives, such as pump taxes and enforcement mechanisms. In unadjudicated streams and basins the water right claims remain unvalidated and unquantified. In the latter instance disputes must be resolved by the state courts or SWRCB. In some instances, such as where well interference is claimed, litigation can resolve water right disputes without a stream-wide or basin-wide adjudication.

state-wide water law regime controls beneficial use competition, conflicts, and priorities related to recycled water.

5.5. Monitoring Recycled Water Technologies and Regulatory Developments

The Commission recognizes that recycled water technologies and regulations are changing as the importance and use of recycled water increase. In furtherance of its regulatory role, the Commission will keep abreast and take account of technological and regulatory developments related to recycled water. This undertaking is expected to be an integral part of the Commission's promotion of greater interagency coordination and collaboration. Accordingly, we direct the Commission's Policy and Planning Division and DWA to coordinate with CDPH, SWRCB, and stakeholders annually or as needed via a symposium to discuss technological and regulatory developments associated with the production and use of recycled water.

5.6. Public Funding for Recycled Water Project Costs

The current recycled water regulations require the IOWSUs to have a separate distribution system specifically designated for the conveyance of recycled water. Such infrastructure requirements add costs that can make recycled water projects less cost-effective and deter IOWSUs from undertaking recycled water projects. Recycled water projects tend to be more viable or cost-effective when public and private partnerships are formed and/or when public funding is available. Currently the primary source of State funding for recycled water projects is through the Water Recycling Funding Program

administered by the SWRCB. This program provides low-interest loans and grants to local agencies.[64]

To make recycled water projects more viable, the Commission encourages IOWSUs to secure low-cost public funding to cover or contribute to the cost of recycled water projects. Further, the Commission supports reasonable changes to the eligibility criteria for public loan and grant programs at the local, state and national governmental level to facilitate access for the IOWSUs to those funds for recycled water projects.

5.7. Ratemaking Treatment of Costs Associated with Recycled Water Projects should be Considered on a Case-by-Case Basis

The ratemaking treatment of costs associated with recycled water projects should be considered on a case-by-case basis due to the wide range of variables associated with: 1) recycled water project costs; 2) project funding and partnerships; and 3) customer infrastructure costs and incentives. The ratemaking treatment of recycled water project costs includes a determination of how those costs should be allocated between the IOWSUs' potable and recycled water customers, and whether those costs should be recovered through the general metered service rates or a surcharge. In addition to the project costs, the ratemaking treatment of recycled water projects should also consider all of the benefits the project provides for customers in the service area and/or region where the project is implemented so as to support the proposed cost allocation.

5.7.1. Recycled Water Utility Plant Investments Made by IOWSUs

[64] Other funding sources include the US Bureau of Reclamation.

should be Afforded Rate Base Treatment

Consistent with our cost-of-service ratemaking policies and accounting treatment for utility plant investments, the utility plant related to the production, distribution and use of recycled water that is funded by the IOWSU, and found just and reasonable, should be allowed into the company's rate base. Consistent with the accounting rules and ratemaking policies adopted in Decision (D.) 10-12-058, utility plant investments not funded by the IOWSUs or paid for by low-interest public loans or grants should be treated as contributed plant for ratemaking purposes.

5.8. Evaluating Customer Incentives for Recycled Water Service

As discussed in section 3.2 of this decision, Water Code § 13580.8, and Pub. Util. Code § 455.1 allow the Commission and IOWSUs to discount recycled water rates from the general metered potable rate so as to provide an economic incentive for customers to switch to recycled water service.[65] Water Code § 13580.8 also provides that the IOWSUs may recover from general metered customers the discounts benefitting recycled water users, provided the discounts are greater than the avoided cost resulting from some customers no longer receiving potable water service.

Based on the information gathered in workshops, the incentives needed to get customers to switch from potable to recycled water service may need to extend beyond discounting recycled water since some customers may need to

[65] This authorization for discounted rates arguably does not run counter to the prohibition against discriminatory ratemaking (e.g., Pub. Util. Code § 453(a)) as the sources of supply differ. Water Code § 13580.8 does appear to condone an exception to a strict "cost of service" basis for ratemaking, however, as do other policies such as low-income rate assistance.

make a financial investments (for example, to retrofit building facilities) in order use recycled water. Accordingly, in order for the Commission to evaluate the reasonableness of customer incentives and/or discounts for recycled water, including customer assistance with facilities retrofits, pursuant to Water Code § 13580.8 and Pub. Util. Code § 455.1, the Commission will require the IOWSUs to provide as part of the MCRs in Attachment A: 1) information on the current cost, availability and demand for both potable and recycled water supplies in the IOWSU's service area where the project is being proposed; 2) the potential demand for the proposed project's recycled water supply by prospective customers; and 3) information on the factors used or considered in setting the recycled water incentives, including wholesaler discounts and assistance with customers' facility retrofits costs.

5.9. Recycled Water Project Costs should be Recovered from Recycled and Potable Water Service Customers

Water Code § 13580.8 explicitly allows the IOWSUs' to recover revenue shortfalls that result from discounting recycled water from general metered customers. Water Code § 13580.8 is less clear about the recovery and allocation of recycled water project costs. Information gathered in workshops suggests that the IOWSUs face several challenges when deciding whether or not to undertake a recycled water project. As previously noted, one of the main challenges under existing recycled water regulations is that a separate distribution system is needed for the conveyance of recycled water. This can potentially require a substantial investment and make recycled water projects less cost-effective if the investment is strictly recovered from customers that take recycled water service. We believe that there may be specific cases where a recycled water project is highly valued for the benefits it provides to a region or

IOWSU service area (i.e. where there is water scarcity, reliability problems, or water related environmental issues) which would justify undertaking such a project even though it may not otherwise be cost-effective. Therefore, in order to accurately evaluate the costs and benefits we require the IOWSUs to provide a cost-benefit analysis for recycled water projects as part of the MCRs.

Consistent with the Commission's WAP policy objectives of promoting infrastructure investments associated with an increase in the use of recycled water and making recycled water projects more viable, we adopt a policy to allow recovery of recycled water project costs from both recycled and potable water service customers in the IOWSU's service area. The allocation of recycled water project costs for potable water service customers should be based on the adopted cost allocation factors from the IOWSU's last GRC for the respective service area where the project is realized. However, recovery of recycled water project costs from recycled and potable water service customers is contingent upon the IOWSUs demonstrating to the Commission's satisfaction the prudency of each project and the reasonableness of the associated costs, as specified in the MCRs (in Appendix A) and further discussed in section 6.1 of this decision.

6. Promoting Consumer Education About Recycled Water Use

Customer education is essential to greater public understanding, acceptance, and use of recycled water. We encourage the IOWSUs to increase recycled water consumer education efforts and associated public health protections. Each IOWSU should take advantage of opportunities to increase customers' understanding of the financial, economic, social and environmental costs and benefits of recycled water. When an IOWSU undertakes a recycled water project, it should identify and review consumer education materials and

methods that are available industry-wide and, where appropriate, must work with any public agency partners to utilize existing resources before developing or duplicating more costly materials. The IOWSUs should include with their recycled water proposals the consumer education materials and methods they will use to educate customers about the benefits associated with the use of recycled water.

6.1. Minimum Criteria for IOWSU Recycled Water Projects

IOWSU recycled water projects require criteria or guidelines in addition to those contained in the Rate Case Plan (RCP).[66] We require the MCRs (in Attachment A) because recycled water projects are unique to the IOWSUs' water supply portfolio and generally involve public-private partnerships with contractual agreements for pricing, supply, cost sharing, and operational responsibilities over recycled water facilities which need to be fully evaluated in order to assess the reasonableness of these agreements and recycled water projects. In addition, because we are adopting a policy that will allow the IOWSUs to allocate recycled water project costs to both recycled and potable water service customers we must be able to assess all of the project costs and benefits associated with each project.

We disagree with parties' claims that the RCP already requires water companies to provide the information and analysis necessary to demonstrate the prudency of a water rate case increase associated with a capital addition,[67] and that treating recycled water projects differently from other capital projects in a water company's GRC wrongly imposes dissimilar requirements for capital

[66] Appendix (Rate Case Plan for Class A Water Utilities) to D. 04-06-018 in R.03-09-005.

[67] *See* California Water Association's March 1, 2013, comments at 3.

projects considered in the same proceeding. We have reviewed the information and analysis required by the RCP for capital projects and have determined that the RCP does not provide the specific information needed (i.e. information on public-private partnerships and contractual agreements, and a cost-benefit analysis) to sufficiently evaluate the reasonableness of proposed recycled water projects. The minimum criteria we adopt are included as Attachment A to this decision.

7. Implementation of Tier 2 and 3 Advice Letter Review Process for Specific Recycled Water Projects

To lessen the processing steps and time required for the review and approval of smaller scale recycled water projects, we adopt a Tier 3 advice letter process and template (included as Attachment B). To qualify for the Tier 3 Advice Letter process the proposed recycled water project must: (1) have a revenue impact of less than 5% of the proposing IOWSU's revenue requirement in the associated ratemaking area, (2) not require NEPA or CEQA review, or the lead agency must have completed and certified

NEPA/CEQA review for the proposed project; and (3) not require direct potable reuse as defined by Water Code Sections 13560 et. seq.[68] The Commission will consider the cumulative revenue requirement impact of multiple recycled water project proposals within a given General Rate Case cycle, in the IOWSU's ratemaking area.

We will continue to use the Tier 2 advice letter process for the review of recycled water project proposals that have no impact on IOWSUs' revenue requirement and on potable customers' rates in the service area where the project is proposed in accordance with Pub. Util. Code Section 455.1 as discussed in Section 3.2 of this decision.

8. Comments on Proposed Decision

The Proposed Decision in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. On July 14, 2014, both the Office of Ratepayer Advocates (ORA) and the California Water Association (CWA) filed opening comments on the Proposed Decision (PD). Reply comments by both of those parties and the Consumer Federation of California followed on July 21, 2014.[69]

In its comments ORA states that the PD "has adequately addressed the issues discussed in the Recycled Water proceeding." However, ORA took issue with three aspects of the PD. First, according to ORA the cost-benefit analysis of

[68] Water Code Section 13560 (c) provides that: "'Direct potable reuse' means the planned introduction of recycled water either directly into a public water system, as defined in Section 116275 of the Health and Safety Code, or into a raw water supply immediately upstream of a water treatment plant. "

[69] Not all of the changes requested in Comments are addressed here.

the recycled water projects should only reflect benefits that directly accrue to the ratepayers in the service area of the project. Second, ORA argues that the IOWSUs should be encouraged to include planned recycled water projects as part of their General Rate Case applications. Finally, ORA argues that recycled water projects that apply via Tier 3 Advice Letter filings should be kept to a minimum. (ORA Comments at 1-2.) Cost containment and ratepayer protection were given as the objectives for these suggestions. ORA suggests changes in Ordering Paragraphs (OP) 12 and 20 of the PD to meet these objectives, (*See* Appendix A of ORA Opening Comments) as well as a change in OP No. 6 to remove a requirement for the incorporation of comparative GHG analysis from the economic analysis for each project.

We agree that the cost-benefit analyses should clearly show the benefits specific to customers in the service area to be served by the recycled water project proposed by the IOWSU. The PD has been changed accordingly. However, in light of state laws and policies that encourage integrated regional water management and planning, we think the Commission should also consider all of the benefits the recycled water project will provide to the region and the state. This is now reflected in the MCRs found in Attachment A of the PD. .

Lastly, in response to ORA's concerns about the discussion in the PD of GHG emissions and given the evolving nature of the GHG economic analysis, we have made GHG emissions analysis non-mandatory and added a related footnote to the MCRs in Attachment A of the PD.

The Consumer Federation of California (CFC) argues that the MCRs and Tier 3 Advisory Letter Template "should include an outline that requires a detailed explanation about how cost burdens will be allocated among customer classes." (CFC Reply Comments at 2.) We decline to adopt this

recommendation. We require the IOWSUs to provide a determination of how recycled water project cost should be allocated between potable and recycled water customers. We also adopt a cost allocation policy for recycle water project costs for potable customers based on the cost allocation criteria from the OIWSU's most recent GRC for that particular service area.

CFC also urges that further guidance be provided on the education and outreach requirements for the IOWSUs. (CFC Reply Comments at unnumbered 3). In response, we have modified the decision to require that IOWSUs include recycled water educational materials with their project proposals.

While the CWA concludes that the PD has "considerable merits," it is concerned about the prescriptive nature of what it calls the "exhaustive list of minimum criteria requirements" which it thinks would be a disincentive for recycled water project development. (CWA Opening Comments at 2 and 3.) From this perspective, CWA first argues that the MCRs and Tier 3 Advice Letter Template should be instructive rather than mandatory. We disagree. Those instruments are mandatory because the information collected is necessary for a full evaluation of the costs, benefits, and cost–effectiveness of recycled water projects. We do however agree with CWA that the MCRs and Tier 3 Advice Letter Template can be streamlined by consolidating some informational categories. To this end, we have modified subparagraphs 3a and 3c in the PD's Attachments A and B.

CWA also suggests several constructive changes concerning cost comparison in cost-effectiveness and cost-benefit analysis. (CWA Opening Comments at 7 and 8.) We have modified Section 4 of the MCRs and Section 4 of

the Tier 3 Advice Letter Template to allow a broader basis for comparison of a full range of water sources.

Finally, we reject CWA's recommendation that the 5% criteria for Tier 3 AL treatment eligibility should exclude operation and maintenance cost impacts from the revenue requirement calculation as these costs are an integral part of a revenue requirement.

9. Assignment of Proceeding

Michel Peter Florio is the assigned Commissioner and Gary Weatherford and Darwin E. Farrar are the assigned ALJs in this proceeding.

Findings of Fact

1. Recycled water is an increasingly important component of the urban water supply portfolios of publicly-owned and investor-owned water utilities alike.
2. The State of California is strongly committed, where compatible with the protection of public health, to promoting and facilitating growth in the production, distribution and use of recycled water.
3. California is a leader in municipal wastewater recycling, using over 600,000 acre-feet (AF) annually, mostly in Southern California.
4. The amount of recycled water distributed by Commission-regulated investor-owned water and sewer utilities in 2012 and 2013 was about 11,500 and 11,996 AF, respectively.
5. The SWRCB policy calls for a significant increase in the use of recycled water and storm water.
6. SWRCB policy encourages the streamlining of the permit process for recycled water projects and promotes a state-wide increase in the use of recycled water through mandated goals for 2020 and 2030.

7. SWRCB policy calls for the substitution of as much recycled water supplies for potable water as possible by 2030 and interagency guidance for economic analyses of recycling proposals.

8. The duplication of water service by political subdivisions within the service territory of IOWSUs should be avoided.

9. Public agencies typically treat municipal waste in California.

10. The recycled water that public agencies produce is generally allocated to public and/or investor-owned water purveyors.

11. Interagency cooperation and collaboration is necessary to address the multi-lateral delivery and pricing agreements, operating and maintenance costs, operational responsibilities over recycled water distribution systems, and PPP agreements that are associated with the use of recycled water.

12. Potential energy costs and savings should be considered in any comparative analysis of recycled water and alternative sources of water supply where the data for such analysis exist or can be reasonably produced or collected.

13. Integrated regional water resource planning and management has been authorized and funded by the state since 2002.

14. The Commission is committed to avoiding the duplication of recycled water service within the service territory of each IOWSU.

15. The Commission is committed to protecting IOWSU ratepayers by ensuring that ratepayers do not assume an unjust share of recycled water project costs when PPPs are involved in regional projects.

16. Recycled water projects are more viable or cost-effective when public and private partnerships are formed and/or when public funding is available.

17. There is significant variability associated with recycled water project costs, project funding and partnerships, and customer infrastructure costs and incentives.

18. The level of the incentive or pricing of recycled water provided by the IOWSUs and public agencies to incentivize customers to take recycled water service has extended in some instances beyond the discounting of recycled water.

19. When general modifications to GO 103-A are next considered by the Commission, whether GO 103-A is adequately supporting the Commission's role in regulating recycled water quality should be examined.

20. Many recycled water projects are not cost-effective due to the infrastructure investments needed to treat and distribute recycled water so as to provide service to a small number of customers.

21. A review of and changes to eligibility criteria for public loan and grant programs at the local, state and national governmental level can facilitate the IOWSU's access to those funds for recycled water projects.

22. The amount of recycled water each IOWSU is selling to its customers should be tracked and monitored.

23. Customer education is a key element in gaining greater public understanding and acceptance of the use of recycled water.

24. The IOWSUs should increase their consumer education efforts concerning recycled water use and associated public health protections.

25. Each IOWSU should take advantage of opportunities to increase customer understanding of the financial, economic, social and environmental costs and benefits of recycled water.

26. Additional criteria or guidelines are needed to evaluate the reasonableness of the IOWSUs' proposed recycled water projects.

Conclusions of Law

1. Recycled water is an important resource in the State's IRWR program.
2. The Commission can provide incentives to encourage ratepayers to use recycled water in lieu of potable water.
3. The IOWSUs may recover from general metered customers the discounts benefitting recycled water users, provided the discounts are greater than the avoided cost resulting from some customers no longer receiving portable water service.
4. The Commission's recycled water policies conform to Cal. Water Code §§ 13510, 13550 and 13560(c).
5. The Commission has concurrent jurisdiction to regulate water quality in conjunction with the CDPH, SWRCB, RWQCBs and local public health agencies.
6. The utility plant related to the production, distribution and use of recycled water that is funded by the IOWSU, that the Commission finds just and reasonable, should be allowed into the company's rate base.
7. Utility plant investments not funded by the IOWSUs or paid for by low interest public loans or grants should be treated as contributed plant for ratemaking purposes.
8. The state-wide water law regime controls beneficial use competition, conflicts, and priorities related to recycled water.
9. GO 103-A presently requires that all recycled water meet the applicable CDPH's recycled water quality requirements.
10. It is the utility's (utilities') responsibility to adhere to all Commission rules, decisions, GOs and statutes including Public Utilities Code Section 451 to take all

actions "…necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public."

11. The complexity of PPP agreements calls for a thorough reasonableness review of proposed recycled water projects and/or contract agreements.

ORDER

IT IS ORDERED that:

1. Each Investor-Owned Water and Sewer Utility shall report in its respective general rate case, the amount(s) of recycled water being sold annually by treatment type, the wholesale and retail price(s), and identity of the recycled water supplier(s).

2. Pursuant to the Minimum Criteria Requirements adopted in this decision, contracts and partnerships entered into by the Investor-Owned Water and Sewer Utilities must fully disclose the key terms of the agreement(s) concerning project cost allocation and sharing, and the responsibilities for the construction, operation, and maintenance of the recycled water infrastructure facilities.

3. The Investor-Owned Water and Sewer Utilities shall incorporate the comparative analysis of energy costs and savings into the cost-benefit analysis for each proposed recycled water project.

4. The Commission's Division of Water and Audits, the Energy Division, and the Policy and Planning Division shall monitor, contribute to efforts to collect relevant data, and develop and improve the tools and methodologies for the comparative analysis of energy costs and savings related to recycled water.

5. The Division of Water and Audits shall monitor the developments and changes in recycled water regulation and advise the Commission of any necessary modifications to the policies adopted by this decision.

6. The Investor-Owned Water and Sewer Utilities shall consider a comparative analysis of recycled water and alternative sources of water supply in terms of greenhouse gas emissions. This analysis shall be an informative component in the cost-benefit analysis for each proposed recycled water project to the extent that the data needed for such comparative analysis exist or can be reasonably produced or collected.

7. To receive Commission approval, recycled water projects must have a determination of compliance with or exemption from the California Environmental Quality Act and/or National Environmental Protection Act.

8. When embarking on a recycled water project the Investor-Owned Water and Sewer Utilities shall explore and take advantage of appropriate opportunities for joint recycled water projects and arrangements with other public water supply and wastewater treatment agencies. To the extent feasible, such activities shall be compatible with Integrated Regional Water Resource planning in the applicable region, and if practicable, each Investor-Owned Water and Sewer Utility shall conduct its water supply planning for recycled water in a manner consistent with the relevant portions of the Integrated Regional Water Resource plan for its region.

9. Investor-Owned Water and Sewer Utility ratepayers shall not assume an unjust or unreasonable share of the recycled water project costs when public and private partnerships are involved.

10. Investor-Owned Water and Sewer Utilities shall seek opportunities to partner with public agencies or otherwise to identify and secure lower-cost public funding to cover or contribute to the cost of their recycled water projects.

11. The ratemaking treatment of recycled water projects shall be done on a case-by-case basis because of the wide range of variables involved.

12. The ratemaking treatment of recycled water project costs shall consider all the costs and benefits the project will provide for IOWSU customers in the service area and region where the project will be implemented.

13. The ratemaking treatment of recycled water projects shall include a determination of how the recycled water project costs should be allocated between the Investor-Owned Water and Sewer Utilities' potable and recycled water customers, and whether those costs should be recovered through the general metered service rates or a surcharge.

14. Consistent with Commission cost-of-service ratemaking policies and accounting treatment for utility plant investments, if the utility plant related to recycled water production, distribution and use is funded by the Investor-Owned Water and Sewer Utility, and found just and reasonable by the Commission, it shall be afforded rate base treatment.

15. Consistent with the accounting rules and ratemaking policies adopted in D.10-12-058, utility plant that is not funded by the Investor-Owned Water and Sewer Utilities, or paid for by low interest public loans or grants, shall be treated as contributed plant for ratemaking purposes.

16. As part of the Minimum Criteria Requirements the Investor-Owned Water and Sewer Utilities shall provide information on: a) The current cost, availability and demand for both potable and recycled water supplies in the Investor-Owned Water and Sewer Utilities' service area where the project is being proposed; b) the potential demand for the proposed project's recycled water supply by prospective customers; and c) the factors used or considered in setting the

recycled water incentives, including wholesaler discounts and/or assistance with customers retrofits costs.

If the discounts provided for in the above paragraphs are greater than the water utility's reduction in costs, the water utility may include the aggregate amount of that discount in its revenue requirements to be applied to, and recovered in, rates that are applicable to all general metered customers.

17. Recycled water project costs shall be allocated using each Investor-Owned Water and Sewer Utilities' adopted cost allocation criteria from its most recent GRC for the service area where the project will be implemented.

18. The Investor-Owned Water and Sewer Utilities must make a showing that demonstrates to the Commission's satisfaction the prudency of each recycled water project and reasonableness of the associated costs specified in the minimum criteria requirements prior to recovery of recycled water project costs from metered service customers. The aforementioned showing must include a cost-benefit analysis for new recycled water projects.

19. When an Investor-Owned Water and Sewer Utility undertakes a recycled water project, it shall identify and review consumer education materials and methods that are available industry-wide, and, where appropriate, take reasonable steps with any public agency partners to utilize existing resources before developing duplicative or more costly materials. The IOWSUs shall include with their recycled water proposals, information on the consumer education materials and methods they will use to educate customers about the benefits associated with the use of recycled water.

20. To qualify for the Tier 3 Advice Letter process a proposed recycled water project shall: (1) Be required to have a revenue impact of less than 5% of the proposing Investor-Owned Water and Sewer Utilities' revenue requirement in

the associated ratemaking area; (2) be exempt from review under the National Environmental Protection Act (NEPA) or California Environmental Quality Act (CEQA), or the lead agency must have completed and certified NEPA/CEQA review for the proposed project; and (3) not require direct potable water reuse as defined by Water Code Sections 13560 et seq.

21. Recycled water project proposals that do not have an impact on the Investor-Owned Water and Sewer Utilities' revenue requirement and potable customers' rates in the service area where the project is proposed qualify for the Tier 2 Advice Letter process.

22 Any remaining unresolved motions or requests are denied.

23. Rulemaking 10-11-014 is closed.

Dated August 28, 2014, at San Francisco, California.

MICHAEL R. PEEVEY
President
MICHEL PETER FLORIO
CATHERINE J.K. SANDOVAL
CARLA J. PETERMAN
MICHAEL PICKER
Commissioners

Attachment A: Minimum Criteria Requirements for a Proposed Recycled Water Project
Attachment B: Tier 3 Advice Letter Template for a proposed Recycled Water Project
Attachment C: Procedural History
Attachment D: Statutory Citations

ATTACHMENT A

Minimum Criteria Requirements for a Proposed Recycled Water Project

These minimum criteria requirements for recycled water projects are to be submitted by an Investor-Owned Water and Sewer Utility ("IOWSU")[1] in the preparation and submission of a recycled water project ("Project") for Commission approval in a General Rate Case application or a stand-alone application. IOWSU should provide a thorough showing in support of the prudency of the project and the reasonableness of the associated costs. The applicant must provide, at a minimum, a detailed showing on the following:

1. Background of the Proposed Recycled Water Project
    a. General information, including Project name and description (e.g., proposed technology, whether for direct potable, indirect potable or non-potable reuse, whether part of an existing recycled water system, etc.);
    b. Past history, present status and projected timeline of Project development;
    c. Status of any related projects;
    d. Location of the proposed project (include city/district/county and a summary description of the geographical and hydrological conditions) and applicable Integrated Regional Water Management ("IRWM") planning area, if any;
    e. Confirmation that the wastewater treatment plant providing recycled water for Project is fully permitted by the county, state and federal agencies as required by laws and regulations; and
    f. Name(s) and description of relationship(s) with partnering entities, if any.

2. Need for the Proposed Recycled Water Project
    a. The current cost, availability and demand for potable and recycled water supplies in the service area of the proposed project;

[1] The use of "IOWSU" in these criteria refers to Class A investor-owned water and comparable size sewer utilities and to smaller size Commission regulated water and sewer utilities that are engaging in the production, distribution or use of recycled water. To the extent such smaller utilities provide recycled water service, the Commission may apply these guidelines in a manner to account for operational challenges that may arise as a result of limited scale and resources.

b. Potential customer demand for the proposed project's recycled water supply by prospective customer;
c. Potential displacement of current potable delivery; and
d. The projected impact of the proposed project on the recycled water supplies available in the applicable Integrated Regional Water Resources Plan ("IRWRP").

3. General Structure of the Proposed Project Transaction
   a. Summary and explanation of key terms and conditions of the proposed project contracts, including the following, as applicable:

      i. Partnerships and Contracting parties;
      ii. Partnering entities' timeline and current status–include any Memorandum of Understanding that may be in place.
      iii. Proposed cost-sharing and cost allocation;
      iv. Proposed price discounting;
      v. Proposed escalation rates;
      vi. Water Purchased Agreement or other contract-related protections, including protections for water quality, guaranteed supply, future cost increases, stranded costs in the event of breach of contract;
      vii. Funding provided by partnering entity; and
      viii. Distribution of responsibility for partnership – who builds, owns, and operates the distribution facilities? Who pays for the customer's facilities retrofits?

   b. Explanation of how the foregoing contracts will benefit the participating customers, the overall customer base and the company's supply portfolio.

   c. Project overview summary of the proposed project to be shown in Table 1.

4. Project Cost-Benefit Analysis[2]

   a. Provide the cost-benefit analysis for the Project, including consideration of all non-monetized, non-quantifiable factors (e.g. environmental, supply reliability, social benefits, etc.) specific to the applicant's service area where the project is being proposed, the region, the state and beyond.

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[2] The University of California Davis, Guidelines for Preparing Economic Analysis for Water Recycling Projects, April 2011, can be used as a guideline for this analysis and it is available at the US EPA Region 9 website at: http://www.epa.gov/region9/water/recycling/

i. Estimated impacts on energy usage (both demand and energy consumption), subject to data availability and available tools for the analysis.

ii. Estimated Greenhouse Gas reductions, subject to data availability and available tools for the analysis[3]

b. The Project cost-effectiveness analysis:

i. A comparison of project costs against securing the next available alternative source of water supply;

ii. The estimated avoided costs of potable water treatment and distribution resulting from implementation of the proposed project;

c. The direct benefits that the project provides to the customers in the service area (e.g., supply reliability, system redundancy, etc.), and a description of how these benefits or factors are relevant to this specific service area (e.g., scarcity of water within this region, lack of existing system redundancy, etc.).

5. Supply Potential
   a. Source of recycled water supply and projected availability.

6. Incentives

   a. Marketing incentives/rate discounts, if any, to incentivize the use of recycled water produced by the proposed project (include both pricing and non-pricing alternatives; wholesaler discounts and IOWSU-planned incentives, e.g. assistance with customer retrofitting costs); and

   b. Describe the factors used/considered to establish the proposed incentives.

7. Due Diligence on Recycled Water Supply
   a. Information on existing and planned recycled water operations in the Project's Integrated Water Resource Planning area.

[3] The estimated Greenhouse Gas reduction analysis should be informative and not a mandatory requirement.

b. Efforts made by the IOWSU or its public partner(s) to seek public funds in grants or low-interest loans, if at all. Describe the status and anticipated impact of such funds on Project costs.

8. Project Costs

a. Breakdown of utility plant required for the proposed project, including the amount of the proposed project's utility plant that is being proposed to be added to the IOWSU rate base;

b. Breakdown of the proposed project's utility plant, if any, that will be funded by public monies;

c. Identify and quantify one-time and on-going expenses needed for the project to be borne by the IOWSU (e.g., operation and maintenance expenses, administrative and general expenses, etc.); and

d. Amount and type of contributions to the project, if any (e.g., treatment plant upgrades, onsite retrofits, etc.).

9. Revenue Requirement, Rates, and Rate Design

a. Total rate base increase associated with the Project;

b. Total increase in revenue requirement from the Project;

i. Net revenue requirement increase needed to cover the additional Utility Plant for the Project; and

ii. Revenue requirement resulting from 1) added rate base, and 2) expense increases (e.g., depreciation expense/property taxes/marketing incentives/operation & maintenance/administrative and general/etc.)

c. Existing recycled water rates in the applicable service area

i. Wholesale purchase price of recycled water in AF/CCF available in the applicable service area or district where the IOWSU is not the producer of recycled water;

ii. Existing retail price in AF/CCF for IOWSU-produced or conveyed recycled water in the applicable service area;

d. For new projects, specify recycled water rates that will result from the addition of the proposed project;

e. For new projects, specify the rate design of the proposed recycled water rates; and

f. Estimated impact of expanding the recycled water services to new or existing customers on the allocation of fixed and volumetric costs across potable and recycled water customers in the service area where the recycled water project is proposed.

10. Environmental Review, Permits and Certifications

a. Demonstrate project compliance with California Environmental Quality Act ("CEQA") and the National Environmental Policy Act ("NEPA"), to the extent applicable;
b. Identification and status of all of the necessary permits/certifications from the relevant regulatory agencies with jurisdiction over the proposed project (e.g. Regional Water Quality Control Board, California Department of Public Health, etc.),if any.
c. Specify any limitations set by applicable permit that may affect the proposed project.

Proposed Project Summary
Table 1

Project Name:		
1	Location (City, Hydrologic Region, and IRWMP if any)	
2	Additional utility plant required for Project and the amount proposed to be added to rate base	
3	Total amount of recycled water to be produced and/or conveyed by the Project in AF or CCF per Yr	
4	Expected Project start and completion date	
5	Projected start date for recycled water conveyance to customers	
6	Lead agency for NEPA / CEQA review and approval and status of NEPA / CEQA review	
7	Source and wholesale price of recycled water, if applicable	
8	Proposed retail price of recycled water	
9	Public and/or private grants/loans pursued by project proponent, and/or project partners	
10	Status of any grant/loan funding applications	
11	Note Project affiliations with one or more DWR IRWM planning entities	
12	Status of any applicable permits	

Attachment B

Tier 3 Advice Letter Template for a Proposed Recycled Water Project

I. Purpose and Process – Eligibility Criteria

This Tier 3 Advice Letter process for recycled water projects is intended for the review and approval of relatively, straightforward, uncomplicated and cost-limited recycled water projects ("Project") that meet the criteria set-forth in Decision 14-08-058, as follows:[1]

1. The proposed project has a revenue impact of less than five (5) percent of the proposing Investor Owned Water and Sewer Utility's (IOWSU's) revenue requirement in the associated ratemaking area

2. The proposed project does not require National Environmental Protection Act ("NEPA") or California Environmental Quality Act (CEQA) review and/or the lead agency has completed and certified NEPA / CEQA review for the proposed project; and

3. The proposed project does not involve direct potable reuse as defined by Water Code Section 13560 et. seq.[2]

II. Tier 3 Advice Letter Template

1. Background of the Proposed Recycled Water Project

   a. General Information, including Project name and description (e.g. proposed technology, whether for indirect potable or non-potable reuse, etc., whether part of an existing recycled water system, etc.);

[1] The use of "IOWSU" in these criteria refers to Class A investor-owned water and comparable size sewer utilities and to smaller size Commission regulated water and sewer utilities that are engaging in the production, distribution or use of recycled water. To the extent such smaller utilities provide recycled water service, the Commission may apply these guidelines in a manner that accounts for operational challenges that may arise as a result of limited scale and resources.

[2] Chapter 7.3. Direct and Indirect Potable Reuse Section 13560 (c) "Direct potable reuse" means the planned introduction of recycled water either directly into a public water system, as defined in Section 116275 of the Health and Safety Code, or into a raw water supply immediately upstream of a water treatment plant.

b. Past history, present status and projected timeline of Project development,

c. Status of any related projects;

d. Location of the proposed project (include city/district /county and a summary description of the geographical and hydrological conditions) and applicable Integrated Regional Water Management ("IRWM") planning area, if any;

e. Confirmation that the wastewater treatment plant providing recycled water for the proposed project is fully permitted by the county, state and federal agencies as required by laws and regulations.

f. Name(s) and description of relationship(s) with partnering entities, if any.

2. Need for the Proposed Recycled Water Project

a. The current cost, availability and demand for potable and recycled water supplies in the service area of the proposed project;

b. Potential customer demand for the proposed project's recycled water supply by prospective customer;

c. Potential displacement of current potable delivery; and

d. The projected impact of the proposed project on the recycled water supplies available in the applicable Integrated Regional Water Resources Plan (IRWRP).

3. General Structure of Proposed Project Transaction

a. Summary and explanation of key terms and conditions of the proposed project contracts, including the following, as applicable:

i. Partnerships and Contracting parties;

ii. Partnering entities' timeline and current status - include any Memorandum of Understanding that may be in place.

iii. Proposed cost-sharing and cost-allocation;

iv. Proposed price discounting;

v. Proposed escalation rates;

vi. Water Purchased Agreement or other contract-related protections, including protections for water quality, guaranteed supply, future cost increases, stranded costs guaranteed supply, future cost increases, stranded costs in the event of breach of contract;

vii. Funding provided by partnering entity; and

viii. Distribution of responsibility for partnership – who builds, owns, and operates the distribution facilities? Who pays for the customer's facilities retrofits?

b. Explanation of how the foregoing contracts will benefit the participating customers, the overall customer base and the company's supply portfolio.

c. Project overview summary of the proposed project to be shown in Table 1.

4. Project Cost-Effectiveness

a. Describe the cost-effectiveness of the Project, including a comparison of Project costs against securing the next available alternative source of water supply.

5. Supply Potential

a. Source of recycled water supply and projected availability;

6. Incentives

a. Marketing incentives/rate discounts, if any, to incentivize the use of recycled water produced by the proposed project (include both pricing and non-pricing alternatives; wholesaler discounts and IOWSU-planned incentives, e.g. assistance with customer retrofitting costs); and

b. Describe the factors used/considered to establish the proposed incentives.

7. Due Diligence on Recycled Water Supply

   a. Information on existing and planned recycled water operations in the Project's Integrated Water Resource Planning area.

   b. Efforts made by the IOWSU or its public partner(s) to seek public grants or low-interest loans, if at all. Describe the status and anticipated impact of such funds on Project costs.

8. Project Costs

   a. Breakdown of utility plant required for the proposed project, including the amount of the proposed project's utility plant that is being proposed to be added to the IOWSU rate base;

   b. Breakdown of the proposed project's utility plant, if any, that will be funded by public monies;

   c. Identify and quantify one-time and on-going expenses needed for the Project to be borne by the IOWSU (e.g., operation and maintenance expenses, administrative, and general expenses, etc.); and

   d. Amount and type of contributions to the Project, if any (e.g., treatment plant upgrades, on-site retrofits, etc.).

9. Revenue Requirement, Rates and Rate Design

   a. Total rate base increase associated with the Project;

   b. Total increase in revenue requirement from the Project;

      i. Net revenue requirement increase needed to cover the additional Utility Plant for the Project; and

      ii. Revenue requirement resulting from 1) added rate base, and 2) expense increases (e.g., depreciation expense/property taxes/marketing incentives/operation & maintenance/administrative and general/etc.)

   c. Existing recycled water rates in the applicable service area;

i. Wholesale purchase price of recycled water in AF/CCF available in the applicable service area or district where the IOWSU is not the producer of recycled water

ii. Existing retail price in AF/CCF for IOWSU-produced or conveyed recycled water in the applicable service area

d. For new projects, specify the recycled water rates that will result from the addition of the proposed project; and

e. For new projects, specify the rate design of the proposed recycled water rates.

f. Estimated impact of expanding the recycled water services to new or existing customers on the allocation of fixed and volumetric costs across potable and recycled water customers in the service area where the recycled water project is proposed.

10. Environmental Review, Permits and Certifications

a. Demonstrate Project compliance with the California Environmental Quality Act ("CEQA") and the National Environmental Policy Act ("NEPA"), to the extent applicable;

b. Identification and status of all of the necessary permits/certifications from the relevant regulatory agencies with jurisdiction over the proposed project (e.g. Regional Water Quality Control Board, California Department of Public Health, etc.), if any.

c. Specify any limitations set by applicable permit that may affect the proposed project.

Proposed Project Summary

Table 1

Project Name:		
1	Location (City, Hydrologic Region, and IRWMP if any)	
2	Additional utility plant required for Project and the amount proposed to be added to rate base	
3	Total amount of recycled water to be produced and/or conveyed by the Project in AF or CCF per Yr	
4	Expected Project start and completion date	
5	Projected start date for recycled water conveyance to customers	
6	Lead agency for NEPA / CEQA review and approval and status of NEPA / CEQA review	
7	Source and wholesale price of recycled water, if applicable	
8	Proposed retail price of recycled water	
9	Public and/or private grants/loans pursued by project proponent, and/or project partners	
10	Status of any grant/loan funding applications	
11	Note Project affiliations with one or more DWR IRWM planning entities	
12	Status of any applicable permits	

Attachment C
PROCEDURAL HISTORY

The Order Instituting Rulemaking (OIR) issued on November 23, 2010, identified nineteen issues, within six categories (planning, cost allocation, rate design, inter-agency coordination, environmental matters and accountability) for purposes of a preliminary scoping. The proceeding was assigned to President Michael R. Peevey on November 23, 2010, and reassigned to Commissioner Mike Florio on April 13, 2011. Administrative Law Judges Gary Weatherford and Darwin E. Farrar are co-assigned to this proceeding.

In the OIR the Commission directed that all regulated water utilities, and several other interested entities, be served with the OIR. Respondents were ordered to identify by December 8, 2010, public agencies with which they had partnered in the production, sales or delivery of recycled water. Nine responses were received and the identified public agencies were sent a copy of the OIR. The respondents were ordered, and other parties invited, to file by January 18, 2011, Prehearing Conference Statements addressing the issues and questions identified in the OIR as well as the subjects of scope, schedule, category, need for hearing, and other procedural matters. Fifteen such statements were filed and three responses to those statements thereafter were filed.

On January 28, 2011, persons on the service list were notified that a Prehearing Conference (PHC) would be held in San Francisco on April 7, 2011. On March 30, 2011, ALJ Weatherford issued a ruling containing a tentative agenda for the PHC and a draft summary of comments, responses and topics presented up to that date in the proceeding. At the PHC the agenda and the summary were modified in response to comments from attendees, and workshops were planned and scheduled. The assigned Commissioner's Ruling and Scoping Memo issued on June 16, 2011.

The first workshop, held on August 30, 2011, covered the public health regulatory framework for recycled water; the roles of the State Water Resources Control Board and the Regional Water Quality Control Boards; the involvement of the California Department of Water Resources; the recycled water experiences of the San Jose Water Company, San Gabriel Valley Water Company and the Suburban Water Systems.

The second workshop, held on November 21, 2011, looked at the comparative features of and demand for recycled water and potable water; the economic parameters for evaluating recycled water projects; and some of the economic and financial challenges posed by recycled water.

The third workshop, held on January 19 and 20, 2012, considered recycled water's social benefits; comparative rate structures between public and investor-owned recycled water purveyors; wholesale and retail rates; customer classes; and revenue requirements.

In the wake of the issuance of a report of the National Research Council's (NRC) Committee on Water Reuse, a fourth workshop was held on June 27, 2012, in part to review the report's findings, recommendations and ramifications. The Chair of the NRC committee made a presentation and responses to the committee report were given by representatives of the Water ReUse Association, State Water Resources Control Board, Department of Water Resources, California Department of Public Health and Region 9 of the U.S. Environmental Protection Agency. Also discussed at the workshop were public funding sources for Commission-regulated water companies.

The fifth and final workshop was held on October 23-24, 2012 and focused on consumer education and outreach, market potential and incentives, ratemaking and cost allocation, regional integrated resource planning and management, as well as discussions of the Division of Water and Audits' draft policies, minimum criteria and advice letter form that had been circulated to the parties in advance.

More than two dozen power point presentations from the above workshops are available for viewing on the Division of Water and Audits web site at: http://www.cpuc.ca.gov/PUC/Water/WaterEvents/.

ATTACHMENT D

Selected Recycled Water Statutes, Regulations and Policies

State Water Resources Control Board

For 2013 Recycled Water Policy see:

http://www.waterboards.ca.gov/board_decision/adopted

California Water Code

9.1.1.1 DIVISION 7. WATER QUALITY [13000 - 16104]

(Division 7 repealed and added by Stats. 1969, Ch. 482.)

9.1.1.1.1. CHAPTER 2. Definitions [13050 - 13051]

(Chapter 2 added by Stats. 1969, Ch. 482.)

9.1.1.1.1.1. 13050

As used in this division:***

(d) "Waste" includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.***

(f) "Beneficial uses" of the waters of the state that may be protected against quality degradation include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.***

(n) "Recycled water" means water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefor considered a valuable resource.***

(r) "Master recycling permit" means a permit issued to a supplier or a distributor, or both, of recycled water, that includes waste discharge requirements prescribed pursuant to Section 13263 and water recycling requirements prescribed pursuant to Section 13523.1.

(Amended by Stats. 1996, Ch. 1023, Sec. 429. Effective September 29, 1996.)

9.1.1.1.1.1. **13510.**

It is hereby declared that the people of the state have a primary interest in the development of facilities to recycle water containing waste to supplement existing surface and underground water supplies and to assist in meeting the future water requirements of the state.
(Amended by Stats. 1995, Ch. 28, Sec. 26. Effective January 1, 1996.)

9.1.1.1.1.2. **13511.**

The Legislature finds and declares that a substantial portion of the future water requirements of this state may be economically met by beneficial use of recycled water.
The Legislature further finds and declares that the utilization of recycled water by local communities for domestic, agricultural, industrial, recreational, and fish and wildlife purposes will contribute to the peace, health, safety and welfare of the people of the state. Use of recycled water constitutes the development of "new basic water supplies" as that term is used in Chapter 5 (commencing with Section 12880) of Part 6 of Division 6.
(Amended by Stats. 1995, Ch. 28, Sec. 27. Effective January 1, 1996.)

9.1.1.1.1.3. **13512.**

It is the intention of the Legislature that the state undertake all possible steps to encourage development of water recycling facilities so that recycled water may be made available to help meet the growing water requirements of the state.
(Amended by Stats. 1995, Ch. 28, Sec. 28. Effective January 1, 1996.)

13520.

As used in this article "recycling criteria" are the levels of constituents of recycled water, and means for assurance of reliability under the design concept which will result in recycled water safe from the standpoint of public health, for the uses to be made.
(Amended by Stats. 1995, Ch. 28, Sec. 29. Effective January 1, 1996.)

13521.

The State Department of Public Health shall establish uniform statewide recycling criteria for each varying type of use of recycled water where the use involves the protection of public health.
(Amended by Stats. 2010, Ch. 700, Sec. 2. Effective January 1, 2011.)

13522-13528. [contamination abatement; reports to Regional Water Quality Control Boards; misdemeanor penalty; Attorney General enforcement; master recycling permit; compliance with uniform statewide recycling criteria]

13529.

The Legislature hereby finds and declares all of the following:
(a) The purpose of Section 13529.2 is to establish notification requirements for unauthorized discharges of recycled water to waters of the state.
(b) It is the intent of the Legislature in enacting this section to promote the efficient and safe use of recycled water.
(c) The people of the state have a primary interest in the development of facilities to recycle water to supplement existing water supplies and to minimize the impacts of growing demand for new water on sensitive natural water bodies.
(d) A substantial portion of the future water requirements of the state may be economically met by the beneficial use of recycled water.
(e) The Legislature has established a statewide goal to recycle 700,000 acre-feet of water per year by the year 2000 and 1,000,000 acre-feet of water per year by the year 2010.
(f) The use of recycled water has proven to be safe and the State Department of Health Services is drafting regulations to provide for expanded uses of recycled water.
(Added by Stats. 1997, Ch. 833, Sec. 2. Effective January 1, 1998.)

13529.2.

***(b) For the purposes of this section, an unauthorized discharge means a discharge not authorized by waste discharge requirements pursuant to Article 4 of Chapter 4 (commencing with Section 13260), water reclamation requirements pursuant to

Section 13523, a master reclamation permit pursuant to Section 13523.1, or any other provision of this division.
(c) For the purposes of this section, "recycled water" means wastewater treated as "disinfected tertiary 2.2 recycled water," as defined or described by the State Department of Health Services or wastewater receiving advanced treatment beyond disinfected tertiary 2.2 recycled water.
(d) For purposes of this section, "recycled water" means "recycled water," as defined in subdivision (n) of Section 13050, which is treated at a level less than "disinfected tertiary 2.2 recycled water," as defined or described by the State Department of Health Services.
(e) The requirements in this section supplement, and shall not supplant, any other provisions of law.
(Added by Stats. 1997, Ch. 833, Sec. 3. Effective January 1, 1998.)

13529.4. [fines specified for failure to give notice of unauthorized discharge]

9.1.1.1.1.4.

13550.

(a) The Legislature hereby finds and declares that the use of potable domestic water for nonpotable uses, including, but not limited to, cemeteries, golf courses, parks, highway landscaped areas, and industrial and irrigation uses, is a waste or an unreasonable use of the water within the meaning of Section 2 of Article X of the California Constitution if recycled water is available which meets all of the following conditions, as determined by the state board, after notice to any person or entity who may be ordered to use recycled water or to cease using potable water and a hearing held pursuant to Article 2 (commencing with Section 648) of Chapter 1.5 of Division 3 of Title 23 of the California Code of Regulations:
(1) The source of recycled water is of adequate quality for these uses and is available for these uses. In determining adequate quality, the state board shall consider all relevant factors, including, but not limited to, food and employee safety, and level and types of specific constituents in the recycled water affecting these uses, on a user-by-user basis. In addition, the state board shall consider the effect of the use of recycled water in lieu of potable water on the generation of hazardous waste and on the quality of wastewater discharges subject to regional, state, or federal permits.
(2) The recycled water may be furnished for these uses at a reasonable cost to the user. In determining reasonable cost, the state board shall consider all relevant

factors, including, but not limited to, the present and projected costs of supplying, delivering, and treating potable domestic water for these uses and the present and projected costs of supplying and delivering recycled water for these uses, and shall find that the cost of supplying the treated recycled water is comparable to, or less than, the cost of supplying potable domestic water.
(3) After concurrence with the State Department of Health Services, the use of recycled water from the proposed source will not be detrimental to public health.
(4) The use of recycled water for these uses will not adversely affect downstream water rights, will not degrade water quality, and is determined not to be injurious to plantlife, fish, and wildlife.
(b) In making the determination pursuant to subdivision (a), the state board shall consider the impact of the cost and quality of the nonpotable water on each individual user.
(c) The state board may require a public agency or person subject to this article to furnish information which the state board determines to be relevant to making the determination required in subdivision (a).
(Amended by Stats. 1995, Ch. 28, Sec. 39. Effective January 1, 1996.)

9.1.1.1.1.5. **13551.**

A person or public agency, including a state agency, city, county, city and county, district, or any other political subdivision of the state, shall not use water from any source of quality suitable for potable domestic use for nonpotable uses, including cemeteries, golf courses, parks, highway landscaped areas, and industrial and irrigation uses if suitable recycled water is available as provided in Section 13550; however, any use of recycled water in lieu of water suitable for potable domestic use shall, to the extent of the recycled water so used, be deemed to constitute a reasonable beneficial use of that water and the use of recycled water shall not cause any loss or diminution of any existing water right.
(Amended by Stats. 1995, Ch. 28, Sec. 40. Effective January 1, 1996.)

9.1.1.1.1.6. **13552.2.**

(a) The Legislature hereby finds and declares that the use of potable domestic water for the irrigation of residential landscaping is a waste or an unreasonable use of water within the meaning of Section 2 of Article X of the California Constitution if

recycled water, for this use, is available to the residents and meets the requirements set forth in Section 13550, as determined by the state board after notice and a hearing.
(b) The state board may require a public agency or person subject to this section to submit information that the state board determines may be relevant in making the determination required in subdivision (a).
(Amended by Stats. 1995, Ch. 28, Sec. 41. Effective January 1, 1996.)

9.1.1.1.1.7. 13552.4-1355.2.8 [required use of recycled water for residential landscaping and general permit authorized; uses of potable water that are unreasonable and uses for which recycled water are required]

9.1.1.1.1.8. 13553.

(a) The Legislature hereby finds and declares that the use of potable domestic water for toilet and urinal flushing in structures is a waste or an unreasonable use of water within the meaning of Section 2 of Article X of the California Constitution if recycled water, for these uses, is available to the user and meets the requirements set forth in Section 13550, as determined by the state board after notice and a hearing. ***

9.1.1.1.1.9. 13554-13554.3 [recycled water for toilet/urinal use; reimbursement of CDPH and SWRCB]

9.1.1.1.1.10.

9.1.1.1.1.11. 13555.2.

The Legislature hereby finds and declares that many local agencies deliver recycled water for nonpotable uses and that the use of recycled water is an effective means of meeting the demands for new water caused by drought conditions or population increases in the state. It is the intent of the Legislature to encourage the design and construction of water delivery systems on private property that deliver water for both potable and nonpotable uses in separate pipelines.
(Amended by Stats. 1995, Ch. 28, Sec. 47. Effective January 1, 1996.)

9.1.1.1.1.12.

9.1.1.1.1.13.

9.1.1.1.1.14. 13556.

In addition to any other authority provided in law, any water supplier described in subdivision (b) of Section 1745 may acquire, store, provide, sell, and deliver recycled water for any beneficial use, including, but not limited to, municipal, industrial, domestic, and irrigation uses, if the water use is in accordance with statewide recycling criteria and regulations established pursuant to this chapter.
(Amended by Stats. 1995, Ch. 28, Sec. 49. Effective January 1, 1996.)

13560.

The Legislature finds and declares the following:
(a) In February 2009, the state board unanimously adopted, as Resolution No. 2009-0011, an updated water recycling policy, which includes the goal of increasing the use of recycled water in the state over 2002 levels by at least 1,000,000 acre-feet per year by 2020 and by at least 2,000,000 acre-feet per year by 2030.
(b) Section 13521 requires the department to establish uniform statewide recycling criteria for each varying type of use of recycled water where the use involves the protection of public health.
(c) The use of recycled water for indirect potable reuse is critical to achieving the state board's goals for increased use of recycled water in the state. If direct potable reuse can be demonstrated to be safe and feasible, implementing direct potable reuse would further aid in achieving the state board's recycling goals.
(d) Although there has been much scientific research on public health issues associated with indirect potable reuse through groundwater recharge, there are a number of significant unanswered questions regarding indirect potable reuse through surface water augmentation and direct potable reuse.
(e) Achievement of the state's goals depends on the timely development of uniform statewide recycling criteria for indirect and direct potable water reuse. ***
(Added by Stats. 2010, Ch. 700, Sec. 3. Effective January 1, 2011.)

13561.

For purposes of this chapter, the following terms have the following meanings:
(a) "Department" means the State Department of Public Health.
(b) "Direct potable reuse" means the planned introduction of recycled water either directly into a public water system, as defined in Section 116275 of the Health and Safety Code, or into a raw water supply immediately upstream of a water treatment plant.
(c) "Indirect potable reuse for groundwater recharge" means the planned use of recycled water for replenishment of a groundwater basin or an aquifer that has been designated as a source of water supply for a public water system, as defined in Section 116275 of the Health and Safety Code.
(d) "Surface water augmentation" means the planned placement of recycled water into a surface water reservoir used as a source of domestic drinking water supply.
(e) "Uniform water recycling criteria" has the same meaning as in Section 13521.
(Added by Stats. 2010, Ch. 700, Sec. 3. Effective January 1, 2011.)

13562.

(a) (1) On or before December 31, 2013, the department shall adopt uniform water recycling criteria for indirect potable reuse for groundwater recharge.
(2) (A) Except as provided in subparagraph (C), on or before December 31, 2016, the department shall develop and adopt uniform water recycling criteria for surface water augmentation.
(B) Prior to adopting uniform water recycling criteria for surface water augmentation, the department shall submit the proposed criteria to the expert panel convened pursuant to subdivision (a) of Section 13565. The expert panel shall review the proposed criteria and shall adopt a finding as to whether, in its expert opinion, the proposed criteria would adequately protect public health.
(C) The department shall not adopt uniform water recycling criteria for surface water augmentation pursuant to subparagraph (A), unless and until the expert panel adopts a finding that the proposed criteria would adequately protect public health.
(b) Adoption of uniform water recycling criteria by the department is subject to the requirements of Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code.
(Added by Stats. 2010, Ch. 700, Sec. 3. Effective January 1, 2011.)

13562.5.

Notwithstanding any other law, no later than June 30, 2014, the department shall adopt, by emergency regulations in accordance with Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code, requirements for groundwater replenishment using recycled water. The adoption of these regulations is an emergency and shall be considered by the Office of Administrative Law as necessary for the immediate preservation of the public peace, health, safety, and general welfare. Notwithstanding Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code, emergency regulations adopted by the department pursuant to this section shall not be subject to review by the Office of Administrative Law and shall remain in effect until revised by the department.
(Added by Stats. 2014, Ch. 3, Sec. 15. Effective March 1, 2014.)

13563.

(a) (1) On or before December 31, 2016, the department, in consultation with the state board, shall investigate and report to the Legislature on the feasibility of developing uniform water recycling criteria for direct potable reuse.
(2) The department shall complete a public review draft of its report by September 1, 2016. The department shall provide the public not less than 45 days to review and comment on the public review draft.
(3) The department shall provide a final report to the Legislature by December 31, 2016. The department shall make the final report available to the public.
(b) In conducting the investigation pursuant to subdivision (a), the department shall examine all of the following:
(1) The availability and reliability of recycled water treatment technologies necessary to ensure the protection of public health.
(2) Multiple barriers and sequential treatment processes that may be appropriate at wastewater and water treatment facilities.
(3) Available information on health effects.
(4) Mechanisms that should be employed to protect public health if problems are found in recycled water that is being served to the public as a potable water supply, including, but not limited to, the failure of treatment systems at the recycled water treatment facility.
(5) Monitoring needed to ensure protection of public health, including, but not limited to, the identification of appropriate indicator and surrogate constituents.
(6) Any other scientific or technical issues that may be necessary, including, but not limited to, the need for additional research. ***

(Amended by Stats. 2013, Ch. 637, Sec. 1. Effective January 1, 2014.)

13563.5.

(a) The department, in consultation with the state board, shall report to the Legislature as part of the annual budget process, in each year from 2011 to 2016, inclusive, on the progress towards developing and adopting uniform water recycling criteria for surface water augmentation and its investigation of the feasibility of developing uniform water recycling criteria for direct potable reuse. ***
(Added by Stats. 2010, Ch. 700, Sec. 3. Effective January 1, 2011. Repealed as of January 1, 2017, by its own provisions.)

13564-13569. [information to inform water recycling criteria; expert panel; advisory group; considerations in investigating feasibility of developing uniform water recycling criteria for direct potable reuse; consistency with specified federal and state statutes; acceptance of nonstate funds]

9.1.1.1.1.15.

13575. **[Water Recycling Act of 1999 definitions]**

9.1.1.1.1.16. 13576.

The Legislature hereby makes the following findings and declarations:
(a) The State of California is subject to periodic drought conditions.
(b) The development of traditional water resources in California has not kept pace with the state's population, which is growing at the rate of over 700,000 per year and which is anticipated to reach 36,000,000 by the year 2010.
(c) There is a need for a reliable source of water for uses not related to the supply of potable water to protect investments in agriculture, greenbelts, and recreation and to replenish groundwater basins, and protect and enhance fisheries, wildlife habitat, and riparian areas.
(d) The environmental benefits of recycled water include a reduced demand for water in the Sacramento-San Joaquin Delta that is otherwise needed to maintain water quality, reduced discharge of waste into the ocean, and the enhancement of groundwater basins, recreation, fisheries, and wetlands.

(e) The use of recycled water has proven to be safe from a public health standpoint, and the State Department of Public Health is updating regulations for the use of recycled water.
(f) The use of recycled water is a cost-effective, reliable method of helping to meet California's water supply needs.
(g) The development of the infrastructure to distribute recycled water will provide jobs and enhance the economy of the state.
(h) Retail water suppliers and recycled water producers and wholesalers should promote the substitution of recycled water for potable water and imported water in order to maximize the appropriate cost-effective use of recycled water in California.
(i) Recycled water producers, retail water suppliers, and entities responsible for groundwater replenishment should cooperate in joint technical, economic, and environmental studies, as appropriate, to determine the feasibility of providing recycled water service.
(j) Retail water suppliers and recycled water producers and wholesalers should be encouraged to enter into contracts to facilitate the service of recycled and potable water by the retail water suppliers in their service areas in the most efficient and cost-effective manner.
(k) Recycled water producers and wholesalers and entities responsible for groundwater replenishment should be encouraged to enter into contracts to facilitate the use of recycled water for groundwater replenishment if recycled water is available and the authorities having jurisdiction approve its use.
(l) Wholesale prices set by recycled water producers and recycled water wholesalers, and rates that retail water suppliers are authorized to charge for recycled water, should reflect an equitable sharing of the costs and benefits associated with the development and use of recycled water.
(Amended by Stats. 2010, Ch. 288, Sec. 47. Effective January 1, 2011.)

9.1.1.1.1.17. 13577.

This chapter establishes a statewide goal to recycle a total of 700,000 acre-feet of water per year by the year 2000 and 1,000,000 acre-feet of water per year by the year 2010.
(Added by Stats. 1991, Ch. 187, Sec. 3.)

9.1.1.1.1.18. 13578. [2002 recycled water task force to advise CDPH and Legislature]

9.1.1.1.1.19.

9.1.1.1.1.20. 13579.

(a) In order to achieve the goals established in Section 13577, retail water suppliers shall identify potential uses for recycled water within their service areas, potential customers for recycled water service within their service areas, and, within a reasonable time, potential sources of recycled water.
(b) Recycled water producers and recycled water wholesalers may also identify potential uses for recycled water, and may assist retail water suppliers in identifying potential customers for recycled water service within the service areas of those retail water suppliers.
(c) Recycled water producers, retail water suppliers, and entities responsible for groundwater replenishment may cooperate in joint technical, economic, and environmental studies, as appropriate, to determine the feasibility of providing recycled water service and recycled water for groundwater replenishment consistent with the criteria set forth in paragraphs (1) to (3), inclusive, of subdivision (a) of Section 13550 and in accordance with Section 60320 of Title 22 of the California Code of Regulations.
(Amended by Stats. 1998, Ch. 164, Sec. 3. Effective January 1, 1999.)

9.1.1.1.1.21. 13580.

(a) A retail water supplier that has identified a potential use or customer pursuant to Section 13579 may apply to a recycled water producer or recycled water wholesaler for a recycled water supply.
(b) A recycled water producer or recycled water wholesaler that has identified a potential use or customer pursuant to Section 13579 may, in writing, request a retail water supplier to enter into an agreement to provide recycled water to the potential customer.
(c) A customer may request, in writing, a retailer to enter into an agreement to provide recycled water to the customer.
(d) (1) An entity responsible for groundwater replenishment that is a customer of a retail water supplier and that has identified the potential use of recycled water for groundwater replenishment purposes may, in writing, request that retail water supplier to enter into an agreement to provide recycled water for that purpose. That

entity may not obtain recycled water for that purpose from a recycled water producer, a recycled water wholesaler, or another retail water supplier without the agreement of the entity's retail water supplier.
(2) An entity responsible for groundwater replenishment that is not a customer of a retail water supplier and that has identified the potential use of recycled water for groundwater replenishment purposes may, in writing, request a retail water supplier, a recycled water producer, or a recycled water wholesaler to enter into an agreement to provide recycled water for that purpose.
(Amended by Stats. 1998, Ch. 753, Sec. 2. Effective January 1, 1999.)

9.1.1.1.1.22. 13580.5.

(a) (1) Subject to subdivision (e) of Section 13580.7, a retail water supplier that receives a request from a customer pursuant to subdivision (c) of Section 13580 shall enter into an agreement to provide recycled water, if recycled water is available, or can be made available, to the retail water supplier for sale to the customer.
(2) Notwithstanding paragraph (1), in accordance with a written agreement between a recycled water producer or a recycled water wholesaler and a retail water supplier, the retail water supplier may delegate to a recycled water producer or a recycled water wholesaler its responsibility under this section to provide recycled water.
(b) A customer may not obtain recycled water from a recycled water producer, a recycled water wholesaler, or a retail water supplier that is not the retailer without the agreement of the retailer.
(c) If either a recycled water producer or a recycled water wholesaler provides a customer of a retail water supplier with a written statement that it can and will provide recycled water to the retailer, the retail water supplier shall, not later than 120 days from the date on which the retail water supplier receives the written statement from the customer, by certified mail, return receipt requested, submit a written offer to the customer. A determination of availability pursuant to Section 13550 is not required.
(d) If the state board pursuant to Section 13550 makes a determination that there is available recycled water to serve a customer of a retail water supplier, the retail water supplier, not later than 120 days from the date on which the retail water supplier receives a copy of that determination from the customer, by certified mail, return receipt requested, shall submit a written offer to the customer.
(Amended by Stats. 1999, Ch. 173, Sec. 1. Effective January 1, 2000.)

9.1.1.1.1.23. 13580.7. [public agency retail water suppliers]

9.1.1.1.1.24. 13580.8.

(a) This section applies only to a retail water supplier that is regulated by the Public Utilities Commission.
(b) Rates for recycled water that is provided to the customer by a retail water supplier regulated by the Public Utilities Commission shall be established by the commission pursuant to Section 455.1 of the Public Utilities Code. A regulated water utility may request the commission to establish the rate or rates for the delivery of recycled or nonpotable water, with the objective of providing, where practicable, a reasonable economic incentive for the customer to purchase recycled or nonpotable water in place of potable water.
(c) A regulated water utility may propose a rate or rates for recycled or nonpotable water by tariff or by contract between the retail water supplier and the customer. Where the rate or rates are set by contract, the water utility and its customer shall meet, confer, and negotiate in good faith to establish a contract rate.
(d) The commission shall, as appropriate, provide a discount from the general metered rate of the water utility for potable water by either of the following means:
(1) Passing through to the customer the net reduction in cost to the water utility in purchasing and delivering recycled or nonpotable water as compared to the cost of purchasing and delivering potable water.
(2) Granting to the customer a uniform discount from the water utility's general metered potable water rate when the discount in paragraph (1) is determined to be an insufficient incentive for the customer to convert to the use of recycled or nonpotable water. If the commission provides for a discount pursuant to this paragraph that is greater than the water utility's reduction in cost, the commission shall authorize the water utility to include the aggregate amount of that discount in its revenue requirements to be applied to, and recovered in, rates that are applicable to all general metered customers.
(Added by Stats. 1998, Ch. 753, Sec. 5. Effective January 1, 1999.)

9.1.1.1.1.25. 13581.2.

If the retail water supplier is regulated by the Public Utilities Commission, and there is a failure to agree on terms and conditions of a recycle water supply agreement

with a customer within 180 days from the date of the receipt of a request for recycled water pursuant to subdivision (c) of Section 13580, a written statement pursuant to subdivision (c) of Section 13580.5, or a determination of availability pursuant to subdivision (d) of Section 13580.5, the matter shall be submitted to the Public Utilities Commission for resolution, and the commission shall determine a contract rate or rates for recycled water as provided in Section 13580.8.
(Added by Stats. 1998, Ch. 753, Sec. 8. Effective January 1, 1999.)

9.1.1.1.1.26. 13582.

This chapter is not intended to alter either of the following:
(a) Any rights, remedies, or obligations which may exist pursuant to Article 1.5 (commencing with Section 1210) of Chapter 1 of Part 2 of Division 2 of this code or Chapter 8.5 (commencing with Section 1501) of Part 1 of Division 1 of the Public Utilities Code.
(b) Any rates established or contracts entered into prior to January 1, 1999.
(Amended by Stats. 1998, Ch. 753, Sec. 9. Effective January 1, 1999.)

Public Utilities Code

9.1.1.1.2.

GENERAL PROVISIONS ***

9.1.1.1.2.1. 20.5.

For the purposes of this code, "recycled water" or "reclaimed water" has the same meaning as recycled water as defined in subdivision (n) of Section 13050 of the Water Code.
(Added by Stats. 1995, Ch. 28, Sec. 9.5. Effective January 1, 1996.)

453.

(a) No public utility shall, as to rates, charges, service, facilities, or in any other respect, make or grant any preference or advantage to any corporation or person or subject any corporation or person to any prejudice or disadvantage.

(b) No public utility shall prejudice, disadvantage, or require different rates or deposit amounts from a person because of ancestry, medical condition, marital status or change in marital status, occupation, or any characteristic listed or defined in Section 11135 of the Government Code. A person who has exhausted all administrative remedies with the commission may institute a suit for injunctive relief and reasonable attorney's fees in cases of an alleged violation of this subdivision. If successful in litigation, the prevailing party shall be awarded attorney's fees.

(c) No public utility shall establish or maintain any unreasonable difference as to rates, charges, service, facilities, or in any other respect, either as between localities or as between classes of service.

(d) No public utility shall include with any bill for services or commodities furnished any customer or subscriber any advertising or literature designed or intended (1) to promote the passage or defeat of a measure appearing on the ballot at any election whether local, statewide, or national, (2) to promote or defeat any candidate for nomination or election to any public office, (3) to promote or defeat the appointment of any person to any administrative or executive position in federal, state, or local government, or (4) to promote or defeat any change in federal, state, or local legislation or regulations.

(e) The commission may determine any question of fact arising under this section.

(Amended by Stats. 2007, Ch. 568, Sec. 43. Effective January 1, 2008.)

9.1.1.1.2.2. 455.1.

Whenever a water corporation files with the commission, pursuant to an advice letter submitted in accordance with commission procedures for this means of submission, a schedule stating rates, classifications, contracts, practices, or rules for the service of recycled water, the policies and standards for which are provided for in Article 7 (commencing with Section 13550) of Chapter 7 of Division 7 of the Water Code, the commission shall observe the following procedures:
(a) Unless the commission determines, pursuant to subdivision (b), that the schedule filed by a water corporation for the service of recycled water is not justified or, pursuant to subdivision (d), any other party protests in writing the filing of the

schedule, the schedule shall become effective upon the expiration of 40 days from the time of filing thereof.
(b) Notwithstanding the filing of notice of changes or amendments as provided in subdivision (c) or a protest as provided in subdivision (d), the schedule as filed shall become effective on an interim basis upon the expiration of 30 days from the time of filing thereof, subject to refund of any amount of the rate subsequently found by the commission to be in excess of a just and reasonable rate.
(c) If, upon its own initiative, the commission, acting through the staff organization with responsibility for reviewing advice letter filings, determines that the schedule filed by a water corporation for the service of recycled water is not justified, it shall notify the water corporation of the determination in writing within 40 days from the time of filing of the schedule and shall state in the notice all changes or amendments to the schedule that are required to make it just and reasonable. Upon the refiling by the water corporation within 10 days of the receipt of the notice of a revised schedule incorporating all changes and amendments specified by the commission, the revised schedule shall become effective on an interim basis subject to refund upon the expiration of five days from the time of the refiling thereof, and shall become final upon formal commission action approving the schedule, as revised.
(d) If any other party, including the commission organization or division created pursuant to Section 309.5, protests in writing the schedule filed by a water corporation for the service of recycled water, the commission shall set the matter for a hearing on the protest to be held within a reasonable time from the time that the party files its written protest with the commission.
(e) Subdivision (d) of Section 311 shall govern the timing of actions by the commission after the close of the record in any proceeding pursuant to subdivision (d) of this section.
(Amended by Stats. 2007, Ch. 130, Sec. 219.5. Effective January 1, 2008.)

California Health and Safety Code

116800-116820 [cross-connection control by users of water; fees; backflow certification programs; purple pipe distribution lines; violations]
California Code of Regulations (CCR)
Title 22, Division 4, Chapter 3, § 60301 et seq.
60301.90:

"Undisinfected Secondary recycled water means oxidized wastewater, Title 22, Division, 4, Chapter 3, Article 1"

60301.200. Direct Beneficial Use.

"Direct beneficial use" means the use of recycled water that has been transported from the point of treatment or production to the point of use without an intervening discharge to waters of the State.

Note: Authority cited: Section 13521, Water Code. Reference: Sections 13520 and 13521, Water Code.

60301.220. Disinfected Secondary-2.2 Recycled Water.

"Disinfected secondary-2.2 recycled water" means recycled water that has been oxidized and disinfected so that the median concentration of total coliform bacteria in the disinfected effluent does not exceed a most probable number (MPN) of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed, and the number of total coliform bacteria does not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30 day period.

Note: Authority cited: Section 13521, Water Code. Reference: Sections 13520 and 13521, Water Code.

60301.225. Disinfected Secondary-23 Recycled Water.

"Disinfected secondary-23 recycled water" means recycled water that has been oxidized and disinfected so that the median concentration of total coliform bacteria in the disinfected effluent does not exceed a most probable number (MPN) of 23 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed, and the number of total coliform bacteria does not exceed an MPN of 240 per 100 milliliters in more than one sample in any 30 day period.

Note: Authority cited: Section 13521, Water Code. Reference: Sections 13520 and 13521, Water Code.

60301.220:

"Disinfected secondary-2.2 recycled water" means recycled water that has been oxidized and disinfected so that the median concentration of total coliform bacteria in the disinfected effluent does not exceed a most probable number (MPN) of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed, and the number of total coliform bacteria does not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30 day period.

60301.225:

"Disinfected secondary-23 recycled water" means recycled water that has been oxidized and disinfected so that the median concentration of total coliform bacteria in the disinfected effluent does not exceed a most probable number (MPN) of 23 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed, and the number of total coliform bacteria does not exceed an MPN of 240 per 100 milliliters in more than one sample in any 30 day period.

60301.230:

"Disinfected tertiary recycled water" means a filtered and subsequently disinfected wastewater that meets the following criteria:

(a) The filtered wastewater has been disinfected by either:

(1) A chlorine disinfection process following filtration that provides a CT (the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow; or

(2) A disinfection process that, when combined with the filtration process, has been demonstrated to inactivate and/or remove 99.999 percent of the plaque forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.

(b) The median concentration of total coliform bacteria measured in the disinfected effluent does not exceed an MPN of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed and the number of total coliform bacteria does not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30 day period. No sample shall exceed an MPN of 240 total coliform bacteria per 100 milliliters.

60304. Use of Recycled Water for Irrigation.

(a) Recycled water used for the surface irrigation of the following shall be a disinfected tertiary recycled water, except that for filtration pursuant to Section 60301.320(a) coagulation need not be used as part of the treatment process provided that the filter effluent turbidity does not exceed 2 NTU, the turbidity of the influent to the filters is continuously measured, the influent turbidity does not exceed 5 NTU for more than 15 minutes and never exceeds 10 NTU, and that there is the capability to automatically activate chemical addition or divert the wastewater should the filter influent turbidity exceed 5 NTU for more than 15 minutes:

(1) Food crops, including all edible root crops, where the recycled water comes into contact with the edible portion of the crop,

(2) Parks and playgrounds,

(3) School yards,

(4) Residential landscaping,

(5) Unrestricted access golf courses, and

(6) Any other irrigation use not specified in this section and not prohibited by other sections of the California Code of Regulations.

(b) Recycled water used for the surface irrigation of food crops where the edible portion is produced above ground and not contacted by the recycled water shall be at least disinfected secondary-2.2 recycled water.

(c) Recycled water used for the surface irrigation of the following shall be at least disinfected secondary-23 recycled water:

(1) Cemeteries,

(2) Freeway landscaping,

(3) Restricted access golf courses,

(4) Ornamental nursery stock and sod farms where access by the general public is not restricted,

(5) Pasture for animals producing milk for human

consumption, and

(6) Any nonedible vegetation where access is controlled so that the irrigated area cannot be used as if it were part of a park, playground or school yard

(d) Recycled wastewater used for the surface irrigation of the following shall be at least undisinfected secondary recycled water:

(1) Orchards where the recycled water does not come into contact with the edible portion of the crop,

(2) Vineyards where the recycled water does not come into contact with the edible portion of the crop,

(3) Non food-bearing trees (Christmas tree farms are included in this category provided no irrigation with recycled water occurs for a period of 14 days prior to harvesting or allowing access by the general public),

(4) Fodder and fiber crops and pasture for animals not producing milk for human consumption,

(5) Seed crops not eaten by humans,

(6) Food crops that must undergo commercial pathogen-destroying processing before being consumed by humans, and

(7) Ornamental nursery stock and sod farms provided no irrigation with recycled water occurs for a period of 14 days prior to harvesting, retail sale, or allowing access by the general public.

(e) No recycled water used for irrigation, or soil that has been irrigated with recycled water, shall come into contact with the edible portion of food crops eaten raw by humans unless the recycled water complies with subsection (a).

Note: Authority cited: Section 13521, Water Code. Reference: Sections 13520 and 13521, Water Code.

60307. Use of Recycled Water for Other Purposes.

(a) Recycled water used for the following shall be disinfected tertiary recycled water, except that for filtration being provided pursuant to Section 60301.320(a) coagulation need not be used as part of the treatment process provided that the filter effluent turbidity does not exceed 2 NTU, the turbidity of the influent to the filters is continuously measured, the influent turbidity does not exceed 5 NTU for more than 15 minutes and

never exceeds 10 NTU, and that there is the capability to automatically activate chemical addition or divert the wastewater should the filter influent turbidity exceed 5 NTU for more than 15 minutes:

(1) Flushing toilets and urinals,

(2) Priming drain traps,

(3) Industrial process water that may come into contact with workers,

(4) Structural fire fighting,

(5) Decorative fountains,

(6) Commercial laundries,

(7) Consolidation of backfill around potable water pipelines,

(8) Artificial snow making for commercial outdoor use, and

(9) Commercial car washes, including hand washes if the recycled water is not heated, where the general public is excluded from the washing process.

(b) Recycled water used for the following uses shall be at least disinfected secondary-23 recycled water:

(1) Industrial boiler feed,

(2) Nonstructural fire fighting,

(3) Backfill consolidation around nonpotable piping,

(4) Soil compaction,

(5) Mixing concrete,

(6) Dust control on roads and streets,

(7) Cleaning roads, sidewalks and outdoor work areas and

(8) Industrial process water that will not come into contact with workers.

(c) Recycled water used for flushing sanitary sewers shall be at least undisinfected secondary recycled water.

Note: Authority cited: Section 13521, Water Code. Reference: Sections 13520 and 13521, Water Code.

60307. Use of Recycled Water for Other Purposes.

(a) Recycled water used for the following shall be disinfected tertiary recycled water, except that for filtration being provided pursuant to Section 60301.320(a) coagulation need not be used as part of the treatment process provided that the filter effluent turbidity does not exceed 2 NTU, the turbidity of the influent to the filters is continuously measured, the influent turbidity does not exceed 5 NTU for more than 15 minutes and never exceeds 10 NTU, and that there is the capability to automatically activate chemical addition or divert the wastewater should the filter influent turbidity exceed 5 NTU for more than 15 minutes:

(1) Flushing toilets and urinals,

(2) Priming drain traps,

(3) Industrial process water that may come into contact with workers,

(4) Structural fire fighting,

(5) Decorative fountains,

(6) Commercial laundries,

(7) Consolidation of backfill around potable water pipelines,

(8) Artificial snow making for commercial outdoor use, and

(9) Commercial car washes, including hand washes if the recycled water is not heated, where the general public is excluded from the washing process.

(b) Recycled water used for the following uses shall be at least disinfected secondary-23 recycled water:

(1) Industrial boiler feed,

(2) Nonstructural fire fighting,

(3) Backfill consolidation around nonpotable piping,

(4) Soil compaction,

(5) Mixing concrete,

(6) Dust control on roads and streets,

(7) Cleaning roads, sidewalks and outdoor work areas and

(8) Industrial process water that will not come into contact with workers.

(c) Recycled water used for flushing sanitary sewers shall be at least undisinfected secondary recycled water.

Note: Authority cited: Section 13521, Water Code. Reference: Sections 13520 and 13521, Water Code.

60321. Sampling and Analysis.

(a) Disinfected secondary-23, disinfected secondary-2.2, and disinfected tertiary recycled water shall be sampled at least once daily for total coliform bacteria. The samples shall be taken from the disinfected effluent and shall be analyzed by an approved laboratory.

(b) Disinfected tertiary recycled water shall be continuously sampled for turbidity using a continuous turbidity meter and recorder following filtration. Compliance with the daily average operating filter effluent turbidity shall be determined by averaging the levels of recorded turbidity taken at four-hour intervals over a 24-hour period. Compliance with turbidity pursuant to section 60301.320(a)(2)(B) and (b)(1) shall be determined using the levels of recorded turbidity taken at intervals of no more than 1.2-hours over a 24-hour period. Should the continuous turbidity meter and recorder fail, grab sampling at a minimum frequency of 1.2-hours may be substituted for a period of up to 24-hours. The results of the daily average turbidity determinations shall be reported quarterly to the regulatory agency.

(c) The producer or supplier of the recycled water shall conduct the sampling required in subsections (a) and (b).

Note: Authority cited: Section 13521, Water Code. Reference: Sections 13520 and 13521, Water Code.