# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

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# **RESPONSES TO COMMENTS**

**Tentative Order:** Waste Discharge Requirements Order R7-2024-XXXX

**Scheduled Adoption Date:** May 14, 2024

**Dischargers:** Coachella Valley Water District

Facility/Project: Water Reclamation Plant No. 10

**Public Notice:** 7-24-03-02

Agenda Item:

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**Comment Period:** March 1 – April 15, 2024 Riverside County
Staff Contact:

County:

Kevin Gonzalez Kevin.Gonzalez@WaterBoards.ca.gov

#### Table 1. Comments Received.

Commentor	Submittal Date	Responses
Zoe Rodriguez del Rey, Water Resources Mgr., Coachella Valley Water District (Discharger)	April 15, 2024	Page 3
Honorable Kelly Seyarto State Senator, 32nd District of California	April 12, 2024	Page 73
Andy Malone, Principal Geologist II Coachella Valley Salt and Nutrient Management Plan Agencies	April 15, 2024	Page 74
Steve L. Johnson, General Manager Desert Water Agency (DWA)	April 15, 2024	Page 77
Castulo Estrada, Utilities Manager Coachella Valley Reg'l Water Mgmt. Group	April 15, 2024	Page 81

Commentor	Submittal Date	Responses		
Matteo Serena, Senior Manager Irrigation Research and Services United States Golf Assn.	April 15, 2024	Page 83		
Jeff Jensen, Southwest Field Representative Golf Course Superintendents Assn. of America	April 11, 2024	Page 85		
Ellen Lloyd-Trover, Managing Partner Rancho Ellenita, The Lloyd-Trover Partnership	April 11, 2024 Page 86			
Ellen Lloyd-Trover, Riverside County Farm Bureau (RCFB)	April 11, 2024	Page 87		
Ellen Lloyd-Trover, Director Coachella Valley Irrigated Lands Coalition, Inc	April 11, 2024	Page 87		
Gretchen Gutierez, CEO Desert Valleys Builders Association (DVBA)	April 11, 2024	Page 87		
Callen M. Lockett, Executive Director Community Associations Institute, Coachella Valley	April 12, 2024	Page 87		
Linda Evans, Mayor City of La Qunita	April 15, 2024	Page 87		
Laura E James, Interim President Coachella Valley Economic Partnership	April 15, 2024	Page 87		
Steve Downs, Mayor City of Ranch Mirage	April 15, 2024	Page 87		
David B. Turner, Owner Coachella Valley Engineers, Inc.	April 16, 2024	Page 87		

# COMMENTS FROM COACHELLA VALLEY WATER DISTRICT (DISCHARGER)

# <u>MAIN COMMENT LETTER—ISSUE 1</u> (EFFLUENT LIMIT FOR TOTAL NITROGEN)

# <u>Subject</u>

Section C.1 (Table 8) of the Tentative Order prescribes an effluent limit of 10 mg/L for Total Nitrogen (compliance determined by a 30-day rolling average). However, the Discharger would be permitted to submit a Time Schedule for compliance with this effluent limit within 10 years.

# Comments<sup>1</sup>

*First*, the Discharger intends to expand its non-potable water recycling system to entirely eliminate the need for discharges of secondary treated effluent to percolation ponds at Water Reclamation Plant No. 10 (Facility), which is expected to be completed by 2029. Compliance with a Time Schedule, which would include at least some deliverables due within six months, would divert the Discharger's resources away from this transition. The Discharger has provided alternative language allowing flexibility to continue the non-potable water system expansion, while also providing assurances that the work will be completed in a timely manner.

The Facility currently treats an annual average of approximately 8.3 million gallons per day (MGD) of which 82 percent is treated annually to Title 22 recycled water standards and beneficially reused by 18 customers for golf course and landscape irrigation. Without this recycled water, these customers would otherwise use high quality groundwater and would also need to apply additional fertilizers. The remaining 18 percent is currently disposed to percolation ponds within the facilities footprint.

The Discharger has started construction on an expansion of the WRP-10 non-potable water system that will eliminate all discharges of secondary effluent to the percolation ponds. Phase 1 and 2 of the current expansion of the WRP-10 non-potable water system will add an additional 20 customers bringing the use of available recycled water to 100 percent by 2029, as shown in Table 1 below. The investment in this expansion, which has already been funded in part through State and Federal grants, is \$90 million.

<sup>&</sup>lt;sup>1</sup> The Discharger's comments on the total nitrogen effluent limit have been edited and/or summarized for improved readability.

1	able 1	. Exces	s Recy	cied v	vater (	KW) A	vana	ошту в	y real	r in Ac	re-ree	t (AF)	-
Excess	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
RW by													Annual
Year													
2024-	357	316	224	76	59	37	17	18	77	105	122	290	1,698
2025													(18%)
2026-	146	117	0	0	0	0	0	0	0	0	0	48	311
2028													(3%)
2029-	0	0	0	0	0	0	0	0	0	0	0	0	0
Future													(0%)

 Table 1. Excess Recycled Water (RW) Availability by Year in Acre-Feet (AF)<sup>1</sup>

<sup>1</sup> Assumes WRP-10 influent increases annually by 1% which is conservative given State regulation that reduces indoor water use standards from 55 gallons per capita per day (gpcd) to 42 gpcd by 2030, which is a reduction of 23.6%.

*Second*, the existing percolation ponds will not be needed for hypothetical emergency discharges. The Facility currently has four lined secondary effluent holding ponds with a total volume of 51.42 million gallons (MG) and two secondary effluent bladders with a combined storage capacity of 2.1 MG, for a total storage capacity of 53.52 MG to hold excess secondary effluent when recycled water availability exceeds demand or for other unforeseen conditions. As part of the Facility's non-potable water system expansion, the Disharger could expand the storage capacity for an additional 33 MG, which combined represents a total of 10 days of Facility effluent. This does not include additional system storage such as tertiary storage, blending water reservoir, pumping capacities, or repurposing of the remaining discharge ponds that could be used to further expand facility storage. The combined storage capacity at the Facility would be used in the event of recycled water distribution system disruptions and/or extreme storm events. Therefore, the assumption that the Discharger will require continuation of the existing percolation ponds as an emergency disposal method is unfounded.

*Third*, treatment for nitrogen at the Facility is estimated to cost 155.2 million dollars for capital improvement projects (CIP), as well as an annual increase of 2.8 million dollars for operations and maintenance (O&M) costs. These costs would in turn require sanitation rate increases between 62 and 148 percent.

*Fourth*, nitrogen treatment would not result in any decreases in tertiary-treated recycled water used for landscape and golf course irrigation because the irrigators would simply apply more nitrogen fertilizer. It is also well-established that turfgrass can act as an excellent biofilter. Studies have shown that agronomic irrigation with recycled water results in almost no nitrogen leaching, and no impairment of beneficial uses. The State Water Resources Control Board Order 2016-0068-DDW (*Water Reclamation Requirements for Recycled Water Use*) already requires that enrolled "Administrators" require their users of recycled water to apply at agronomic rates.

# Staff Responses

# The State Water Board's Antidegradation Policy requires the imposition of an effluent limit for Total Nitrogen.

The effluent limit for total nitrogen is necessary to comply with State Water Resources Control Board's (State Water Board) *Statement of Policy with Respect to Maintaining High Quality Waters in California*, Resolution 68-16 (*Antidegradation Policy*), which requires that Regional Water Board waste discharge requirements (WDRs) not result in water quality less than the applicable water quality objective (WQO).

For groundwater designated for municipal and domestic beneficial uses (MUN), the Water Quality Control Plan for the Colorado River Basin Region (Basin Plan) incorporates the Primary Maximum Contaminant Levels (MCLs) under California Code of Regulations, title 22, section 64431, which specifies that the total of nitrate and nitrite (sum of nitrogen) in drinking water cannot exceed 10 milligrams per liter (mg/L).<sup>2</sup> The exceedance of a WQO represents the impairment of a beneficial use of groundwater, and constitutes a condition of "pollution." (Wat. Code, § 13050, subd. (*I*)(1).)

In WDRs Order R7-2018-0001 (2018 WDRs Order), the Regional Water Board previously determined that the Facility was contributing to nitrate exceedances in groundwater.<sup>3</sup> (Finding 47a, pp. 10-11.) The order required the Discharger to investigate its nitrogen and TDS contribution to groundwater...." (§ F.1.e, pp. 17-18.) In its Final Report dated October 2021, the Discharger acknowledged that several groundwater wells had been "influenced" by the Facility's discharges. (*Evaluation of the* 

<sup>&</sup>lt;sup>2</sup> As stated in the Discharger's Annual Review for 2022-2023:

Nitrate (as nitrogen) in drinking water at levels above 10 milligrams per liter (mg/L) is a health risk for infants younger than six months. High nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of skin. Nitrate (as nitrogen) in drinking water levels above 10 milligrams per liter (mg/L) may also affect the ability of blood to carry oxygen in other individuals, such as pregnant women and those with certain enzyme deficiencies. ... [¶] Wells that confirm with nitrate levels (as nitrogen) above 10 mg/L are removed from service.

<sup>&</sup>lt;sup>3</sup> Although it did not contain any direct limitations on the nitrate concentrations in the Discharger's effluent, the order expressly prohibited the Discharger from causing an exceedance of Primary MCLs. (2018 WDRs Order, § C.1; cf. *Asociacion de Gente Unida por el Agua v. Central Valley Regional Water Quality Control Bd.* (2012) 210 Cal.App.4th 1255, 1281 [State Water Board *Antidegradation Policy* requires more than mere prohibition against further degradation of impaired groundwater].)

Influence of WRP 10 on Groundwater Total Dissolved Solids and Nitrate Concentrations (Oct. 2021), § 3.5, pp. 23-26.)

The Facility's effluent has historically had a nitrate as nitrogen concentration of 13.64 mg/L as N. Between 2018 and 2023, the effluent still contained an average nitrate as N concentration of 14.1 mg/L, which is 40 percent higher than the WQO.<sup>4</sup> Nitrate accounts for nearly all of the total nitrogen in the Facility's effluent. During this same period, groundwater samples from the Discharger's upgradient monitoring well (MW-4) had an average nitrate as N concentration of 8.74 mg/L; and the Discharger's two downgradient wells (MW-5 and MW-6) had average nitrate as N concentrations of 19.04 mg/L and 13.24 mg/L, respectively.

Although the Discharger may not be responsible for all of the nitrate loading in downgradient groundwater, it is now clear that, in the absence of any direct limitation on the amount of total nitrogen<sup>5</sup> that may be percolated to groundwater, the Facility's discharges will continue to degrade groundwater beyond the WQO, thereby impairing beneficial uses and causing a condition of "pollution." The Discharger must therefore be required to comply with an effluent limit similar to other dischargers in the area. (See, e.g., Order R7-2024-009 [Palm Springs Wastewater Treatment Plant].)

In summary, the proposed effluent limitation for Total Nitrogen is not "conservative," as the Discharger argues. Rather, it represents the minimum of what is already legally mandated under the *Antidegradation Policy*.

<sup>&</sup>lt;sup>4</sup> Although the Discharger appears to suggest that at least some nitrogen removal is already occurring in the percolation ponds, no technical support is provided. Instead, the Discharger cites to an unspecified provision within the Santa Ana Regional Water Quality Control Board's (Santa Ana Water Board) Water Quality Control Plan for the Santa Ana River Basin (Santa Ana River Basin Plan), as well as to the Santa Ana Water Board's Order R8-2008-0008 for the Eastern Municipal Water District (EMWD). Neither citation is persuasive or appropriate in this proceeding. Section 5.B.3 of the Santa Ana River Basin (p. 5-21) establishes a nitrogen implementation plan incorporating a range of nitrogen loss coefficients based on agronomic uptake and hydrological considerations that are specific to the Santa Ana River Basin and the various management zones within it. Moreover, the evidentiary bases for the Santa Ana River Basin Water Basin Plan provisions or the 2008 EMWD order are not being offered here. Nor is Colorado River Basin Water Board required to adopt the same approach.

<sup>&</sup>lt;sup>5</sup> Although nitrate already comprises most of the total nitrogen in the Discharger's wastewater, additional nitrogen may convert to nitrate or nitrite. Because it is not known how much nitrogen will be converted, the effluent limit is for total nitrogen, rather than for nitrate and nitrite in particular.

# The proposed effluent limitation will be inapplicable to the Discharger's production and distribution of recycled water.

The Discharger appears to erroneously assume that the proposed effluent limitation would somehow result in a needless reduction in the nitrogen content of its recycled water. However, the Tentative Order does not prescribe requirements for, permit, or otherwise regulate the Discharger's production and distribution of tertiary-treated recycled water for landscape and golf course irrigation. As noted in the Tentative Order's findings, such activities continue to be regulated under the State Water Board's Water Reclamation Requirements for Recycled Water Use, Order 2016-0068-DDW (Recycled Water General Order).

The Tentative Order's discharge requirements are strictly limited to discharges of secondary-treated wastewater discharged directly to groundwater through nine large percolation ponds.<sup>6</sup> Indeed, none of the proposed effluent limitations are applicable to the production, distribution and/or application of recycled water offsite. The effluent limitation would only apply to the wastewater discharged to the percolation ponds.

# Once the Facility completes its transition to 100 percent recycled water, the Tentative Order will not require nitrogen treatment.

The Discharger now informs staff that it will altogether cease discharging wastewater to the percolation ponds within five years (2029), and thereafter have no need for them—even as a backup option for the recycled water system.<sup>7</sup> These plans were not disclosed in the Discharger's Report of Waste Discharge (ROWD); nor has the Discharger submitted any formal proposals or work plans for the conversion to

<sup>&</sup>lt;sup>6</sup> Although the Tentative Order contains monitoring requirements for related activities, it does not constitute a permit or other regulatory mechanism for those activities.

<sup>&</sup>lt;sup>7</sup> Notwithstanding the Discharger's assertions, Regional Water Board staff are less confident that the Discharger will no longer need to dispose of wastewater via the percolation ponds. On February 1, 2024, in anticipation of a significant storm event, the Discharger contacted staff requesting an emergency preapproval to discharge untreated wastewater to the percolation ponds. The request was denied on the grounds that such approval could not be granted under the Water Code sections 13223 and 13263. Fortunately, the Facility was ultimately able to handle all of the wastewater without any unauthorized discharges.

100 percent recycled water.<sup>8</sup> If so, Board staff will welcome such a transition away from direct wastewater percolation to groundwater.

The effluent limitation for total nitrogen only applies as long as the Discharger continues to discharge secondary treated wastewater to its percolation ponds. If the Discharger proceeds according to its plans, it will not need to implement nitrogen treatment under the Tentative Order. Once the transition has occurred and the percolation ponds are appropriately decommissioned, the Tentative Order will be rescinded.<sup>9</sup>

# The Tentative Order minimizes impacts on the Facility's conversion to 100 percent recycled water.

The Discharger asserts that the Tentative Order's effluent limitations and time schedule provisions will interfere with its expansion of recycled water operations, yet it is not clear why that would be the case. The Discharger claims that it will cease discharging wastewater to the percolation ponds within five years, and yet the Tentative Order allows the Discharger to delay compliance for 10 years. Although some preliminary investigation and evaluation of nitrogen treatment alternatives may be required within the next five years, the Discharger's implementation of the preferred alternative may be deferred until the end of the 10-year period—and more importantly—after the percolation ponds are no longer being used to dispose of secondary treated wastewater.

Based on their professional experience, Regional Water Board staff do not anticipate that the preliminary investigation and evaluation activities will impose a heavy cost on the Discharger, much less interfere with its recycled water expansion. However, it is necessary that such an evaluation occur as a backup option in the event that the percolation ponds are still needed due to unforeseen circumstances.

Although the Discharger claims that compliance with a total nitrogen effluent limit would require it to spend over \$155M on capital improvement projects, plus nearly \$3M annual increases in operations and maintenance expenses, no support is provided for these estimates. It is also unclear whether the Discharger has actually researched and evaluated the variety of available treatment options. Although Regional Water Board

<sup>&</sup>lt;sup>8</sup> Contrary to the Discharger's assertions, the operative Title 22 Engineering Report does not contain anything other than a vague intention to "expand ... service to include future Customers." (See p. 40.) The report certainly does not contain any concrete plans to convert the Facility to 100 percent recycled water, much less propose a specific date for doing so.

<sup>&</sup>lt;sup>9</sup> Although the Discharger may be permitted to use decommissioned ponds for storage, the Regional Water Board will require that measures be taken to prevent percolation to groundwater.

staff are extremely sensitive to compliance costs, an explanation is needed for these estimates.

# MAIN COMMENT LETTER —ISSUE 2 (SALT AND NUTRIENT MANAGEMENT PLAN)

# Subject

In addition to the total nitrogen effluent discussed above, the Tentative Order maintains the same total dissolved solids (TDS) effluent as the previous order, which is 530 mg/L.

#### <u>Comment</u>

The Coachella Valley Salt and Nutrient Management Plan (CV-SNMP) agencies are working on an updated CV-SNMP that will calculate assimilative capacity, define management zones, recommend water quality objectives, and identify appropriate projects and management actions to manage salts and nutrients in a way that maximizes the uses of available water supplies, protects beneficial uses of groundwater, and maximizes the benefit to the communities of the Coachella Valley.

The statewide requirement to develop Salt and Nutrient Management Plans (SNMPs) for groundwater basins in California was first promulgated in 2009 when the State Water Board adopted the Recycled Water Policy. The purpose of the Policy was to encourage increased use of recycled water in a manner that implements state and federal water quality laws. To accomplish this, the Policy included, among other provisions, a requirement to prepare SNMPs such that "salts and nutrients from all sources be managed on a basin-wide or watershed-wide basis in a manner that ensures attainment of water quality objectives and protection of beneficial uses." The Policy recognized that all groundwater basins are different in size, hydrogeologic complexity, sources of water, and loading factors, which necessitates locally driven stakeholder efforts to define an appropriate SNMP that addresses region-specific conditions.

In the Coachella Valley, the CV-SNMP Agencies are working collaboratively to develop and implement an updated SNMP for the Coachella Valley Groundwater Basin. The CV-SNMP Agencies are committed to developing an updated SNMP that complies with State policies and preserves the long-term sustainable and affordable use of groundwater in the Coachella Valley. To achieve this, the CV-SNMP Agencies developed a workplan and schedule to update the SNMP, which was reviewed and approved by the Regional Water Board. The approved workplan includes the following main tasks to support basin-wide management of salts and nutrients to protect current and future beneficial uses of groundwater.

- Establish a CV-SNMP stakeholder group and technical advisory committee.
- Characterize nitrogen and TDS loading to the Groundwater Basin.
- Characterize current groundwater quality.
- Delineate management zones and metrics to characterize beneficial use protection.
- Recommend TDS numeric water quality objectives.
- Calculate available assimilative capacity for nitrogen and TDS loading.
- Develop a technical approach for forecasting nitrogen and TDS concentrations in groundwater.
- Construct nitrogen and TDS modeling tools and evaluate baseline conditions.
- Recommend implementation measures to manage nitrogen and TDS sustainably.
- Forecast nitrogen and TDS concentrations for management scenarios.
- Characterize and compare the cost of baseline and management scenarios.
- Select the appropriate management scenario to meet State policy objectives.
- Complete an antidegradation analysis.
- Prepare a Final CV-SNMP for Regional Water Board approval.

As stated in the Final Staff Report for the Amendment to the Water Quality Control Policy for Recycled Water:

A key parameter to consider in evaluating whether a project may result in water quality less than water quality objectives included in regional water board basin plans is assimilative capacity. When a receiving water (in this case groundwater) is able to absorb a pollutant load without exceeding the water quality objective, then assimilative capacity is said to exist.

Accordingly, one of the main goals in preparing the updated CV-SNMP is to calculate the available assimilative capacity for TDS and nitrogen in the subbasins of the Coachella Valley Groundwater Basin. This calculation will provide a technical basis for the Regional Water Board to assess whether the available assimilative capacity is sufficient to absorb the existing loads of TDS and nitrogen in the basin (including from future projects) while meeting groundwater quality objectives that are protective of beneficial uses into the future. Along with determining available assimilative capacity, the SNMP will identify and set appropriate triggers for implementation measures to manage TDS and nitrogen levels in groundwater in a manner that is protective of beneficial uses. Until these efforts are completed, it is premature to set effluent limits that mandate increased levels of costly treatment that may be unnecessary. Until an updated SNMP is completed and accepted by the Regional Water Board, it is premature to set the conservative limits for TDS and nitrogen proposed in the WRP-10 Tentative Order.

# Staff Response

Neither the State Water Board's Recycled Water Policy nor the Coachella Valley Salt and Nutrient Management Plan (CV-SNMP) allow the Discharger to continue contributing to nitrate pollution in groundwater.

As discussed above, nitrate in the Discharger's wastewater has already resulted in a condition of pollution in groundwater downgradient from the Facility. In other words, the underlying groundwater has already exceeded its assimilative capacity. The Coachella Valley Salt and Nutrient Management Plan (CV-SNMP) simply has no bearing on this issue, except to underscore that as the result of the discharge, groundwater has already been degraded and additional measures need to be taken to address the condition of pollution.

# The Discharger's wastewater is already complying with the existing "interim" effluent limitation for total dissolved solids (TDS).

Under the 2018 WDRs Order, the Discharger was required to comply with an "interim" total dissolved solids (TDS) effluent limit of 530 mg/L, with compliance determined based on the annual average. This limit was selected because it reflected the 99th percentile of effluent concentrations for the three-year period ending September 2017. (Finding 47c, p. 11.) The Discharger is already able to comply with the existing limit, and does not require a new "interim" limit. It is not clear that maintaining the existing limit will result in new treatment requirements.

# The Coachella Valley Salt and Nutrient Management Plan (CV-SNMP) does not relieve the Discharger from compliance with the Antidegradation Policy or its obligation to avoid further impairment of beneficial uses.

The Discharger argues that it should receive an even higher "interim" TDS effluent limit than the one already in place, and that the Regional Water Board should wait for the Coachella Valley Salt and Nutrient Management Plan (CV-SNMP) to propose a new a numeric salinity WQO and examine the basin's assimilative capacity before imposing costly treatment requirements. As noted above, the Discharger's wastewater already meets the existing TDS effluent limits. It is not clear why the existing limits would impose new treatment requirements.

It should be noted that the CV-SNMP, as described by the Discharger, is substantially broader than the process described in the State Water Board's *Water Quality Control Policy for Recycled Water* (Recycled Water Policy). Section 6.2.4 of the policy requires stakeholders to develop Salt and Nutrient Management Plans (SNMPs) that contain the following components:

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- (a) "A basin- or subbasin-wide monitoring plan that includes an appropriate network of monitoring locations to provide a reasonable, cost effective means of determining whether the concentrations of salts, nutrients, and other constituents of concern as identified in the salt and nutrient management plans are consistent with applicable water quality objectives";
- (b) "Water recycling use goals and objectives";
- (c) "Salt and nutrient source identification, basin or subbasin assimilative capacity and loading estimates, together with fate and transport of salts and nutrients";
- (d) "Implementation measures to manage or reduce the salt and nutrient loading in the basin on a sustainable basis and the intended outcome of each measure"; and
- (d) "An antidegradation analysis demonstrating that the existing projects, reasonably foreseeable future projects, and other sources of loading to the basin included within the plan will, cumulatively, satisfy the requirements of State Water Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California (Antidegradation Policy)."

The *Recycled Water Policy* presupposes the existence of numeric salinity objectives that do not yet exist in the Colorado River Basin.<sup>10</sup> Although the Basin Plan contains a *narrative* water quality objective (WQO) for "tastes and odors" in groundwater designated for municipal and domestic (MUN) beneficial uses, the Board also has yet to establish a generally applicable or site-specific supportive numeric limit for TDS. Notably, unlike those of other regions, the Board's Basin Plan does not incorporate the Title 22 Consumer Acceptance Contaminant Level Range, which specifies a recommended TDS limit of 500 mg/L, an upper limit of 1,000 mg/L, and a short-term limit of 1,500 mg/L. Additionally, the Regional Water Board has yet to establish a WQO that is protective of agricultural supply (AGR) beneficial uses of groundwater.

Although the Regional Water Board has found that the CV-SNMP was "acceptable," it has not committed to deferring to any recommended WQOs. Nor has it committed to waiting until the CV-SNMP process has been completed. The establishment of a WQO is ultimately a policy decision made by the Regional Water Board, in accordance with the Water Code and any applicable State Water Board policies such as the

<sup>&</sup>lt;sup>10</sup> Without an established objective, assimilative capacity cannot be determined.

Antidegradation Policy. (Wat. Code, § 13240.) Further, any such Basin Plan Amendment will be subjected to scientific peer review (Health & Saf. Code, § 57004), as well as State Water Board approval (Wat. Code, § 13245).

Regardless of whatever the CV-SNMP agencies recommend, the Regional Water Board will be required to establish a WQO that "in its judgment will ensure the reasonable protection of beneficial uses and the prevention of nuisance." (Wat. Code, § 13241.) In this case, underlying groundwater is designated for not only municipal and domestic supply (MUN), but also agricultural supply (AGR).<sup>11</sup>

Other relevant considerations in the selection of a numeric WQO will be "Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto," as well as "Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area." (Wat. Code, § 13241, subds. (b)-(c).) In other words, the selection of a numeric WQO will be made based in part on consideration of *existing* and *reasonably achievable* groundwater quality. It is therefore imperative that existing water quality be maintained until a numeric objective can be established. To be sure, the results of CV-SNMP's current water quality investigation activities will greatly inform such considerations.

Until a numeric limit WQO is established for TDS, a "conservative" approach to water quality degradation is warranted to preserve existing water quality to the extent possible—especially in light of the Discharger's groundwater recharge activities involving Colorado River water with much higher TDS concentrations. This approach is also consistent with the State Water Board's *Antidegradation Policy*, which requires that WDRs "result in the best practicable treatment or control of the discharge necessary to assure … the highest water quality consistent with the maximum benefit to the people of the State will be maintained." The Tentative Order merely maintains the existing "interim" TDS effluent limit under the 2018 WDRs Order (determined by annual average). The Discharger is already able to comply with that limit.

Ultimately, the Discharger has not provided any real justification for increasing its "interim" effluent limit from 530 mg/L (with which it is already complying) to an even higher limit of 575 mg/L. The CV-SNMP process certainly does not provide that justification, or otherwise relieve the Discharger from complying with the *Antidegradation Policy* in the meantime.

<sup>&</sup>lt;sup>11</sup> Notably, a WQO supporting AGR beneficial uses would need to account for salinity impacts on crop yields.

# **CVWD ATTACHMENT, COMMENT 1**

# Subject

Cover Page of Tentative Order

#### **Requested Revisions**

The Facility address stated on cover page and in Finding 2 is incorrect. Change address from 43400 Cook Street to 43000 Cook Street.

#### **Staff Response**

Change accepted.

# CVWD ATTACHMENT, COMMENT 2<sup>12</sup>

#### Subject

Tentative Order, generally

#### **Requested Revisions**

Change all references from "Five-Day Biochemical Oxygen Demand at 20°C" and "BOD5" to "Five-Day *Carbonaceous* Biochemical Oxygen Demand at 20°C" and "CBOD5."

#### **Staff Response**

Changes accepted.

<sup>&</sup>lt;sup>12</sup> This comment has been expanded to encompass all references to "Five-Day Biochemical Oxygen Demand at 20°C" and "BOD5" within the Tentative Order. Other parts of the Discharger's comment letter request similar changes to various provisions.

# **CVWD ATTACHMENT, COMMENT 3**

# Subject

Tentative Order, Finding 2

#### **Requested Revisions**

The Facility address stated in Finding 2 is incorrect. Change address from 43400 Cook Street to 43000 Cook Street.

#### **Staff Response**

Change accepted.

# **CVWD ATTACHMENT, COMMENT 4**

# Subject

Tentative Order, Finding 2, Footnote 1 (p. 1)

The Stormwater Channel is also commonly referred to as the "Coachella Valley Stormwater Channel."

#### **Requested Revisions**

Delete footnote. The stormwater channel becomes the Coachella Valley Stormwater Channel southeast of Washington St. Upstream of this point it is the Whitewater River Stormwater Channel.

#### Staff Response

Although the footnote will not be deleted, it has been revised to read as follows:

South of the Facility, the Whitewater River becomes the Coachella Valley Stormwater Channel (Channel), which is an engineered downstream extension that serves as a drainage way for irrigation return flows, treated community wastewater, and storm runoff. (Water Quality Control Plan for Colorado River Basin Region, § VI.C.1, p. 1-12.)

# **CVWD ATTACHMENT, COMMENT 5**

# Subject

Tentative Order, Finding 6 (p. 2)

The Facility is an activated sludge treatment Facility that treats wastewater from the surrounding communities of Indian Wells, Palm Desert, Rancho Mirage, and a portion of Cathedral City and serves a blend of canal water and disinfected tertiary recycled water to customers for golf course and landscape irrigation in the middle Coachella Valley. As the demand for reclaimed water increases, smaller volumes of secondary treated water are being discharged to the onsite percolation ponds each year. The Facility layout is depicted in **Figure 1** of **Attachment B**.

#### **Comments and Requested Revisions**

The Discharger has begun construction of an expansion of the WRP-10 non-potable water system to recycle 100% of the Facility's effluent and eliminate discharges to the percolation ponds by 2029.

Add the following before the final sentence of Finding 6.

The Discharger plans to no longer discharge to the onsite percolation ponds by the year 2029.

#### **Staff Response**

No changes to this finding. This information will be incorporated elsewhere within the Tentative Order. Additionally, this information was not disclosed in the Discharger's report of waste discharge (ROWD).

#### **CVWD ATTACHMENT, COMMENT 6**

#### Subject

Tentative Order, Finding 7.e (p. 2)

Order R7-2018-0001 described the Discharger's implementation of a Groundwater Replenishment Project that repurposed the nine northern percolation ponds to now receive canal water from the Colorado River for groundwater replenishment and required the Discharger to investigate the vertical and horizontal extent of TDS and Nitrate concentrations in the

groundwater around the Facility. The Discharger submitted a Final Investigation Report on October 30, 2021.

# **Comments and Requested Revisions**

Order R7-2018-0001 made it clear that the Palm Desert Groundwater Replenishment Project (GRP) was not subject to the Order. Please add the following sentence to the description of Order R7-2018-0001: "The scope of the Order was limited to the Facility and did not cover the GRP." Also, correct the submittal date of the Final Investigation Report to November 18, 2021.

# Staff Response

The requested addition has been rejected, as the scope of the prior order is not relevant to this Tentative Order. However, the Final Investigation Report submittal date will be changed to November 18, 2021. It should be noted that report's cover page states "October 2021."

# **CVWD ATTACHMENT, COMMENT 7**

# Subject

Tentative Order, Finding 8 (p. 3)

#### **Requested Revisions**

Change Report of Waste Discharge (ROWD) submittal date from December 23 to December 21, 2022.

#### **Staff Response**

Change accepted.

# **CVWD ATTACHMENT, COMMENT 8**

#### Subject

Tentative Order, Finding 10 (p. 3)

The pretreatment system consists of three mechanical bar screens, one aerated grit chamber, and one vortex type grit chamber. Secondary treatment consists of three activated sludge treatment plants with six 500 horsepower high speed turbo aeration blowers. The A Plant activated

sludge plant is rated at 2.0 MGD, the B Plant is rated for 8.0 MGD and C Plant is rated at 8. MGD for a total secondary wastewater dry weather flow capacity rating of 18 MGD. The secondary treatment system consists of a total of 16 aeration basins, and 14 secondary clarifiers.

#### **Comments and Requested Revisions**

Add a decimal point to the C-Plant rating for consistency with the number format of the other two plants (i.e., change from "8" to "8.0").

#### Staff Response

Change accepted.

# **CVWD ATTACHMENT, COMMENT 9**

#### Subject

Tentative Order, Finding 12 (p. 3)

Private contractors haul away the Facility's treated secondary sludge. If the contractor is unable to provide service for secondary sludge removal and disposal, the Discharger's contingency plan for temporary storage is to transport secondary sludge to the Discharger's Water Reclamation Plant No. 4. Sludge is not permanently disposed/land-applied onsite.

#### **Comments and Requested Revisions**

The Discharger's Operations has a different contingency plan for the Facility's treated secondary sludge which includes having multiple private contractors on-call to haul away the Facility's treated secondary sludge.

Delete the following:

If the contractor is unable to provide service for secondary sludge removal and disposal, the Discharger's contingency plan for temporary storage is to transport secondary sludge to the Discharger's Water Reclamation Plant No. 4.

Replace with:

Sludge is not permanently disposed/land-applied onsite.

#### **Staff Response**

Changes accepted.

# **CVWD ATTACHMENT, COMMENT 10**

#### Subject

Tentative Order, Finding 13 (p. 3)

Secondary effluent is further treated in the tertiary treatment plant for use through the existing recycled water distribution system in accordance with seasonal demand. The Facility experiences diurnal flow patterns; therefore, flows peak in the daytime and drop significantly in the nighttime. This causes secondary effluent to be stored during the day and recirculated back to the headworks at night to maintain tertiary production. The practice is similar during the wet season, when the demand for irrigation/landscape water drops and any excess water that cannot be stored as reclaim is stored as secondary effluent in the secondary effluent ponds. The secondary effluent is returned to headworks during the low flow periods to maintain tertiary production. If returning the flow to headworks is not possible, then the secondary effluent is disposed of in the nine- percolation ponds. Any tertiary water not being used for irrigation is stored in the tertiary lined basins and utilized during peak flow periods.)

#### **Requested Revisions**

To improve clarity, please revise the third and fourth sentences of the paragraph to read as follows:

... **As needed**, secondary effluent **can be** stored during the day and recirculated back to the headworks at night to maintain tertiary production. The practice is similar during the wet season, when the demand for irrigation/landscape water drops and any excess water that cannot be stored as **reclaimed water** is stored as secondary effluent in the secondary effluent ponds. ...

# **Staff Response**

Changes accepted.

# **CVWD ATTACHMENT, COMMENT 11**

# Subject

Tentative Order, Finding 14 (p. 4)

Tertiary treated wastewater from the two treatment units is comingled after disinfection and then blended with Coachella Canal water in the "T2" highpressure and low-pressure pump station wet-well or in one of the lined basins before being used as recycled water for golf-course and landscape irrigation.

#### **Requested Revisions**

Change "Coachella Canal" to "Colorado River" water.

#### **Staff Response**

Changes accepted with further revision. The sentence now reads as follows:

Tertiary treated wastewater from the two treatment units is comingled after disinfection and then blended with Coachella Canal water from the Colorado River in the "T2" high-pressure and low-pressure pump station wet-well or in one of the lined basins before being used as recycled water for golf-course and landscape irrigation.

# **CVWD ATTACHMENT, COMMENT 12**

#### Subject

#### Tentative Order, Finding 16 (p. 4)

The Facility experienced an increase in secondary effluent discharge rates from 1975 through the early 2000s, peaking at approximately 7,700-acrefeet-per-year (AFY) in 2003. Then, rates gradually declined to approximately 1,700 AFY in 2020. The average annual secondary effluent discharge rate over the 45-year historical period is 4,700 AFY. The recent increase in local demand for recycled water is reasonably expected to further increase in the future. The Discharger also has planned improvements to optimize treated effluent storage capacity and delivery of recycled water at Facility; secondary effluent discharge at the Facility site is anticipated to no longer be needed by approximately 2035. However, the Facility will still require emergency discharge ponds in the event of unanticipated recycled water distribution system disruptions and/or catastrophic storm events.)

# **Comments and Requested Revisions**

Please make the following updates and corrections:

- (1) Update the 2020 secondary effluent discharge amount to the most recent 2023 volume of approximately 1,500 AFY.
- (2) Update the status of planned improvements to optimize treated effluent storage capacity and delivery of recycled water at the Facility to reflect that construction has begun on these improvements.
- (3) Update the anticipated year by which secondary effluent discharge at the Facility is planned to no longer be needed to 2029.
- (4) The addition of customers to increase recycled water delivery and optimized storage at WRP-10 means that there will be no need for emergency discharge ponds. Please delete the following sentence which is not correct: "However, the Facility will still require emergency discharge ponds in the event of unanticipated recycled water distribution system disruptions and/or catastrophic storm events."

Revise the subject provision to read as follows:

The Facility experienced an increase in secondary effluent discharge rates from 1975 through the early 2000s, peaking at approximately 7,700-acrefeet-per-year (AFY) in 2003. Then, rates gradually declined to approximately **1,500** AFY in 2023. The average annual secondary effluent discharge rate over the 45-year historical period is 4,700 AFY. The increase in local demand for recycled water is reasonably expected to further increase in the future. The Discharger *has begun construction of* planned improvements to optimize treated effluent storage capacity and delivery of recycled water at *the* Facility; secondary effluent discharge at the Facility site is *planned* to no longer be needed by 2029.

#### **Staff Response**

Changes accepted. The Discharger's expectations regarding the need for wastewater discharges at the Facility are also incorporated elsewhere in the Revised Tentative Order. As noted above, this information was not disclosed in the Discharger's ROWD. See newly added Findings 90-95 in the Revised Tentative Order.

# **CVWD ATTACHMENT, COMMENT 13**

# Subject

Tentative Order, Finding 17 (p. 5)

Tertiary treated water is used as recycled water for golf course and landscape irrigation by 18 customers in Palm Desert and Indian Wells. Some effluent is also used on-site at the Facility for landscape irrigation. Approximately 6 MGD of tertiary treated wastewater is now used as recycled water for irrigation purposes while the balance of approximately 3 MGD of secondary treated wastewater is discharged to the percolation ponds.

#### **Requested Revisions**

Update the amount of tertiary treated wastewater used as recycled water for irrigation purposes and amount discharge to the percolation ponds from 6 MGD to 7 MGD and from 3 MGD to 1.4 MGD, respectively.

#### Staff Response

Changes accepted.

# **CVWD ATTACHMENT, COMMENT 14**

#### Subject

Tentative Order, Table 1 (Influent Data), p. 5

#### **Requested Revisions**

Make the following corrections:

- (1) For "Total Influent Flow," change the maximum value from 9.76 to 9.8 million gallons per day (MGD), and the minimum value from 6.99 to 7.0 MGD.
- (2) For "Total Suspended Solids," change the average value from 394.3 mg/L to 394 mg/L.
- (3) For "Five-Day Biochemical Oxygen Demand at 20°C," change the average value from 257.7 mg/L to 258 mg/L.

#### Staff Response

Changes accepted.

Hearing Date: May 14, 2024

# **CVWD ATTACHMENT, COMMENT 15**

# Subject

Tentative Order, Finding 20 (p. 6)

On September 22, 2020, the Discharger experienced a Sanitary Sewer Overflow (SSO), which lasted for approximately one hour, and occurred from a manhole junction structure located on the west side of Cook Street. The untreated wastewater ultimately ended up in the dry Stormwater Channel less than 1000 linear feet from the point of origination. The SSO was caused by an internal component failure of the "Uninterruptible Power Supply" which caused the "Programmable Logic Controller" to deenergize from both commercial and battery back-up power. The lack of power caused a snowball effect which caused other redundancies in the system to also fail. The Discharger vacuum recovered approximately 28,000 gallons of the spill, resulting in a net spill volume of 128,639 gallons to the dry Stormwater Channel. The Discharger has implemented numerous improvements and redundancies to their monitoring system and power supply backups as well as changed operational policies to ensure at least one operator is always in the control room at the Facility.

#### **Comments and Requested Revisions**

Please delete this finding, as it is not germane to this permit. The SSO occurred in the wastewater collection system, which is regulated under the State Water Resources Control Board Order 2022-0103-DWQ (Statewide General WDRs for Sanitary Sewer Systems). Please refer to Finding 3 of this Tentative Order that makes it clear that regulatory coverage under this Order is strictly limited in scope to those waste discharges, activities and processes described and expressly authorized by the Order.

# **Staff Response**

No changes. Regional Water Board WDRs typically reference any major areas of noncompliance that are associated with the Facility, including violations of other permits. Moreover, the Discharger performed many updates to the Facility's SCADA monitoring system which is located in the Administration Building of the Facility. The SCADA system is also used to remotely monitor and control the Facility's wastewater treatment process. Finally, Finding 3 has been revised to clarify the scope of the Tentative Order.

# **CVWD ATTACHMENT, COMMENT 16**

# Subject

Tentative Order, Finding 24 (p. 6)

The Stormwater Channel is located immediately south of the Facility. The Stormwater Channel is a water of the United States (WOTUS) and is also a tributary to the Salton Sea, a WOTUS, which serves to receive and store agricultural drainage, seepage, and storm water.

# **Comments and Requested Revisions**

Delete this finding. The Stormwater Channel near the Facility is an ephemeral stream that is not a Water of the United States (WOTUS). Neither does it receive and store agricultural drainage. WRP-10 operations do not involve any discharge to WOTUS, and therefore this finding is unnecessary. The Tentative Order is not an NPDES Permit.

# **Staff Response**

No changes. Regional Water Board staff do not concur with the Discharger's assertion that the Whitewater River is not a WOTUS subject to the federal Clean Water Act. The Whitewater River is a tributary to the Coachella Valley Stormwater Channel, which is a WOTUS. Ultimately, the Whitewater River's status as a WOTUS is not material to WDRs for discharges of wastewater to groundwater. If the Discharger strongly believes that the Whitewater River is not subject to the Clean Water Act, it should seek a jurisdictional determination from the Army Corps of Engineers.

# **CVWD ATTACHMENT, COMMENT 17**

# Subject

Tentative Order, Finding 32 (p. 8)

The Facility is immediately adjacent to two large groundwater recharge facilities that percolate large volumes of Colorado River water to groundwater. The recharge facility to the north uses percolation ponds that were previously used for disposal of the Facility's wastewater. The facility to the south is situated within the Channel. These groundwater recharge operations appear to have resulted in significant mounding of groundwater, as well as the commingling with the Facility's discharges, as evidenced by the TDS concentrations in upgradient and downgradient monitoring wells.

# **Requested Revisions**

Delete this finding. The Groundwater Recharge Project (GRP) is not subject to this permit. Please refer to Finding 3 of this Tentative Order that makes it clear that regulatory coverage under this Order is strictly limited in scope to those waste discharges, activities and processes described and expressly authorized by the Order. For further clarification, there is currently only one facility which uses the repurposed percolation ponds to replenish approximately 10,000 AFY.

# **Staff Response**

The Discharger previously had submitted figures that depicted two separate Groundwater Recharge Projects (GRPs), one immediately north of the Facility, and the second immediately south. To date, the Discharger has only commenced the northern project (i.e., the Palm Desert GRP).

Regarding regulatory scope, Findings 3-4 of the Revised Tentative Order have been included to better explain the relationship between the Tentative Order and the GRP, as well as the need for limited GRP monitoring and reporting under the Tentative Order.

- 3. Authorization under this Order is strictly limited in scope to discharges of secondary treated wastewater to percolation ponds and related activities, as described herein. This Order does not permit the following activities/facilities:
  - a. The wastewater collection system is regulated under State Water Resources Control Board (State Water Board) General Order 2022 0103 DWQ, Statewide General WDRs for Sanitary Sewer Systems, adopted December 2, 2022, and became effective on June 5, 2023.
  - b. The application of tertiary treated wastewater as recycled irrigation water is regulated by State Water Board Order WQ 2016 0068 DDW (Water Reclamation Requirements for Recycled Water Use).
- 4. Although this Order does not constitute a discharge permit for the Discharger's application of Colorado River water as part of the adjacent Palm Desert Groundwater Recharge Project (GRP), as described in Findings 33-35, certain monitoring requirements are necessary to address Palm Desert GRP impacts on Facility operations, including but not limited to the mounding of groundwater and mobilization of waste constituents through the unsaturated zone and ultimately into and through groundwater. Additionally, in order

for Regional Water Board staff to properly understand how the Facility's discharges are affecting underlying groundwater, it is necessary to also ascertain the volume and TDS concentration of Colorado River water being applied to groundwater as part of the Palm Desert GRP.

The relationship between the Facility and the Palm Desert GRP is further clarified in Findings 33-35 of the Revised Tentative Order, which now read as follows:

- 33. The Facility is immediately adjacent to the Palm Desert Groundwater Recharge Project (Palm Desert GRP), which uses nine large percolation ponds that were formerly used to percolate secondarytreated wastewater.
- 34. Palm Desert GRP operations appear to have resulted in significant mounding of groundwater, as well as the commingling with the Facility's discharges, as evidenced by the TDS concentrations in upgradient and downgradient monitoring wells. Additionally, Palm Desert GRP operations may have resulted in the mobilizing of residual waste constituents deposited from historical wastewater discharges to the nine former Facility ponds.
- 35. To evaluate the effects of Palm Desert GRP operations on Facility discharges, the attached Monitoring and Reporting Program (Attachment A) requires the Discharger to monitor and report the volume and TDS concentration of Colorado River water applied to the nine former Facility percolation ponds.

# **CVWD ATTACHMENT, COMMENT 18**

#### Subject

Tentative Order, Finding 35 (p. 8)

Groundwater pumping has resulted in groundwater level declines of about 1 to 3 feet per year from 1985 to 2015. In 1985, groundwater levels ranged from 50 feet above mean sea level (msl) in the northwest to -20 feet msl in the southeast, representing a 70-foot gradient across the general area of the Facility. In 2015, groundwater levels ranged from zero feet msl in the northwest to -120 feet msl in the southeast. These water levels represent water level declines of 50 feet in the northwest to 100 feet in the southeast over the past 30 years. The rate of water level decline between 2005 and 2015 was smaller, amounting to approximately one foot per year on

average (10 feet over 10-year period). Between 2015 and 2020, water levels were increasing in response to reduced local pumping due to water conservation measures and increased use of recycled water and imported water, as well as groundwater replenishment activities at the Whitewater River Groundwater Replenishment Project (GRP), immediately upgradient of the Facility, and since 2019, at the Palm Desert GRP.

# **Comments and Requested Revisions**

Remove the word "immediately" to reflect that the Whitewater Groundwater Replenishment Project (GRP) is not immediately upgradient of the WRP-10 Facility. This GRP is located in the upper portion of the Valley, in the basin's forebay. Revise the last sentence to read as follows:

Between 2015 and 2020, water levels were increasing in response to reduced local pumping due to water conservation measures and increased use of recycled water and imported water, as well as groundwater replenishment activities at the Whitewater River GRP, upgradient of the Facility, and since 2019, at the Palm Desert GRP.

# Staff Response

Changes accepted.

# **CVWD ATTACHMENT, COMMENT 19**

#### Subject

Tentative Order, Finding 38 (p. 9)

In October 2021, the Discharger concluded an investigation into the horizontal and vertical extent of the Facility's TDS and Nitrates impacts, as required by Order R7-2018-0001 (§ F.1). The Discharger analyzed the data from over 120 monitoring (including several newly constructed monitoring wells) and production wells within several miles' radius from the Facility. The Discharger also conducted isotopic and general mineral chemistry analysis of the underlying aquifer within the proposed study area that was used to assist their groundwater modeling.

#### **Comments and Requested Revisions**

Please correct the date from "October 2021" to "November 2021," and revised the last sentence to read as follows (i.e., to correctly reflect the scope of the study):

Revise the subject provision to read as follows:

The Discharger also conducted isotopic and general mineral chemistry analysis of the underlaying aquifer from 32 wells within the study area that were used to assist in groundwater modeling and data analyses.

# **Staff Response**

Changes accepted.

# **CVWD ATTACHMENT, COMMENT 20**

# Subject

Tentative Order, Finding 41 (p. 9)

The water supply to the communities of Palm Desert, Rancho Mirage, and parts of Cathedral City and Indian Wells that are serviced by the Discharger's wastewater collection system is from groundwater production wells within the Coachella Valley Groundwater Basin.

#### **Requested Revisions**

Add "Indio Subbasin" to correctly reflect the source of water supply to the communities serviced by the wastewater collection system conveyed to the WRP-10 Facility. Revise the subject provision to read as follows:

The water supply to the communities of Palm Desert, Rancho Mirage, and parts of Cathedral City and Indian Wells which are serviced by the Discharger's wastewater collection system is from groundwater production wells within the Indio Subbasin of the Coachella Valley Groundwater Basin.

#### Staff Response

Changes accepted. The finding now reads as follows:

The Discharger's wastewater collection system serves the communities of Palm Desert, Rancho Mirage, parts of Cathedral City and Indian Wells. The water supply for these communities comes from groundwater production wells within the Indio Subbasin of the Coachella Valley Groundwater Basin.

# **CVWD ATTACHMENT, COMMENT 21**

# Subject

Tentative Order, Finding 42 (p. 10)

Based on the Discharger's investigation (described in Finding 38), there may be evidence of historically elevated nitrate and TDS concentrations in groundwater in the Indian Wells area. Huberty et al. (1948) found that the elevated groundwater concentrations of these constituents were likely a by-product of flood irrigation of nearby date groves, which leached salts and nitrates out of the shallow soil and pushed them deeper into the valley's sediments. This included the remnants of a mesquite forest, which are nitrogen fixing plants, that had been located in this area prior to human occupation. The lateral extent of elevated salt and nitrate concentrations in the groundwater and the change in concentration through time are not known. Regardless, the Discharger's recent investigations strongly suggest anthropogenic sources in groundwater that exceed historical effluent limits in upgradient, cross gradient, and downgradient portions of the upper and lower aquifer.

# **Requested Revisions**

Please make edits to the sentences below to recognize the results of the Discharger's investigation that provided results from over 120 wells, including 32 wells sampled as part of the study, that showed the lateral extent of TDS and nitrate in the study area, and that higher TDS and nitrate was primarily associated with shallower wells. Revise the subject provision to read as follows:

Based on the Discharger's investigation (described in Finding 38), there may be evidence of historically elevated nitrate and TDS concentrations in groundwater in the Indian Wells area. Huberty et al. (1948) found that the elevated groundwater concentrations of these constituents were likely a by-product of flood irrigation of nearby date groves, which leached salts and nitrates out of the shallow soil and pushed them deeper into the valley's sediments. This included the remnants of a mesquite forest, which are nitrogen fixing plants, that had been located in this area prior to human occupation. The Discharger's recent investigations strongly suggest *that various* anthropogenic sources *have resulted in elevated nitrogen and TDS, primarily in shallower* groundwater in wells upgradient, cross gradient, and downgradient from the Facility.<sup>3</sup>

# **Staff Response**

Changes accepted.

# **CVWD ATTACHMENT, COMMENT 22**

# Subject

Tentative Order, Finding 47 (p. 11)

In January 2011, the Discharger reported that wells MW-1, MW-2 and MW-3 were deteriorating and in need of replacement, and that they were affected by mounding (i.e., resulting from percolation pond discharges). Consequently, the results from 2009 to 2012 may not reflect background conditions or the impacts of Facility discharges (though such concerns extend to the Facility's entire monitoring network due to groundwater mounding and commingling from the adjacent recharge operations).

# **Requested Revisions**

Operations at the Palm Desert GRP did not begin until 2019. The Discharger, in the conclusion to its groundwater investigation, proposed changing the upgradient well to MW-7 to ensure that the upgradient well was outside any mounding associated with the Facility or Palm Desert GRP. The Discharger received no comments or communications from the Regional Water Board on this proposal after submittal of the final report but is ready to implement this recommendation. The downgradient wells (MW-5 and MW-6) are outside the mounding but are inevitably likely to capture signals from historical and present upgradient anthropogenic activities.

Please delete: "(though such concerns extend to the Facility's entire monitoring network due to groundwater mounding and commingling from the adjacent recharge operations)."

Revise the subject provision to read as follows:

In January 2011, the Discharger reported that wells MW-1, MW-2 and MW-3 were deteriorating and in need of replacement, and that they were affected by mounding (i.e., resulting from percolation pond discharges). Consequently, the results from 2009 to 2012 may not *have reflected* background conditions or the impacts of Facility discharges.

# **Staff Response**

Changes accepted with further revisions. The finding will now read as follows:

In January 2011, the Discharger reported that wells MW-1, MW-2 and MW-3 were deteriorating and in need of replacement, and that they were affected by mounding (i.e., resulting from percolation pond discharges). Consequently, the results from 2009 to 2012 may not have reflected background conditions, either upgradient or downgradient of the discharge location, but do however capture impacts of wastewater mound.

# **CVWD ATTACHMENT, COMMENT 23**

# Subject

Tentative Order, Footnote 4(p. 11)

Although the Discharger purportedly "rehabilitated" wells MW-1, MW-2 and MW-3 in 2019, the Discharger has not reported any monitoring data from them. The Monitoring and Reporting Program included in Attachment A explicitly requires a resumption in their monitoring.

#### **Comments and Requested Revisions**

Please delete or edit Footnote 4. As written, the footnote seems to (1) question the work completed to rehabilitate the wells for the 2018 WRP-10 WDR Special Provision Study and (2) suggest that data were not being reported. The Discharger did not have any obligations to report data from these wells beyond those established in 2018 WRP-10 WDR Special Provision Study and met with the submittal of the final report. Monitoring requirements are more appropriately established in the MRP section of the Tentative Order.

#### **Staff Response**

The footnote will be revised to read as follows:

Although the Discharger rehabilitated wells MW-1, MW-2 and MW-3 in 2019, the Discharger has not reported any monitoring data from them (it was not required to do so under prior orders). The Monitoring and Reporting Program included in Attachment A explicitly requires a resumption in their monitoring.

# **CVWD ATTACHMENT, COMMENT 24**

# Subject

Tentative Order, Footnote 5 (p. 12)

Although MW-4 was intended to be representative of background conditions (i.e., upgradient from the percolation ponds), and MW-5 and MW-6 were intended to be representative of groundwater impacts from Facility discharges (i.e., downgradient from the percolation ponds),

#### **Requested Revisions**

Please delete Footnote 5 since it is not a complete sentence and would be more appropriately incorporated contextually into the findings.

#### **Staff Response**

The footnote has been revised to read as follows:

Although MW-4 was intended to be representative of background conditions (i.e., upgradient from the percolation ponds), MW-5 and MW-6 were intended to be representative of groundwater impacts from Facility discharges (i.e., downgradient from the percolation ponds).

#### **CVWD ATTACHMENT, COMMENT 25**

#### Subject

Tentative Order, Finding 49 (p. 12)

Notably, the TDS in the upgradient monitoring well MW-4 (701 mg/L) is significantly higher than downgradient well MW-6 (568 mg/L) and the Facility's average effluent concentrations (503 mg/L). However, downgradient MW-5 contains a higher concentration of TDS (737 mg/L) than either the Facility's average effluent (503 mg/L) or the other downgradient monitoring well (503 mg/L). These results suggest that the upgradient monitoring well (MW-4) may not be reflective of background conditions, and that the downgradient well MW-5 may not be necessarily reflective of the Facility's effluent discharges alone. Further, it does not appear possible to distinguish between the Facility's discharges and impacts from the GRPs.

# **Comments and Requested Revisions**

Please edit the last three sentences of this finding to reflect the facts presented here. According to Finding 48, the data presented in Table 5 is from 2012 to 2017. The Palm Desert GRP did not begin operations until early 2019. The groundwater modeling results suggested that MW-4 may be or was in the past when discharge volumes were higher under the influence of WRP-10 discharges. Accordingly, the Discharger drilled a monitoring well further upgradient (MW-7) and proposed that this be designated as the new upgradient well. As concluded in the investigation, shallow groundwater quality has been under the influence of various historical anthropogenic sources, including septic system and agricultural discharges, which makes it challenging to site monitoring wells that would only detect downgradient signals from the WRP-10 Facility.

Here we suggest the following edits to these sentences to better reflect the facts.

These results suggest that the upgradient monitoring well (MW-4) may not be reflective of background conditions, and that the downgradient well MW-5 may not be necessarily reflective of the Facility's effluent discharges alone.

Revise the subject provision to read as follows:

Notably, the TDS in the upgradient monitoring well MW-4 (701 mg/L) is significantly higher than downgradient well MW-6 (568 mg/L) and the Facility's average effluent concentrations (503 mg/L). However, downgradient MW-5 contains a higher concentration of TDS (737 mg/L) than either the Facility's average effluent (503 mg/L) or the other downgradient monitoring well (503 mg/L). These results suggest that the upgradient monitoring well (MW-4) may not be reflective of background conditions, and that the downgradient well MW-5 may **not** be necessarily reflective of the Facility's effluent discharges alone.

#### **Staff Response**

Changes rejected based on staff professional judgment.

#### **CVWD ATTACHMENT, COMMENT 26**

#### Subject

Tentative Order, Finding 50 (p. 13)

In 2020, the Discharger installed two additional monitoring wells, MW-7 and MW- 8, as part of its recent groundwater investigation (see Finding 38).

Although the wells do not appear to have been decommissioned, the Discharger has not reported any monitoring results since 2021. **Table 6** summarizes the available groundwater quality information.

# **Comments and Requested Revisions**

Please delete: "Although the wells do not appear to have been decommissioned, the Discharger has not reported any monitoring results since 2021."

The Discharger had no obligations to report data for these wells beyond those established in the 2018 WRP-10 WDR Special Provision Study. Nonetheless all these wells are now part of the monitoring and reporting under the CV-SNMP Groundwater Monitoring Workplan approved by the Regional Water Board and that MW-4 through MW-8 are also part of the MRP requirements for the Facility's Notice of Applicability for coverage under State Water Board Order WQ 2016-0068-DDW.

Revise the subject provision to read as follows:

In 2020, the Discharger installed two additional monitoring wells, MW-7 and MW- 8, as part of its recent groundwater investigation (see Finding 38). <u>**Table 6**</u> summarizes the available groundwater quality information.

# **Staff Response**

No changes. The factual information in this finding remains fundamentally accurate. Although the wells are used for the SNMP, they are not reported under the Regional Water Board's 2018 WDRs Order.

# **CVWD ATTACHMENT, COMMENT 27**

# Subject

Tentative Order, Finding 52 (p. 14)

Historical groundwater quality data (2005 to 2018) from nearby monitoring and supply wells and private irrigation wells were used to characterize groundwater quality conditions relative to TDS and nitrate. The historical data indicate that groundwater quality varies laterally and vertically across the area and is under the influence of legacy sources of TDS other than the Facility's effluent discharge. The TDS discharge limit in pre-2018 orders was 500 mg/L, and the interim TDS discharge limit under the Order R7-2018-0001 was 530 mg/L. The average historical TDS and nitrate concentrations of the Facility's secondary effluent are 460 and 62 mg/L as nitrate, respectively.

# **Comments and Requested Revisions**

Revise the subject provision to read as follows:

The TDS discharge limit in pre-2018 order was *an annual mean limit of* 500 mg/L, and the interim TDS discharge limit under the Order R7-2018-0001 was 530 mg/L. The average historical TDS and nitrate concentrations of the Facility's secondary effluent are 460 *mg/L TDS* and 62 mg/*L Nitrate-NO3*, respectively.

#### Staff Response

The finding has been further revised to read as follows:

Historical groundwater quality data (2005 to 2018) from nearby monitoring and supply wells and private irrigation wells were used to characterize groundwater quality conditions relative to TDS and Nitrate. The historical data indicate that groundwater quality varies laterally and vertically across the area and is under the influence of legacy sources of TDS other than the Facility's effluent discharge. Prior to 2018, Regional Water Board WDRs established an effluent limit of 500 mg/L (compliance determined based on annual average). Under the 2018 WDRs Order, the effluent limit was increased to 530 mg/L. The historical average concentrations of TDS and Nitrate in secondary effluent are 460 mg/L TDS, and 13.64 mg/L Nitrate-N.

# **CVWD ATTACHMENT, COMMENT 28**

#### Subject

Tentative Order, Footnote 6 (p. 14)

Although the attached Monitoring and Reporting Program does not currently require these wells to be monitored, such monitoring may be required as part of a subsequently issued Revised Monitoring and Reporting Program.

#### **Requested Revisions**

Please delete this footnote which has no direct relevance to the findings

#### Staff Response

No changes. Contrary to the Discharger's assertion, the footnote contains relevant information and indicates that additional monitoring may be required in the future. Specifically, the footnote adds context that the data in Table 7, and the wells it was

collected from, are for description purposes only and not intended to imply the wells are being required to be sampled on a regular basis.

# **CVWD ATTACHMENT, COMMENT 29**

#### Subject

Tentative Order, Finding 53 (p. 15)

Given that the average historical TDS concentration of secondary effluent is generally below 500 mg/L, and concentrations exceeding 500 to 600 mg/L in shallow wells have been observed indicate that TDS concentrations in shallow local groundwater have been influenced by sources other than the Facility's effluent. The largest contributor to higher TDS concentrations appears to be the groundwater recharge operations.

#### **Comments and Requested Revisions**

In the context of evaluating historical TDS concentration, it is important to consider that the Palm Desert GRP was not operational until 2019. The results at PD MW-1 and PD MW-2 were collected in 2020 and these wells are sufficiently distant from replenishment operations that results from 2020 would not be reflective of recharge operations at the Palm Desert GRP. Therefore, data from these two wells are not appropriate to draw the conclusion presented in this finding.

Please delete:

The largest contributor to higher TDS concentrations appears to be the groundwater recharge operations.

Revise the subject provision to read as follows:

Given that the average historical TDS concentration of secondary effluent is generally below 500 mg/L, and concentrations exceeding 500 to 600 mg/L in shallow wells have been observed indicate that TDS concentrations in shallow local groundwater have been influenced by sources other than the Facility's effluent.

#### **Staff Response**

To the extent that the historical average of TDS in the Facility's secondary effluent is actually below 500 mg/L, it would suggest that the Facility's effluent is not responsible for the higher concentrations downgradient from the Facility. That would suggest the presence of other causes for the *existing* salinity in those wells. Although PD MW-1 and

PD MW-2 may not be within the Palm Desert GRP's zone of influence, other downgradient monitoring wells with elevated TDS are. Regardless, given the very high TDS in Colorado River water, it is clear that the Palm Desert GRP and other similar projects in the area will be the primary driver of TDS concentrations moving forward.

Based on the foregoing, the finding will be revised to read as follows:

Given that the average historical TDS concentration of secondary effluent is generally below 500 mg/L, and concentrations exceeding 500 to 600 mg/L in shallow wells have been observed indicate that TDS concentrations in shallow local groundwater have been influenced by sources other than the Facility's effluent. Although the Palm Desert GRP and other recharge projects may not be responsible for some of the existing salinity observed in downgradient wells, it is clear that the continued operation of the Palm Desert GRP and other recharge projects are now, and will continue to be, the primary contributors to higher TDS concentrations.

## **CVWD ATTACHMENT, COMMENT 30**

#### Subject

Tentative Order, Finding 54 (p. 15)

Historical Nitrate-NO3 concentrations in the shallow aquifer were generally higher than in deeper aquifer zones. Nitrate concentrations for deeper wells generally increased from northwest to southeast, along the historical groundwater direction of flow. Nitrate-NO3 concentrations in twelve wells (four shallow and eight deep aquifer) have exceeded 45 mg/L during sampling events. Given that the Discharger's average historical Nitrate effluent exceeds this number, it is possible that the Discharger has historically contributed to the elevated concentrations of nitrate in groundwater. The Discharger's average secondary effluent concentration of Nitrate from 2008 – July 2023 was 14.62.

#### **Requested Revisions**

Please add the following sentence to the finding to better reflect groundwater conditions as described in the 2018 WRP-10 WDR Special Provision Study results:

However, there is evidence that legacy sources of nitrate, such as those described in Huberty, et. al., 1948, have contributed to elevated nitrogen in the vicinity of WRP-10 as indicated by Nitrate NO3 results exceeding

45 mg/L in wells upgradient and cross-gradient from the flowpaths of WRP-10 discharges.

Also, please add units and constituent name to the Discharger's average secondary effluent concentration of nitrate to help differentiate between results for nitrate-N and nitrate-NO3.

Revise the subject provision to read as follows:

...it is possible that the Discharger has historically contributed to the elevated concentrations of nitrate in groundwater. *However, there is evidence that legacy sources of nitrate, such as those described in Huberty, et. al., 1948, have contributed to elevated nitrogen in the vicinity of WRP 10 as indicated by Nitrate-NO3 results exceeding 45 mg/L in wells upgradient and cross-gradient from the flowpaths of WRP 10 discharges.* The Discharger's average secondary effluent concentration of Nitrate from 2008 – July 2023 was 14.62 *mg/L Nitrate-N.* 

#### Staff Response

Rather than incorporating the Discharger's proposed changes regarding legacy sources of nitrate, which are not necessary, the finding will be limited to the final sentence of paragraph, which reads as follows:

The Discharger's average secondary effluent concentration of Nitrate as Nitrogen from 2008 – July 2023 was 14.62.

#### **CVWD ATTACHMENT, COMMENT 31**

#### Subject

Tentative Order, Finding 63 (p. 17)

With respect to the narrative WQO for tastes and odors, specifically regarding TDS, the Title 22 Secondary MCL specifies a recommended limit of 500 mg/L, and an upper limit of 1,000 mg/L. Generally, the numeric limit should be within this range, with a preference towards the lower recommended limit. Further, the numeric limit should be somewhat reflective of existing background groundwater conditions and municipal/domestic beneficial uses in the area. Although the Board is not establishing a definitive numeric limit supporting the narrative objective at this time, this Order establishes an effluent limit of 530 mg/L.

## **Requested Revisions**

Please delete the following sentences since they are not reflective of current Basin Plan standards and do not include all the factors to be considered, as established in California Water Code § 13241, by a regional board in establishing (or in this case interpreting) numeric water quality objectives. A WDR Order is not the appropriate place to set Colorado River Basin-wide policy on the interpretation of Title 22 Secondary MCL ranges, especially given that the CV-SNMP Agencies are working to implement the Workplan to update the CV-SNMP approved by the Regional Water Board, which includes recommendation of TDS objectives taking all required factors into account.

"Generally, the numeric limit should be within this range, with a preference towards the lower recommended limit. Further, the numeric limit should be somewhat reflective of existing background groundwater conditions and municipal/domestic beneficial uses in the area. Although the Board is not establishing a definitive numeric limit supporting the narrative objective at this time, this Order establishes an effluent limit of 530 mg/L."

The factors that should be considered, as established in California Water Code § 13241, include all the following: (a) past, present, and probable future beneficial uses of water; (b) environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto; (c) water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area; (d) economic considerations; (e) the need for developing housing within the region; and (f) the need to develop and use recycled water.

Revise the subject provision to read as follows:

With respect to the narrative WQO for tastes and odors, specifically regarding TDS, the Title 22 Secondary MCL specifies a range with a recommended lower limit of 500 mg/L, and an upper limit of 1,000 mg/L.

## **Staff Response**

No changes. Although Water Code section 13241 applies to the Regional Water Board's *establishment* of a water quality objective (WQO), it does not necessarily apply to the *interpretation* or *implementation* of an existing narrative WQO through a sitespecific numeric limit. Indeed, the Regional Water Board's Tentative Order is not establishing a region-wide policy, but is rather interpreting and implementing the existing WQO on a site-specific basis.

See Regional Water Board staff response to "Issue 2" in the Discharger's main comment letter (page 11). The Tentative Order merely maintains the existing "interim" TDS effluent limit under the 2018 WDRs Order (determined by annual average), which is 530 mg/L—rather than increasing to a new higher "interim" limit to 575 mg/L, as

requested by the Discharger. It is not necessary to establish a new numeric WQO or interpret an existing narrative WQO in order to deny authorization for further degradation in groundwater quality.

### **CVWD ATTACHMENT, COMMENTS 32-35**

#### Subject

Tentative Order, Finding 66a (p. 18)

Total Nitrogen: The numeric WQO for Total Nitrogen is 10 mg/L. (Primary MCL under Title 22).

i. The Discharger's SMRs from January 2018 through July 2023 indicate that total nitrogen in the effluent ranges from 5.8 to 26.6 mg/L and average 14.8 mg/L. Groundwater monitoring samples have been collected from five wells around the Facility. MW-4 and MW-7 are designated as "upgradient wells." These wells show total nitrogen concentrations averaging 8.74 and 9.9 mg/L, respectively.

Downgradient wells MW-5, MW-6, and MW-8 show total nitrogen concentrations averaging 19.04, 13.24, and 30.9 mg/L, respectively. These data indicate that the discharge of treated wastewater to the percolation ponds is contributing nitrate to groundwater. Groundwater concentrations in downgradient wells exceed the Primary MCL prescribed Title 22, section 64431.

- ii. Because the Discharger's effluent from 2012-2017 exceeded the recommended MCL, Order R7-2018-0001 required that the Discharger investigate the vertical and lateral extent of groundwater containing nitrogen in excess of 10 mg/L, evaluate options for reducing nitrogen in the effluent, and evaluate Discharger's contribution to nitrogen concentrations in the groundwater. The results of the nitrogen investigation were used to develop a final nitrogen effluent limit that is consistent with water quality and public health goals.
- iii. Using increasingly more reclaimed wastewater for golf courses and landscape irrigation has reduced the amount of nitrogen entering the groundwater. The Discharger currently recycles approximately 60 percent of the secondary treated wastewater and plans to recycle 100 percent of it by 2035. Even with reductions in nitrogen loading due to increased water recycling, continuation of the existing

treatment and percolation pond as an emergency disposal method poses a potential threat to the beneficial use of groundwater.

iv. In order to comply with the Antidegradation Policy, this Order incorporates an effluent limitation of 10 mg/L total nitrogen.

## Comment 32

The Discharger has started construction on an expansion of the WRP-10 non-potable water system that will eliminate all discharges of secondary effluent to the percolation ponds which are currently used to discharge excess secondary effluent beyond the available recycled water demand. Phase 1 and 2 of the current expansion of the WRP-10 non-potable water system will add an additional 20 customers bringing the use of available recycled water to 100% by 2029, as shown in Table 1 below. By achieving 100% use of recycled water, the Discharger will no longer be discharging secondary effluent to the percolation ponds by 2029.

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Excess	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
RW by													Annual
Year													
2024-	357	316	224	76	59	37	17	18	77	105	122	290	1,698
2025													(18%)
2026-	146	117	0	0	0	0	0	0	0	0	0	48	311
2028													(3%)
2029-	0	0	0	0	0	0	0	0	0	0	0	0	0
Future													(0%)

Table 1. Excess Recycled Water (RW) Availability by Year in Acre-Feet (AF)<sup>1</sup>

<sup>1</sup> Assumes WRP-10 influent increases annually by 1% which is conservative given State regulation that reduces indoor water use standards from 55 gallons per capita per day (gpcd) to 42 gpcd by 2030, which is a reduction of 23.6%.

Finding 66.a.iii. acknowledges that "using more reclaimed wastewater for golf courses and landscape irrigation has reduced the amount of nitrogen entering the groundwater," but incorrectly assumes the continuation of the existing percolation ponds as an emergency disposal method. This assumption is foundational to the Tentative Order's conclusion that the assumed continued emergency disposals would threaten beneficial uses of groundwater and thus require an effluent limit of 10 mg/L total nitrogen to comply with the Antidegradation Policy. As part of the WRP-10 non-potable water system expansion, the Discharger will be expanding the storage capacity at WRP-10. The increased storage capacity at WRP-10 would be used in the event of recycled water distribution system disruptions and/or extreme storm events. Therefore, the assumption that the Discharger will require continuation of the existing percolation ponds as an emergency disposal method is not correct.

Furthermore, the findings do not provide adequate evidence that even limited emergency discharges would pose a threat to beneficial uses. The CV-SNMP Agencies

are working to implement the Workplan to update the CV-SNMP approved by the Regional Water Board, which includes designation of management zones and calculation of assimilative capacity. As stated in the Staff Report on the 2018 Amendment to the Water Quality Control Policy for Recycled Water, a key parameter to consider in evaluating whether a project may result in water guality less than water quality objectives included in the Basin Plan is assimilative capacity. The findings in the Tentative Order consider neither assimilative capacity nor the loading that may occur under a hypothetical emergency discharge. The loading under a limited emergency discharge at the current average concentration of total nitrogen of 14.8 mg/L would be less than the loading under continued discharge of 1,400 AFY to the percolation ponds at a concentration of 10 mg/L total nitrogen. For illustration purposes only, and considering existing on-site storage, a 3-week event with a recurrence of 5-years, would result in discharges to the percolation ponds of approximately 1,000 AF over a 10-year period. This represents total nitrogen loading over a 10 year period of 18 metric tons (not considering denitrification in the vadose zone) at the current average concentration of the secondary effluent; while continued discharge of approximately 1,500 AFY (or 15,000 AF over a 10-year period) with the addition of treatment to meet a 10 mg/L total nitrogen effluent limit would represent a loading of 185 metric tons of nitrogen. This is ten times more loading under the limit and regulatory approach proposed by this Tentative Order.

At minimum, the Regional Water Board should wait for the work of the CV-SNMP Update to be completed before adopting the proposed total nitrogen limit or allow sufficient flexibility in the final Order for the Discharger to continue pursuing its goal of recycling 100% of the secondary effluent at WRP-10 and optimizing storage to eliminate all discharges to the percolation ponds.

## **Comment 33**

Please correct the reference to Title 22. Title 22 does not incorporate a Primary MCL for total nitrogen.

#### Comment 34

Please delete the following finding and replace it with the language below to adequately reflect the Special Provision requirements of Order R7-2018-0001.

Delete the following:

Because the Discharger's effluent from 2012-2017 exceeded the recommended MCL, Order R7 2018-0001 required that the Discharger investigate the vertical and lateral extent of groundwater containing nitrogen in excess of 10 mg/L, evaluate options for reducing nitrogen in the effluent, and evaluate Discharger's contribution to nitrogen concentrations in the

groundwater. The results of the nitrogen investigation were used to develop a final nitrogen effluent limit that is consistent with water quality and public health goals.

Add the following:

"Because the Discharger's effluent from 2012-2017 is higher than the lowest range of the recommended MCL, Order R7-2018-0001 required that the Discharger investigate the vertical and lateral extent of groundwater containing greater than 10 mg/L nitrogen and evaluate overall TDS impacts in the vicinity of WRP10."

The Discharger disagrees that the results of the 2018 WRP-10 WDR Special Provision Study have been adequately used to develop a nitrogen effluent limit, since the Study demonstrated that 7 the Discharger's plan to expand the non-potable water system would eliminate discharges to the percolation ponds and that there are no indications that discharges from the WRP-10 Facility have impaired beneficial uses including municipal wells.

### Comment 35

Please correct the percentage the Discharger currently recycles from approximately 60% to 82%. Also please correct the year that the Discharger plans to recycle 100% of the effluent from the WRP-10 Facility from 2035 to 2029

## Staff Response

See response to "Issue 1" in Discharger's main comment letter.

The reference to a Primary Maximum Contaminant Level (MCL) for "Total Nitrogen" in this finding was erroneous; the 10 mg/L Primary MCL is for the total of nitrate and nitrite as Nitrogen. However, because it is not known what percentage of the total nitrogen in the Discharger's wastewater will ultimately convert to nitrate or nitrite, the prescribed effluent limit will be for total nitrogen. Even so, the majority of nitrate comprises almost all of the total nitrogen in the Discharger's wastewater.

Based on the foregoing, the subject provision now be revised to read as follows:

**Nitrogen as Nitrate and Nitrite:** The numeric WQO for Nitrogen as Nitrate and Nitrite is 10 mg/L (Primary MCL under Title 22).

i. The Discharger's SMRs from January 2018 through July 2023 indicate that total nitrogen in the effluent ranges from 5.8 to 26.6 mg/L and average 14.8 mg/L. Groundwater monitoring samples have been collected from five wells around the Facility. MW-4 and MW-7

are designated as "upgradient wells." These wells show total nitrogen concentrations averaging 8.74 and 9.9 mg/L, respectively.

Downgradient wells MW-5, MW-6, and MW-8 show total nitrogen concentrations averaging 19.04, 13.24, and 30.9 mg/L, respectively. These data indicate that the discharge of treated wastewater to the percolation ponds is contributing nitrate to groundwater. Nitrate concentrations in downgradient wells exceed the Primary MCL prescribed in Title 22, section 64431.

- ii. Nitrate constitutes the overwhelming majority of nitrogen present in both upgradient and downgradient groundwater.
- iii. Because the Discharger's effluent from 2012-2017 exceeded the recommended MCL, Order R7-2018-0001 required that the Discharger investigate the vertical and lateral extent of groundwater containing nitrogen in excess of 10 mg/L, evaluate options for reducing nitrogen in the effluent, and evaluate Discharger's contribution to nitrogen concentrations in the groundwater. The results of the nitrogen investigation were used to develop a final nitrogen effluent limit that is consistent with water quality and public health goals.
- iv. Using increasingly more reclaimed wastewater for golf courses and landscape irrigation has reduced the amount of nitrogen entering the groundwater. The Discharger currently recycles approximately 60 percent of the secondary treated wastewater and plans to recycle 100 percent of it by 2035. Even with reductions in nitrogen loading due to increased water recycling, continuation of the existing treatment and percolation pond as an emergency disposal method poses a potential threat to the beneficial use of groundwater.
- v. In order to comply with the Antidegradation Policy, this Order incorporates an effluent limitation of 10 mg/L total nitrogen. [FN] This effluent limit is necessary to ensure that the Facility's discharges do not result in water quality less than the applicable WQO for Nitrate and Nitrite.
- [FN] Although not all Total Nitrogen will convert to Nitrate or Nitrite (which depends on site-specific conditions), this Order reflects a conservative approach that assumes 100 percent conversion. This

approach is also consistent with the fact that Nitrate constitutes almost all of the Total Nitrogen in downgradient groundwater.

## CVWD ATTACHMENT, COMMENTS 36-37

## Subject

Tentative Order, Finding 64b (p. 19)

**TDS (Salinity):** As explained in Finding 63, this Order incorporates a numeric limit of 530 mg/L as supportive of the narrative WQO for tastes and odors.

- i. The Discharger's SMRs from January 2018 through July 2023 indicate that TDS in the effluent ranges from 420 to 590 mg/L and average 503 mg/L. Domestic water supply to the community showed an average TDS concentration of about 277.8 mg/L from January 2018 to July 2023. The average TDS increase in the effluent for this Facility over the domestic water supply over the same period was about 228 mg/L.
- ii. Although the Discharger has installed and sampled numerous groundwater monitoring wells in the Facility's vicinity, the resulting data suggests that they may not be reflective of either the Facility's impacts or background conditions. Absent data concretely demonstrating the true background water quality with respect to TDS, this Order implements a conservative TDS effluent limit of 530 mg/L.

## Comment 36

As explained in the Discharger's comment on Finding 63, the finding is not reflective of current Basin Plan standards and does not include all the factors to be considered, as established in California Water Code § 13241, by a regional board in establishing (or in this case interpreting) numeric water quality objectives. A WDR Order is not the appropriate place to set Colorado River Basin-wide policy on the interpretation of Title 22 Secondary MCL ranges, especially given that the CV-SNMP Agencies are working to implement the Workplan to update the CV SNMP approved by the Regional Water Board, which includes recommendation of TDS objectives taking all required factors into account.

The factors that should be considered, as established in California Water Code § 13241, include all the following: (a) past, present, and probable future beneficial uses of water; (b) environmental characteristics of the hydrographic unit under consideration,

including the quality of water available thereto; (c) water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area; (d) economic considerations; (e) the need for developing housing within the region; and (f) the need to develop and use recycled water.

The Discharger is requesting an interim TDS numeric limit of 575 mg/L to allow sufficient flexibility to comply with the Order's TDS numeric limit given that (a) the WRP-10 secondary effluent TDS concentration ranged up to 590 mg/L from 2018 to 2023 and (b) that State conservation regulations reduce indoor water use standards from 55 gallons per capita per day (gpcd) to 42 gpcd by 2030, which is a reduction of 23.6%. This reduction in indoor water use could have an impact on the TDS concentration of the influent to WRP-10 that is not yet understood, but which is likely to result in some increases to TDS. The Discharger needs flexibility to continue and expand water conservation efforts in accordance with State policy without violating the numeric TDS limit.

WRP-10 is not designed to reduce TDS levels in treated wastewater. WRP-10 TDS levels are a result of TDS found in the groundwater supply and the incremental increase that occurs when water is used in homes and businesses prior to disposal into the Discharger's sanitary sewer. This incremental increase in TDS for well managed domestic sewage is typically 200-300 mg/L. Water quality monitoring of the water supply of the communities served by WRP-10 had an average concentration of 278 mg/L from 2018 through 2023. A TDS limit of 575 mg/L is within the optimal range for well-managed domestic sewage. The Discharger will continue its successful source control program, which includes sanitation regulations that prohibit brine discharges and limit the TDS concentration in discharges to the sewer system like those from cooling tower discharges.

The Regional Water Board should wait until the CV-SNMP Update is completed and numeric TDS objectives are recommended for adoption into the Basin Plan that are based on rigorous data 8 analyses, groundwater modeling, and consideration of all required factors. However, if the Regional Water Board wishes to impose a numeric TDS limit, the Discharger requests removing the proposed TDS effluent limitation of 530 mg/L in this finding and replacing it with an interim TDS limit of 575 mg/L. This TDS limit is within the Title 22 Secondary Maximum Contaminant Level (SMCL) recommended range of 500-1,000 mg/L TDS and will not contribute to exceedances of the Title 22 SMCL recommended range in wells used for drinking water supply.

## Comment 37

The Discharger disagrees with this statement and requests that it be deleted from the Tentative Order. In November 2021, the Discharger submitted a 300-page final technical report on the 2018 WRP-10 WDR Special Provision Study to the Regional Water Board. This technical report followed the Workplan approved by the Regional

Water Board and was developed over three phases with Regional Water Board providing comments on each draft deliverable, including the proposed siting of new monitoring wells drilled for the Study. As mentioned in the Tentative Order, the Study analyzed data from over 120 monitoring and production wells within several miles' radius from the WRP-10 Facility. The Discharger also conducted isotopic and general mineral chemistry analysis of the underlaying aquifer from 32 wells within the study area (including the newly constructed monitoring wells). This Study adequately and thoroughly characterized TDS around the WRP-10 Facility. In the final technical report, the Discharger proposed to substitute the recently installed shallow monitoring well MW-7 for monitoring of upgradient shallow groundwater quality. No reply was received from the Regional Water Board on this proposal; but it should be noted that water quality results for this well and flow path modeling indicating that this well is upgradient of the flow paths of the WRP-10 Facility were provided as part of the Technical Report.

Revise the subject provision to read as follows:

**TDS (Salinity):** As explained in **Finding 63**, this Order incorporates an *interim* numeric limit of **575** mg/L as supportive of the narrative WQO for tastes and odors.

i. The Discharger's SMRs from January 2018 through July 2023 indicate that TDS in the effluent ranges from 420 to 590 mg/L and average 503 mg/L. Domestic water supply to the community showed an average TDS concentration of about 277.8 mg/L from January 2018 to July 2023. The average TDS increase in the effluent for this Facility over the domestic water supply over the same period was about 228 mg/L.

## **Staff Response**

See response to "Issue 2" in the Discharger's main comment letter. The Tentative Order merely maintains the existing "interim" TDS effluent limit under the 2018 WDRs Order (determined by annual average), which is 530 mg/L—rather than increasing to a new higher "interim" limit to 570 mg/L, as requested by the Discharger. It is not necessary to establish a new numeric WQO or interpret an existing narrative WQO in order to deny authorization for further degradation in groundwater quality.

To clarify that the Regional Water Board is not establishing a new WQO in the Tentative Order, the subject provision has been revised as follows:

TDS (Salinity): As explained in Finding 63, the Basin Plan contains a narrative WQO for tastes and odors for MUN-designated groundwater. Although the Regional Water Board has not yet established a generally applicable or site-specific numeric limit supporting the narrative WQO (or

alternatively, a strict numeric WQO for TDS), it may do so in a future Basin Plan Amendment.

- i. The 2018 WDRs order prescribed a TDS effluent limit of 530 mg/L, as determined by an annual average.
- ii. The Discharger's SMRs from January 2018 through July 2023 indicate that TDS in the effluent ranges from 420 to 590 mg/L and average 503 mg/L. Domestic water supply to the community showed an average TDS concentration of about 277.8 mg/L from January 2018 to July 2023. The average TDS increase in the effluent for this Facility over the domestic water supply over the same period was about 228 mg/L.
- iii. Although the Discharger has installed and sampled numerous groundwater monitoring wells in the Facility's vicinity, the resulting data suggests that they may not be reflective of either the Facility's impacts or background conditions.
- iv. Until a numeric limit or WQO is established, the Board's approach will be to prescribe a conservative effluent limit for TDS, thereby preserving existing water quality to the maximum extent practicable. Accordingly, this Order continues to incorporate an effluent limit of 530 mg/L. This limit is also partly based on the issues with groundwater data described above.

# **CVWD ATTACHMENT, COMMENT 38**

## Subject

Tentative Order, Finding 80 (p. 24)

The Discharger's application of recycled water is separately regulated under the State Water Board's 2022 general order. (See Finding 1.b.)

## **Requested Revisions**

Correct the year of the State Water Board's recycled water general order from "2022" to "2016" and the parenthetical citation from "(See Finding 1.b.)" to "(See Finding 3.b.)."

## Staff Response

Changes accepted.

## **CVWD ATTACHMENT, COMMENT 39**

## Subject

Tentative Order, § B.4 (p. 26)

The [Dissolved Oxygen] content in the upper one foot of any wastewater treatment or storage pond shall not be less than 1.0 mg/L for three consecutive sampling events.

### **Requested Revisions**

This requirement should only apply to wastewater treatment or percolation ponds. As written, this could apply to lined storage ponds that are used to hold off-specification water, wash water and secondary treated effluent that will be sent back to the headworks.

Please change the first sentence of the requirement to read as follows

"The DO content in the upper one foot of any wastewater treatment or percolation ponds shall not be less than 1.0 mg/L for three consecutive sampling events."

#### **Staff Response**

Changes accepted.

## **CVWD ATTACHMENT, COMMENT 40**

#### Subject

Tentative Order, § B.9 (p. 28)

Wastewater contained in any unlined pond shall not have a pH less than 6.0 or greater than 9.0.

#### **Requested Revisions**

Any unlined pond that may contain water for a prolonged period of time may experience pH excursions above 9.0 that are outside the control of the Discharger. Secondary effluent limitations for pH > 6.00 and < 9.00 are already included in Table 8. Effluent Limitations. Please delete Requirement 9.

### **Staff Response**

Changes rejected. Control of pH in unlined ponds is necessary to prevent waste from being discharged that could result in a condition of pollution or nuisance.

## **CVWD ATTACHMENT, COMMENT 41**

### Subject

Tentative Order, § B.10 (p.28)

The Discharger shall monitor sludge accumulation in the wastewater treatment/storage ponds at least every five years beginning in 2025 and shall periodically remove sludge as necessary to maintain adequate storage capacity. Specifically, if the estimated volume of sludge in the reservoir exceeds five percent of the permitted reservoir capacity, the Discharger shall complete sludge cleanout within 12 months after the date of the estimate.

#### **Requested Revisions**

Please delete this requirement. Sludge cleanout of the storage ponds is already part of the Facility's operation. This requirement is unnecessarily prescriptive of how the Discharger should operate the Facility.

#### **Staff Response**

Changes rejected. The professional judgment of staff is that this requirement is necessary to ensure the Facility's proper operation while maintaining sufficient storage capacity.

# **CVWD ATTACHMENT, COMMENTS 42-43**

## Subject

Tentative Order, § C.1, Table 8 (p. 28)

Parameter	Units	Limitation	Determination		
Average Daily Influent Flow	gpd	18 MGD	Calculated based for each calendar month.		
Average Daily Tertiary Effluent Flow	gpd	15 MGD	Calculated based for each calendar month.		
рН	Std. Units	≥ 6.00			
		≤ 9.00			
Total Suspended	mg/L	30	7-Day Average		
Solids		20	30-Day Average		
Total Settleable	ml/L	0.5	7-Day Average		
Solids		0.3	30-Day Average		
Total Nitrogen	mg/L	10 [FN]	30-Day Rolling Average		
BOD5	mg/L	30	7-Day Average		
		20	30-Day Average		
TDS	mg/L	530	Annual (4 <sup>th</sup> Quarter) Average		

<sup>[</sup>FN] Except as provided in a Time Schedule approved by the Executive Officer (see § G.1.d), this effluent limit shall be effective within five years of the adoption of this Order, and in no case later than 10 years from the adoption date.

## **Requested Revisions**

(1) Change the Average Daily Influent Flow units from "gpd" to "MGD" to be consistent with the Facility's limitation.

- (2) Remove total nitrogen effluent limitation of 10 mg/L. Any total nitrogen effluent limitation should be determined based on a 12-month rolling annual average to be consistent with quarterly monitoring requirements.
- (3) Change the TDS effluent limitation to 575 mg/L.
- (4) Change the determination to read "Annual Average" rather than "Annual (4th Quarter) Average" to avoid any confusion on how the determination should be calculated.
- (5) Delete Footnote 14. This footnote is not consistent with the time schedule proposed in Section G.1.

### Staff Response

Changes (1) and (4) are accepted.

Changes (2) and (5) are rejected. See response to Issue 1 (Total Nitrogen Effluent Limit) in Discharger's main comment letter, and responses to Attachment Comments 32-35.

Change (3) is rejected. See response to Issue 2 (Salt & Nutrient Management Plan) in Discharger's main comment letter, and responses to Attachment Comments 36-37.

## **CVWD ATTACHMENT, COMMENT 44**

#### Subject

Tentative Order, § 5.e.iv (p. 34)

Per section 5.e.iv, calibration reports for filed test instruments are required to be submitted to Regional Water Board staff.

#### **Comments and Requested Revisions**

In lieu of submittal, require field calibration reports to be retained for five years.

#### Staff Response

Changes rejected. These reports are necessary to ensure compliance with the Tentative Order.

## **CVWD ATTACHMENT, COMMENT 45**

## Subject

Tentative Order, § 6.a. (p. 35)

**Electronic Submittal.** All materials shall be submitted electronically via the GeoTracker Database (<u>https://geotracker.waterboards.ca.gov</u>). [FN] After uploading, Dischargers shall notify Regional Water Board staff via email to <u>RB7\_WDRs\_paperless@waterboards.ca.gov</u>, or another address specified by staff. The following information shall be included in the body of the email:

Attention:	Land Disposal Unit
Report Title:	[Report Title]
Upload ID:	[Number]
Facility:	Water Reclamation Plant 10
County:	Riverside County
GeoTracker ID:	WDR100029854

[FN] Large files must be split into appropriately labelled, manageable file sizes and uploaded into GeoTracker.

#### **Requested Revisions**

Please delete the instructions below which are redundant with electronic submittal via the Geo Tracker ESI Database.

## **Staff Response**

Changes rejected. Regional Water Board staff have specified the manner in which they prefer to be notified of Discharger submittals.

## **CVWD ATTACHMENT, COMMENT 46**

## Subject

Tentative Order, § 6.f (p. 36)

Certification. All submittals under this Order shall be accompanied by a transmittal containing the following certification that is signed by either the Required Signatory or their Authorized Representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

#### **Requested Revisions**

Please change the certification to the language below to be consistent with other WDR Orders. Revise the subject provision to read as follows:

I declare under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Executed on the	day of	at	 
	(Signature)		
	(Title)		

## Staff Response

Changes rejected.

# **CVWD ATTACHMENT, COMMENTS 47-48**

#### Subject

Tentative Order, § G.1 (p. 38)

**Total Nitrogen Effluent Limit Compliance Time Schedule.** Within six months of adoption of this Order, the Discharger shall submit, for Executive Officer approval, a Time Schedule for compliance with a 10 mg/L effluent limit for Total Nitrogen, within 10 years of the adoption of this Order.

a. The Time Schedule shall include proposed dates incorporating the following actions:

- i. Submittal of a technical report identifying and assessing treatment options for compliance with the effluent limit within 10 years;
- ii. Submittal of a technical report on the Discharger's selection of a treatment option, with designs included;
- iii. Notification that construction/installation activities have commenced;
- iv. Submittal of a technical report demonstrating that the Facility upgrades have been completed in accordance with the selected option (including the submitted designs);
- v. Startup of any new components at the Facility; and
- vi. Full compliance with the 10 mg/L effluent limitation.
- b. Upon Executive Officer written approval of the Time Schedule, [FN] the approved deadlines for required actions shall be incorporated and made enforceable as part of this Order.
- c. Upon adoption of this Order, the Discharger shall submit quarterly progress reports to the Executive Officer until full compliance with the effluent limit is achieved.
- d. Although the Executive Officer may grant extensions for required actions under the Time Schedule, in no case shall the full compliance date extend beyond 10 years from the date of this Order's adoption.

[FN] The Executive Officer may approve the Discharger's time schedule with any changes that are deemed necessary and appropriate to achieve compliance with WQOs in the most expeditious manner possible. (See Cal. Code Regs., tit. 23, § 2231, subd. (d).)

#### **Requested Revisions**

The Discharger has started construction on an expansion of the WRP-10 non-potable water system that will eliminate all discharges of secondary effluent to the percolation ponds by 2029, prior to the time schedule for constructing treatment for nitrogen removal in this provision. The planned projects include optimization of on-site storage that will eliminate the need for any discharges to the percolation ponds.

The Discharger is requesting that this provision be removed and replaced with a compliance approach that provides the Discharger flexibility to complete this work and

achieve the water management goals of recycling 100% of available wastewater effluent at WRP-10.

Order R7-2022-0009 offers a model for the Regional Water Board to provide the Discharger the flexibility needed to finish implementing the projects that will achieve the goal of recycling 100% of the effluent at WRP-10, while receiving assurances that this work will be completed in a timely manner.

Revise the subject provision to read as follows:

Nitrogen Control Strategy. Within six months of adoption of this Order, the Discharger shall submit, for Executive Officer approval, a Work Plan and Time Schedule for compliance with an effluent limit for Total Nitrogen of 10 mg/L for secondary effluent discharged to the percolation ponds within 10 years of the adoption of this Order. Alternatively, the Discharger may submit a Work Plan and Time Schedule describing its plans to eliminate discharges to disposal ponds within 5 years of the adoption of this Order to satisfy this provision.

- a. The Workplan and Time Schedule shall include proposed dates incorporating the following actions:
  - i. Submittal of a technical report identifying and assessing compliance options to satisfy this provision;
  - ii. Submittal of a technical report on the Discharger's selection of a compliance option, with designs included;
  - iii. Notification that compliance activities have commenced;
  - iv. Submittal of a technical report demonstrating that compliance activities have been completed in accordance with the selected option (including the submitted designs);
  - v. Startup of any new components at the Facility; and
  - vi. Full compliance with the Workplan.
- b. Upon Executive Officer written approval of the Workplan and Time Schedule, the approved deadlines for required actions shall be incorporated and made enforceable as part of this Order. [FN]
- c. Upon adoption of this Order, the Discharger shall submit quarterly progress reports to the Executive Officer until full compliance with the Workplan is achieved.

d. Although the Executive Officer may grant extensions for required actions under the Workplan and Time Schedule, in no case shall the full compliance date extend beyond 10 years from the date of this Order's adoption.

[FN] The Executive Officer may approve the Discharger's time schedule with any changes that are deemed necessary and appropriate to achieve compliance in the most expeditious manner possible. (See Cal. Code Regs., tit. 23, § 2231, subd. (d).)

### Staff Response

Changes rejected. See response to Issue 1 (Total Nitrogen Effluent Limit) in Discharger's main comment letter, and responses to Attachment Comments 32-35. Regional Water Board staff recognize and support the Discharger's efforts to eliminate its use of percolation ponds to discharge secondary treated effluent directly to groundwater. However, the Discharger will nevertheless be required to initially evaluate nitrogen treatment alternatives and select a preferred alternative as a backup option.

New requirements have been added to address the Discharger's intentions to cease using its percolation ponds for wastewater disposal.

Sections G.2 through G.3 will now read as follows:

- 1. Total Nitrogen Effluent Limit Compliance Time Schedule. Within six months of adoption of this Order, the Discharger shall submit, for Executive Officer approval, a Time Schedule for compliance with a 10 mg/L effluent limit for Total Nitrogen for any wastewater discharges to percolation ponds for disposal within 10 years of the adoption of this Order.
  - a. The Time Schedule shall incorporate the following:
    - i. The submittal of technical reports that identify and evaluate nitrogen treatment alternatives that are reasonably expected to be capable of achieving compliance with the effluent limit; and the final selection of a preferred alternative;
    - ii. Notification that construction/installation activities have commenced;
    - iii. Submittal of a technical report demonstrating that the Facility upgrades have been completed in accordance

with the selected option (including the submitted designs);

- iv. Startup of any new components at the Facility; and
- v. Full compliance with the 10 mg/L effluent limitation for any wastewater discharged to the percolation ponds for disposal purposes. [FN-22]
- b. Upon Executive Officer written approval of the Time Schedule, [FN-23] the approved deadlines for required actions shall be incorporated and made enforceable as part of this Order.
- c. Upon adoption of this Order, the Discharger shall submit quarterly progress reports to the Executive Officer until full compliance with the effluent limit is achieved.
- d. Although the Executive Officer may grant extensions for required actions under the Time Schedule, in no case shall the full compliance date extend beyond 10 years from the date of this Order's adoption.
- 2. Recycled Water Expansion and Pond Decommissioning Workplan and Time Schedule. Within one year, the Discharger shall submit a technical report that identifies and schedules all activities necessary to:
  - a. Expand water recycling operations and storage sufficient to allow for the complete cessation of wastewater discharges to the Facility's remaining percolation ponds within 10 years;
  - b. Decommission the remaining percolation ponds in accordance with Section G.3 below. [FN-24]
- 3. Standards for Pond Decomissioning.
  - a. Upon the cessation of wastewater discharges to the percolation ponds (i.e., for disposal purposes), the percolation ponds shall be decommissioned as follows:
    - i. Ponds that are no longer intended to be used shall be deconstructed and filled to grade.

- ii. Ponds used for temporary storage of wastewater (treated or untreated) shall be lined, reconstructed or otherwise modified such that their use will not result in percolation to groundwater in significant volumes. The Discharger shall provide such a demonstration in a technical report.
- iii. Ponds used for groundwater recharge shall be disconnected from the Facility's wastewater treatment system. The bottom of such ponds shall be sampled and analyzed according to an Executive Officerapproved work plan to determine whether any residual waste constituents could be mobilized by groundwater recharge activities. Based on the results of the Discharger's sampling and analysis, sediment at the bottom of the ponds shall be excavated, as necessary to protect water quality, and disposed to a landfill.
- b. Decommissioned ponds that are converted to groundwater recharge shall not be used for the storage of treated or untreated wastewater.
- [FN-22] Although the Discharger will be required to initially investigate, evaluate and propose Nitrogen treatment alternatives (i.e., as a backup option), it may propose a time schedule that delays construction and implementation of the selected alternative to the very end of the 10-year period, and instead prioritize the activities necessary to achieve conversion to 100 percent recycled water within 10 years.
- [FN-23] The Executive Officer may approve the Discharger's time schedule with any changes that are deemed necessary and appropriate to achieve compliance with WQOs in the most expeditious manner possible. (See Cal. Code Regs., tit. 23, § 2231, subd. (d).)
- [FN-24] The report shall also identify how the percolation ponds will be used once they are no longer being used for wastewater disposal.

# **CVWD ATTACHMENT, COMMENT 49**

### Subject

Tentative Order, Attachment A—Monitoring and Reporting Program, § A.7.b (p. 43)

The Discharger shall retain records of all monitoring information, copies of all reports required by this MRP, and records of all data used to complete the application for this MRP, for a period of at least 5 years from the date of the sample, measurement, report or application.

#### **Comments and Requested Revisions**

Please add the following sentence to indicate that records may be maintained electronically. "Records may be maintained electronically."

#### **Staff Response**

Changes accepted.

### **CVWD ATTACHMENT, COMMENT 50**

#### Subject

Tentative Order, Attachment A—Monitoring and Reporting Program, §, B.6 (p. 44)

The Discharger shall monitor groundwater wells MW-1, MW-2, and MW-3, MW-4, MW-5, MW-6, MW-7 and MW-8, as identified in Attachment B, Figure 2 of the WDRs Order, in accordance with MRP Table 6.

#### **Requested Revisions**

Please change this requirement to reflect monitoring obligations in accordance with MRP Table 6 at the new upgradient well MW-7 and two downgradient wells, MW-5 and MW-6.

Based on findings in this Tentative Order the other wells have been deemed to not provide adequate information about the background water quality and water quality impact of the WRP-10 Facility. The remaining monitoring wells (MW-1, MW-2, MW-3, MW-4, and MW-8) should be monitored only for water levels to monitor the extent of water mounding beneath the Facility. Please include a separate requirement to indicate that monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-8 should be monitored for groundwater levels on a quarterly basis.

## **Staff Response**

Changes rejected. According to finding 45 the Discharger reported that MW-1, MW-2 and MW-3 were deteriorating and in need of replacement in 2011, and that they were affected by mounding (i.e., resulting from percolation pond discharges). Consequently, the results from 2009 to 2012 may not have reflected background conditions or the impacts of Facility discharges. However, these three wells were rehabilitated back in 2019. Now that they are once again in working condition, they will provide information as to the quality of mounded groundwater.

Although the TDS concentrations for upgradient MW-4 were higher than those downgradient that does not necessarily mean that this well should not be monitored. The well may not be reflective of background conditions for TDS but the fact that downgradient MW-5 and MW-6 were higher in total nitrogen suggests that this well could be useful to monitor this specific contaminant.

# **CVWD ATTACHMENT, COMMENT 51**

## Subject

Tentative Order, Attachment A—Monitoring and Reporting Program, § B.8, p. 45

To assess impacts from the Discharger's two adjacent groundwater recharge activities (i.e., Whitewater River GRP and Palm Desert GRP), the Discharger shall monitor each GRP in accordance with MRP Table 8.

## **Comments and Requested Revisions**

Please delete this provision. The Whitewater River GRP and Palm Desert GRP are not the subjects of this Order. Please refer to Finding 3 of this Tentative Order that makes it clear that regulatory coverage under this Order is strictly limited in scope to those waste discharges, activities and processes described and expressly authorized by the Order. Also, the Whitewater River GRP is not in the vicinity of the WRP-10 facility and is located in the upper Coachella Valley in the forebay of the Indio Subbasin. This Order is not an appropriate means to require reporting on these two unrelated facilities. The influence of replenishment on groundwater of the Indio Subbasin is being analyzed through the CV-SNMP Update. The CV-SNMP Agencies have already provided information on sources, amounts, and water quality associated with the groundwater replenishment operations in Technical Memorandum #1 Characterize TDS/N Loading to the Coachella Groundwater Basin which was reviewed by Regional Water Board staff.

## **Staff Response**

Refer to staff responses to Attachment Comments 6, 17-18, 22, 25 and 29. References to the "Whitewater River GRP" in the parenthetical will be deleted. No further changes.

## CVWD ATTACHMENT, COMMENT 52<sup>13</sup>

## Subject

Tentative Order, Attachment A—Monitoring and Reporting Program, MRP Table 1 (Influent Monitoring Schedule), p. 45

### **Comments and Requested Revisions**

Change all of the reporting frequencies from "quarterly" to "monthly."

### Staff Response

Changes rejected. To conserve staff resources and minimize the Discharger's reporting requirements, the Tentative Order no longer requires the submittal of monthly reports.

# CVWD ATTACHMENT, COMMENT 53<sup>14</sup>

#### Subject

Tentative Order, Attachment A—Monitoring and Reporting Program, MRP Table 2 (Secondary Effluent Monitoring Schedule), pp. 45-46

## **Requested Revisions**

- (1) Change the reporting frequencies from "quarterly" to "monthly" for the following: CBOD5; pH; TDS; Settleable Matter; Nitrate as N; and Nitrite as N.
- (2) To provide the Discharger with more flexibility in scheduling monitoring activities, remove the requirement that annual monitoring of Major Ions and Major Cations specifically occur in the 4th quarter of each year.

<sup>&</sup>lt;sup>13</sup> Requested revisions related to CBOD5 have been consolidated with Attachment Comment 2.

<sup>&</sup>lt;sup>14</sup> Requested revisions related to CBOD5 have been consolidated with Attachment Comment 2.

### **Staff Response**

See response to Attachment Comment 52 regarding reporting frequencies; such changes are rejected. However, the requested changes for Major Anion and Major Cation monitoring have been accepted.

## **CVWD ATTACHMENT, COMMENT 54**

### Subject

Tentative Order, Attachment A—Monitoring and Reporting Program, MRP Table 3 (Tertiary Effluent Monitoring Schedule), pp. 46-47

### **Requested Revisions**

- (1) Change the monitoring frequency for Volume of Wastewater used for Irrigation at each Location to "Meter Reading."
- (2) To provide the Discharger with more flexibility in scheduling monitoring activities, remove the requirement that annual monitoring of Major lons and Major Cations specifically occur in the 4th quarter of each year.
- (3) Change the reporting frequencies from "quarterly" to "monthly" for all parameters/constituents, excluding Major Ions and Major Cations (reported annually).
- (4) Remove requirement to monitor for Priority Pollutants. The Discharger received a letter from the State Water Board which exempts WRP-10 from this monitoring requirement since it uses recycled water only for golf courses and landscape irrigation. This exemption applies as long as the Discharger completes the State's annual volumetric reports, which the Discharger has been doing since 2019. The State Water Board's letter can be provided upon request.

#### Staff Response

Change (1) is construed as requesting a change in the methodology (type) of monitoring, rather than the location of monitoring, and is accepted accordingly.

Change (2) is accepted.

Change (3) is rejected. See response to Attachment Comment 52.

Change (4) is accepted.

# **CVWD ATTACHMENT, COMMENT 55**

### Subject

Tentative Order, Attachment A—Monitoring and Reporting Program, MRP Table 4 (Pond Monitoring Schedule), p. 47

### **Requested Revisions**

Change the reporting frequencies from "quarterly" to "monthly" for all parameters/constituents.

### **Staff Response**

Changes rejected. See response to Attachment Comment 52.

## **CVWD ATTACHMENT, COMMENT 56**

#### Subject

Tentative Order, Attachment A—Monitoring and Reporting Program, Footnote to MRP Table 4 (Pond Monitoring Schedule), p. 47

If there is little or no water in the percolation ponds, the monitoring report shall state "No standing water in ponds" in place of reporting dissolved pH and DO concentration.

#### **Requested Revisions**

Clarify that if there is no water in a pond, the Discharger is not required to report freeboard.

#### Staff Response

Changes accepted. The footnote to MRP Table 4 now provides follows:

If there is little or no water in the percolation ponds, the monitoring report shall state "No standing water in ponds" in place of reporting freeboard, dissolved pH and DO concentration.

## **CVWD ATTACHMENT, COMMENTS 57-58**

### Subject

Tentative Order, Attachment A—Monitoring and Reporting Program, MRP Table 5 (Community Water Supply Monitoring), p. 48

### **Requested Revisions**

- (1) Move the table caption footnote to each of the rows for Major Anions and Major Cations.
- (2) Change the parameter from "Nitrate" to "Nitrate as N" to be consistent with requirements at other monitoring locations.
- (3) To provide the Discharger with more flexibility in scheduling monitoring activities, remove the requirement that annual monitoring of Major lons and Major Cations specifically occur in the 4th quarter of each year.
- (4) Change the reporting frequencies from "quarterly" to "monthly" for the following: pH; TDS; and Nitrate as N.
- (5) Delete the footnote to the "Major Anions" row, which duplicates the footnote to the table caption.

## Staff Response

In lieu of Change (1), the following text shall be added to Section B.5 of Attachment A (Monitoring and Reporting Program):

For Major Anion and Major Cation analyses, these samples shall be obtained from multiple wells within the service area of the Facility to evaluate the range of concentrations found in the area, and from a potable water outlet (tap water) to represent blended concentrations.

Change (2) is accepted. It should be noted that, unless otherwise specified, "Nitrate" specifically refers to Nitrate as Nitrogen.

Change (3) is accepted.

Change (4) is rejected. See response to Attachment Comment 52.

Change (5) is accepted. [See above response.]

## **CVWD ATTACHMENT, COMMENT 59**

### Subject

Tentative Order, Attachment A—Monitoring and Reporting Program, MRP Table 7 (Sludge Monitoring), p. 49

### **Requested Revisions**

To provide the Discharger with more flexibility in scheduling monitoring activities, remove the requirement that annual monitoring for all parameters specifically occur in the 4th quarter of each year.

### **Staff Response**

Change accepted.

## **CVWD ATTACHMENT, COMMENT 60**

#### Subject

Tentative Order, Attachment A—Monitoring and Reporting Program, MRP Table 8 (Groundwater Recharge Project Monitoring), p. 50

The Tentative Order requires that the Discharger monitor and report the volume and TDS of Colorado River water applied as part of the Palm Desert GRP.

## **Comments and Requested Revisions**

Please delete MRP Table 8. Groundwater Recharge Project Monitoring. The GRPs are not the subjects of this Order. This Order is not an appropriate means to require reporting on GRP facilities. Please refer to Finding 3 of this Tentative Order that makes it clear that regulatory coverage under this Order is strictly limited in scope to those waste discharges, activities and processes described and expressly authorized by the Order. The influence of replenishment on groundwater of the Indio Subbasin is being analyzed through the CV-SNMP Update. The CVSNMP Agencies have already provided information on sources, amounts, and water quality associated with the groundwater replenishment operations in Technical Memorandum #1 Characterize TDS/N Loading to the Coachella Groundwater Basin which was reviewed by Regional Water Board staff.

#### **Staff Response**

Change rejected. See response to Attachment Comments 6, 17-18, 22, 25 and 29.

## **CVWD ATTACHMENT, COMMENT 61**

### Subject

Tentative Order, Attachment A-Monitoring and Reporting Program, § C, p. 51

#### **Requested Revisions**

Please add a provision to describe requirements for Monthly Reporting

### **Staff Response**

Change rejected. See response to Attachment Comment 52.

### **CVWD ATTACHMENT, COMMENT 62**

#### Subject

Tentative Order, Attachment A—Monitoring and Reporting Program, § C.1, p. 51

Quarterly Reporting. The Discharger shall submit Quarterly Self- Monitoring Reports (SMRs) that include the results of all monitoring activities conducted during the subject period. Daily, weekly, and monthly monitoring shall be included in the Quarterly Self-Monitoring Reports (SMRs). Quarterly SMRs shall be submitted by May 15th (1st Quarter covering January 1st through March 31st), August 15th (2nd Quarter covering April 1st through June 30th), November 30th (3rd Quarter covering July 1st to September 30th), and February 15th (4th Quarter covering October 1st through December 31st)...

#### **Requested Revisions**

Please edit Quarterly Reporting requirements to clarify that it applies to "Quarterly" monitoring and not "Daily, weekly, and monthly" monitoring. Also, please change the submittal due date for 3rd Quarter reporting from "November 30" to "November 15" to be consistent with the due dates for the other quarters.

#### Staff Response

The subject provision has been revised to read as follows:

Quarterly Reporting. The Discharger shall submit Quarterly Self-Monitoring Reports (SMRs) that include the results of all monitoring activities conducted during the subject period, excluding those that are required to be

reported annually. Quarterly SMRs shall be submitted by May 15th (1st Quarter covering January 1st through March 31st), August 15th (2nd Quarter covering April 1st through June 30th), November 15th (3rd Quarter covering July 1st to September 30th), and February 15th (4th Quarter covering October 1st through December 31st)...

Additional language has been added to Section C.2 to clarify that the 4th Quarter SMR must include the results of any monitoring required to be reported on an annual basis, notwithstanding the above provision.

## **CVWD ATTACHMENT, COMMENT 63**

### Subject

Tentative Order, Attachment A—Monitoring and Reporting Program, Footnote to Section C.1.b.ii, p. 51

This map shall include all of the elevations obtained from monitoring wells located within a one-mile radius of the Facility boundary to which the Discharger has access.

#### **Comments and Requested Revisions**

Please change footnote read as shown below to reflect that the Discharger may have access to wells which are not scheduled or otherwise able to be monitored in any given quarter:

This map shall include elevations obtained from monitoring wells located within a one-mile radius of the Facility boundary for which the Discharger has monitoring results. The contour intervals on the groundwater elevation map shall be small enough to show areas of groundwater mounding if present.

#### Staff Response

Change accepted.

## **CVWD ATTACHMENT, COMMENT 64**

### Subject

Tentative Order, Attachment A—Monitoring and Reporting Program, § C.1.c.i, p. 51

Tables of the data collected. The tables shall include all the data collected, to date, at each monitoring point, organized in chronological order, with the oldest data in the top row and progressively newer data in rows below the top row. Each row shall be a separate date and each column shall be a separate parameter at a single location (or a single average, as appropriate). The tables shall be submitted in electronic (Excel or other tab delimited).

#### **Comments and Requested Revisions**

The Discharger finds that this request is too broad. All monitoring data from all monitoring locations is a large quantity of information. The Discharger recommends providing tables and graphs for groundwater monitoring data for TDS, Nitrate as N, and depth to groundwater. The Discharger is also requesting that groundwater monitoring data for the above constituents be provided in tables and graphs for the last five (5) years from the reporting period, consistent with the Records Retention policy stated in the Standard Provisions of this Order (page 44).

Revise the subject provision to read as follows:

**Tables** of the data collected for depth to groundwater, TDS, and Nitrate as N within the last five years. The tables shall include the data collected at each monitoring point, organized in chronological order, with the oldest data in the top row and progressively newer data in rows below the top row. Each row shall be a separate date and each column shall be a separate parameter at a single location (or a single average, as appropriate). The tables shall be submitted in electronic (Excel or other tab delimited) format

#### **Staff Response**

Change accepted in part. Although the scope of tabulated data will be reduced to five years (coextensive with the records retention period), the Discharger will be required to tabulate data for all monitoring points and monitoring parameters. The provision will be revised to read as follows:

Tables of the data collected. The tables shall include all the data collected within the past five years, at each monitoring point, organized in chronological order, with the oldest data in the top row and progressively newer data in rows below the top row. Each row shall be a separate date

and each column shall be a separate parameter at a single location (or a single average, as appropriate). The tables shall be submitted in electronic (Excel or other tab delimited).

# **CVWD ATTACHMENT, COMMENT 65**

## Subject

Tentative Order, Attachment A—Monitoring and Reporting Program, § C.1.d p. 52

Section C.1.d requires each Quarterly Self-Monitoring Report to contain the following:

Compliance Summary. Identification of any violations found since the last report was submitted, and actions taken or planned for correcting each violation. If the Discharger previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. If no violations have occurred since the last submittal, this shall be stated.

### **Comments and Requested Revisions**

Please delete this requirement which duplicates the information required to be provided in the Cover Letter.

## Staff Response

Change accepted.

# **CVWD ATTACHMENT, COMMENT 66**

## Subject

Tentative Order, Attachment B—Maps and Facility Diagrams, Figure 1—Map with Facility Location, p. 55)

## **Comments and Requested Revisions**

Substitute Figure 1 with the updated map below that omits the Phases 1-2 of the Palm Desert GRP.



# **Staff Response**

Changes rejected. Although the Discharger has not constructed Phase 2 of the Palm Desert GRP, it is still necessary to include a map depicting the location of Phase 1. See response to Attachment Comments 6, 17-18, 22, 25 and 29.

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# **CVWD ATTACHMENT, COMMENT 67**

### Subject

WDRs Order, Attachment B—Maps and Facility Diagrams, Figure 2, Map of Monitoring Well Locations, p. 55

### **Comments and Requested Revisions**

Substitute Figure 2 with the updated map below that includes only the monitoring wells that are part of the Order's Monitoring and Reporting Program (MRP).



## **Staff Response**

Change rejected. The original version of Figure 2 is appropriate.

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# COMMENTS FROM THE HONORABLE KELLY SEYARTO, STATE SENATOR FOR THE 32ND DISTRICT OF CALIFORNIA

# Comments

I support the Regional Board's ongoing efforts to achieve Basin Plan standards, including through the issuance of effective wastewater permits. However, I oppose the Regional Water Board's Tentative Waste Discharge Requirements Order R7-2024-XXXX (Tentative Order). The Tentative Order mandates the addition of treatment at Coachella Valley Water District's (CVWD) Water Reclamation Plant Number 10 (WRP 10) facility to meet a total nitrogen effluent limit of 10 mg/L within 10 years of adoption of the Order. The Tentative Order risks setting a policy direction that undermines efforts to fully utilize available recycled water and protect groundwater resources while maintaining the affordability of water and sanitation services for the Coachella Valley.

CVWD and other water and wastewater agencies of the Coachella Valley are developing a Salt and Nutrient Management Plan (SNMP) for the Coachella Valley in collaboration with other salt and nutrient contributors and interested parties. The Regional Water Board is a key stakeholder in the process and approved a workplan to guide the progress. The limits within and timing of the Tentative Order do not allow for the SNMP to complete this process to establish a basin-wide and cost-effective approach for managing nutrients.

Mandating the additional treatment to remove nitrogen will be costly to all sanitation customers, increasing rates between 62%-148%. The Tentative Order will have the unintended consequence of impacting wastewater affordability. The communities throughout the Coachella Valley, including many low-income and elderly customers living on fixed incomes, will be negatively and disproportionally harmed by this Tentative Order.

CVWD has invested heavily in its recycled water program as an alternative water supply for golf courses and large landscape customers that would otherwise pump high-quality groundwater directly from the aquifer. Recycled water is an important component of our water conservation strategy. Any regulation that may increase the cost of recycled water or dissuade the development of new recycled water projects should be carefully analyzed. The negative impacts of this order could easily outweigh the benefits.

# Response

See Regional Water Board staff responses to "Issue 1" and "Issue 2" in the Discharger's main comment letter. Staff share the Senator's appreciation for the importance of recycled water as a valuable water supply within the Coachella Valley. It is not the intent

of staff to limit the Discharger's expansion of its recycled water program. The Tentative Order does not prescribe effluent limits for the discharge of recycled water.

The Regional Water Board is tasked with the protection of water quality in the Coachella Valley and throughout the Colorado River Basin Region. The Discharger's secondary-treated wastewater, which is percolated directly to groundwater, has long contained nitrate concentrations far exceeding established water quality objectives that protected human health. Until wastewater can be disposed of through alternative means (e.g., application of recycled water), the Discharger will be required to meet effluent limitations that ensure that groundwater is not degraded any further. Such an approach is mandated under the State Water Resources Control Board's *Statement of Policy with Respect to Maintaining High Quality Waters in California*, Resolution 68-16 (*Antidegradation Policy*) and the Human Right to Water enshrined in section 106.3 of the California Water Code.

As for TDS, the Tentative Order maintains the same effluent limits that are already in place. In the absence of an established water quality objective that is protective of both municipal and domestic (MUN) and agricultural supply (AGR) beneficial uses, a "conservative" limit is warranted to maintain existing water quality to the greatest extent possible. Such is required under the *Antidegradation Policy*.

# <u>COMMENTS FROM COACHELLA VALLEY SALT AND NUTRIENT MANAGEMENT</u> <u>PLAN AGENCIES (CV-SNMP)</u>

# CV-SNMP-1

#### Comment

# *Effluent Limitation for TDS should be delayed until the updated SNMP is complete and TDS water quality objectives have been adopted into the Water Quality Control Plan for the Colorado River Basin.*

First, the Tentative Order proposes a TDS effluent limit of 530 mg/L, arguably based on the narrative water quality objective for taste and order. However, in setting the limit at 530 mg/L, the Tentative Order does not acknowledge the efforts underway to identify appropriate TDS water quality objectives to protect beneficial uses. Specifically, for the SNMP update, the CV-SNMP Agencies have committed to implementing an extensive work plan that was accepted by the Colorado River Water Board in 2021. The work plan includes developing recommended TDS water quality objectives for groundwater throughout the Coachella Valley to protect beneficial uses. Recommended water quality objectives for TDS would be considered by the Colorado River Water Board for adoption into the Water Quality Control Plan for the Colorado River Basin (Basin Plan).

However, rather than waiting for this agreed on process to be completed, a process that includes substantial studies and modeling that will likely inform future permit decisions, the Tentative Order proposes to impose effluent limitations on Coachella Valley Water District now that are conservative and based on the low end of the range of secondary maximum contaminant levels that are set for consumer acceptance – not for public health. The CV-SNMP Agencies believe that setting the limit at this level is premature until the SNMP update process, including the studies that are part of the SNMP process, is complete.

Second, the TDS effluent limit of 530 mg/L is recognized as being conservative. (Tentative Order, p. 20.) However, a conservative limit set at 530 mg/L does not account for increased salinity levels due to water conservation efforts and regulations. Throughout California, wastewater agencies are seeing salinity levels increase in influent and effluent as voluntary and mandatory water conservation restrictions are imposed and implemented. In developing the updated SNMP, the CV-SNMP Agencies are cognizant of needing to account for water conservation and anticipated increases in salinity in influent and effluent. Accordingly, the updated SNMP and its recommendations for TDS water quality objectives will account for these changes, which are critical for managing limited water resources in the Coachella Valley and throughout California.

Moreover, as part of implementing the SNMP work plan, once TDS water quality objectives are identified, available assimilative capacity for each groundwater basin can also be established. With this information in hand, the Colorado River Water Board can then determine an appropriate TDS effluent limitation that is protective of beneficial uses and in compliance with the State's Antidegradation Policy – including consideration of assimilative capacity. Unfortunately, as already stated, the Tentative Order moves forward with setting a conservative limit at 530 mg/L, which is premature, unnecessary, and does not account for consideration of available assimilative capacity.

In light of these considerations, the CV-SNMP Agencies request that the Tentative Order be revised to reflect the following: 1) Include findings in the Tentative Order that acknowledge the existing, ongoing efforts to develop an updated SNMP; 2) Adopt an interim TDS limit due to development of an updated SNMP; and, 3) Increase the level of the interim TDS limit above 530 mg/L to account for increasing salinity due to water conservation.

# Response

Refer to Regional Water Board staff's response to "Issue 2" in the Discharger's main comment letter (see page 11). The CV-SNMP does not relieve the Discharger from complying with limits that reflect the best practicable treatment and control of salinity under the Antidegradation Policy. Nor does the absence of a WQO justify a higher effluent limit than the one that the Discharger is already complying with.

# CV-SNMP-2

#### Comment

# The effluent limitation for total nitrogen should be replaced with an interim limit for nitrate that reflects current plant performance until an updated SNMP is complete.

With respect to nitrate, the Tentative Order proposes a Total Nitrogen limit of 10 mg/L. With this limit, the Tentative Order includes a footnote that suggests the limit will become effective within five years of adoption of the Tentative Order, or alternatively, subject to approval of a time schedule by the Executive Officer, for a period of time not to exceed ten (10) years. The CV SNMP Agencies have several concerns with the Total Nitrogen limit and time schedule provisions.

First, the primary drinking water standard is for nitrate – not Total Nitrogen. Thus, any limit designed to protect the municipal drinking water beneficial use based on the primary drinking water standard should be expressed as Nitrate as Nitrogen – not as Total Nitrogen.

Second, the time schedule provisions contained within the Tentative Order are confusing and unnecessary. The CV-SNMP Agencies are concerned that the substantive provisions associated with the time schedule as expressed in G.1. presume and conclude that Coachella Valley Water District must build additional treatment to meet the limit in question. As explained further below, such a conclusion is premature and fails to consider numerous site-specific factors associated with the nitrogen cycle.

Specifically, and for reasons which make the inclusion of a time schedule unnecessary, the proposed Total Nitrogen Effluent Limit would be imposed "end of pipe," which does not consider that nitrate levels in effluent are not the levels of nitrate that reach groundwater, i.e., the receiving waters. Before imposing an Effluent Limit set at or near the drinking water standard, Coachella Valley Water District should be given the opportunity to determine if de-nitrification of the effluent occurs once it is discharged to the ponds and travels through the soil profile before reaching groundwater. The nitrogen cycle is complex, and it is well known and documented that there are nitrogen losses as effluent infiltrates and travels through soil before reaching groundwater. Depending on the site-specific circumstances, these nitrogen losses may be significant. Accordingly, a limit of 10 mg/L for Total Nitrogen imposed on the effluent is likely overly conservative and could result in substantial costs to the District's rate payers to build treatment facilities for nitrogen removal that are unnecessary.

Further, imposing requirements that lead to building expensive treatment facilities would likely undermine Coachella Valley Water District's significant recycling program. As noted in the Tentative Order, the District is moving vigorously towards one-hundred

percent recycling of effluent by 2035 – with most of this being accomplished by 2029. (Tentative Order, p. 19.) Continued use of the percolation ponds is temporary for the next four to five years as additional recycled water storage and uses are brought online by the Coachella Valley Water District. Considering the District's short-term plan to discontinue use of the percolation ponds, the Tentative Order's push towards additional treatment appears to be illogical and could interfere with the District's planned improvements for increasing recycled water storage and uses. For the other CV-SNMP Agencies, this is concerning as similar requirements could be imposed on them, which could interfere with their plans for improving and increasing recycled water storage and use.

Next, similar to the proposed TDS Effluent Limit, the Tentative Order fails to acknowledge that the CVSNMP Agencies are determining background and available assimilative capacity throughout the Coachella Valley for both TDS and N. Along with determining if assimilative capacity is available, the SNMP will also set forth recommendations for ensuring that TDS and N levels in groundwater remain protective of beneficial uses. Until these efforts are completed, it is inappropriate to set Effluent Limits that push the Coachella Valley Water District towards increased levels of treatment that may ultimately be unnecessary.

#### Response

Refer to Regional Water Board staff's response to "Issue 1" in the Discharger's main comment letter (page 5), as well as to the responses to "Attachment Comments" 32-35 (page 43). Although the MCL pertains to the sum of nitrate and nitrite rather than total nitrogen, nitrate comprises nearly all of the total nitrogen in both the Discharger's wastewater and downgradient groundwater. Moreover, a total nitrogen effluent limit is warranted because additional nitrogen may convert to nitrate in groundwater. In this case, the Facility's groundwater network has already established "background" conditions, as well as the absence of "assimilative capacity."

# COMMENTS FROM DESERT WATER AGENCY (DWA)

# <u>DWA-1</u>

#### Comment

# The Treatment for Nitrogen Mandated by the Tentative Order Would Result in Significant Rate Increases to CVWD and DWA Customers

Mandating the additional treatment to remove nitrogen will result in capital improvement costs in the hundreds of millions of dollars as well as several million dollars annually in operations and maintenance costs for CVWD that, unfortunately, will likely be passed

on to its customers. DWA's sewer conveyance system collects wastewater from our customers in the southern portion of Cathedral City and conveys it to CVWD's sanitary sewer system, ultimately being treated at their WRP 10 facility. As a result, any increase in sanitation costs on CVWD's end would be directly felt by our sanitary sewer customers as well. This Tentative Order, in its current state, will significantly impact wastewater affordability, particularly for low-income families and elderly customers on fixed incomes within our communities. DWA does not believe the benefit of setting these proposed limits outweighs the cost.

# Response

See Regional Water Board staff responses to "Issue 1" in the Discharger's main comment letter (page 8).

# <u>DWA-2</u>

# Comment

# The Treatment for Nitrogen Mandated by the Tentative Order Could Harm Future Efforts to Expand Recycled Water Use as an Alternate Water Supply in DWA's Service Area.

DWA has strived to reduce groundwater pumping through water recycling and conservation programs. DWA began providing recycled water as an alternative water supply for our largest users (i.e. golf courses, parks, etc.) in the 1980s and has invested tens of millions of dollars throughout the life of the system. The public golf courses in DWA's service area along with some of the public parks, greenspaces, and athletic fields use recycled water supplies, resulting in reduced groundwater pumping and improved water resiliency in our community. The State recognizes recycled water as a critical alternative water supply to help increase resiliency and sustainability in California. Accordingly, one of the Project Management Actions (PMA) identified in the SGMA Alternative Plan Update for the Indio Subbasin is expansion of recycled water service in DWA's service area. We are concerned that any precedent set as a result of this Tentative Order will potentially affect future efforts by DWA to expand our recycled water service due to increased treatment costs which would be passed on to our customers, potentially discouraging future project development. Maintaining affordability of recycled water service is key to encouraging future projects and addressing this important component of sustainably managing our basin. DWA asks that the Regional Board further consider CVWD's plan to expand its WRP 10 facility and achieve 100% use of recycled water, including its plan to optimize storage and eliminate the need to discharge to its existing percolation ponds for emergency disposal.

Additionally, DWA encourages the Regional Board to consider a similar approach to that taken by Santa Ana River Water Board in which they incorporated results from a regional study on nitrogen removal into their Basin Plan. Based on the results of this regional study, a nitrogen reduction factor of 25% (minimum) was applied to wastewater discharges as part of developing nitrogen limits. To take it a step further, the Regional Board might consider the option of site-specific studies. These site-specific studies could be conducted by dischargers and the results used to determine nitrogen loss coefficients specific to each site. DWA believes this approach would allow more flexibility for recycled water and wastewater agencies to develop recycled water programs that are both cost-effective and protective of beneficial uses.

# Response

See Regional Water Board staff responses to "Issue 1" in the Discharger's main comment letter (page 8). The Tentative Order does not apply to the Discharger's production or distribution of recycled water, and as long as the Discharger ceases to discharge wastewater to percolation ponds, it will not need to implement nitrogen treatment under the Tentative Order.

Although DWA proposes the application of a nitrogen loss coefficient similar to the one described in the Water Quality Control Plan for the Santa Ana River Basin (Santa Ana River Basin Plan), such an approach would not be appropriate here. Section 5.B.3 (page 5.21) of the Santa Ana River Basin Plan provides for a nitrogen control implementation plan incorporating a potential range of nitrogen loss coefficients based on site-specific conditions and confirmatory monitoring. This approach is based on unique, basin-specific hydrological features that do not exist within the Coachella Valley. It is also not automatically applied to all wastewater discharges within the Santa Ana Region. In this case, the Discharger's own monitoring data clearly indicates that nitrogen discharges are resulting in a water quality exceedance in downgradient groundwater. The Discharger's investigation also concluded that the monitoring wells with water quality exceedances were being influenced by the Facility's wastewater. Furthermore, adjacent groundwater recharge activities are likely mobilizing nitrogen that would otherwise remain within the unsaturated zone.

# <u>DWA-3</u>

# Comment

# Any Limits for Nitrogen Should be Set as Nitrate and Not Total Nitrogen per the Primary Drinking Water Standard.

In considering municipal drinking water beneficial use, the primary drinking water standard has limits for Nitrate as N and, not Total Nitrogen. In keeping with the Primary

Drinking Water Standard, DWA believes any permanent limits should be expressed as Nitrate (as N).

#### Response

See Regional Water Board staff's response to Attachment Comments 32-35 (page 43). Nitrate already comprises nearly all of the total nitrogen in both the Discharger's wastewater, as well as in downgradient groundwater. The effluent limit is expressed as total nitrogen because it is not known how much nitrogen will convert to nitrate or nitrite in groundwater.

# <u>DWA-4</u>

#### Comment

# The Tentative Order Disregards Coordinated Efforts Currently Underway to Develop the Coachella Valley Salt and Nutrient Management Plan (CV-SNMP).

DWA, along with other water and wastewater agencies, is collaborating on the development of an updated Salt and Nutrient Management Plan (SNMP) for the Coachella Valley. We appreciate the coordinated efforts of the Regional Board and stakeholders throughout this process and are committed to ensuring the final updated CV-SNMP adheres to the State Water Board's Recycled Water Policy while determining the best approach to managing TDS and nitrate sources in the Coachella Valley that is protective of beneficial uses of groundwater and maintains sustainability and affordability of groundwater in the Coachella Valley. We respectfully ask that the Regional Board allow for completion of this process prior to setting any final limits for TDS and nitrate out of respect for the extensive efforts by all parties that have gone into and will continue to be dedicated to seeing this process through to the end. The completed CV-SNMP will serve as a tool to help inform any permanent limits. In the meantime, DWA suggests setting reasonable interim limits for TDS and nitrate as N that are reflective of current operations at CVWD's WRP 10 facility.

# Response

See Regional Water Board staff responses to "Issue 2" in the Discharger's main comment letter (page11). The downgradient groundwater already exceeds the established WQO for nitrate plus nitrite as Nitrogen. The CV-SNMP process also has no bearing on the need for total nitrogen effluent limits in this case, as downgradient groundwater is already beyond its assimilative capacity for nitrate and in a condition of pollution. As for TDS, a conservative approach is warranted until the CV-SNMP process is completed.

# <u>COMMENTS FROM COACHELLA VALLEY REGIONAL WATER MANAGEMENT</u> <u>GROUP (RWMG)</u>

# RWMG-1

# Comment

The importance of recycled water as a critical water supply for California is widely recognized. Recycled water is a key resource for diversifying local supplies and improving the state's long-term water resilience, especially during periods of drought and amidst the challenges posed by climate change. Governor Newsom's August 2022 Water Supply Strategy sets goals of recycling at least 800,000 acre feet of water per year by 2030 and 1.8 million acre-feet by 2040. The State Water Board regulates the production and use of recycled water in a manner that protects public health and the environment.

The Coachella Valley has been able to achieve groundwater sustainability by implementing water management plans that consider available supplies and projected increases in demand from development to meet housing needs and population growth. Recycled water is a key part of this strategy that helps the region by augmenting available water supplies, increasing resiliency, and controlling nitrogen. We have recognized the importance of recycled water projects and have incorporated them in the CVIRWM Plan and the Sustainable Groundwater Management Act (SGMA) Alternative Plan Updates for the Indio Subbasin and Mission Creek Subbasin.

The Tentative Order would require CVWD to add unnecessary additional treatment for nitrogen, which is estimated to cost \$155.2 million dollars in capital improvements and an increase in operation and maintenance (O&M) of \$2.8 million dollars per year. We believe that this Tentative Order will have the unintended consequence of shifting resources away from the continued development of recycled water and disincentivize the development of new recycled water projects, hindering progress in sustainable water resource management while providing no tangible water quality benefits for the Region.

# Response

See Regional Water Board staff responses to "Issue 1" in the Discharger's main comment letter (page 8). The Discharger has not provided any support for its cost estimates, and as long as the Discharger proceeds according to its stated intentions, it will not be required to undertake nitrogen treatment in order to comply with the prescribed effluent limitations for secondary treated wastewater discharges to the percolation ponds.

# RWMG-2

# Comment

Coachella Valley has a wide range of disadvantaged communities (DACs) from different demographics, including migrant and seasonal farm workers, low-income families, and others. These DACs experience several water resources issues including, but not limited to, water supply reliability and water quality, sanitation needs, flooding concerns, and maintaining the affordability of water. As mentioned, this additional treatment would cost \$155.2 million dollars and increase O&M of \$2.8 million dollars per year. This would contribute to significant sanitation rate increases. These sanitation rate increases would affect all CVWD customers; however, rate increases would disproportionately burden DACs, exacerbating financial strain and making it more difficult to afford essential services.

#### Response

See Regional Water Board staff responses to "Issue 1" in the Discharger's main comment letter (page 8). The Discharger has not provided any support for its cost estimates, and as long as the Discharger proceeds according to its stated intentions, it will not be required to undertake nitrogen treatment in order to comply with the prescribed effluent limitations for secondary treated wastewater discharges to the percolation ponds.

#### RWMG-3

#### Comment

This Tentative Order establishes a precedent with profound implications for the region, specifically impacting the feasibility of developing recycled water projects for all wastewater agencies. Based on the current draft language of the Tentative Order, additional treatment will be required even when recycling 100% of the water. This additional treatment will be costly, placing it beyond the financial means of wastewater agencies in the region. As mentioned, Coachella Valley has been utilizing recycled water to sustainably maintain the groundwater basin, reducing demand on the aquifer. These high costs will deter wastewater agencies from pursuing recycled water projects, and thus, jeopardizing the region's sustainability goals.

#### Response

See Regional Water Board staff responses to "Issue 1" in the Discharger's main comment letter (page 8). The Discharger has not provided any support for its cost estimates, and as long as the Discharger proceeds according to its stated intentions, it

will not be required to undertake nitrogen treatment in order to comply with the prescribed effluent limitations for wastewater discharges to the percolation ponds.

# RWMG-4

# Comment

We encourage the Colorado River Regional Water Board to look at the models provided by other Regions to encourage the development of recycled water while protecting beneficial uses of groundwater. For example, the Santa Ana River Water Board incorporated results from a regional study on nitrogen removal, including in discharges to percolations ponds, into its Basin Plan. Based on results from the regional study, a minimum nitrogen reduction factor of 25% is applied to wastewater discharges when developing nitrogen limits (see Santa Ana River Basin Plan, Section 3 Nitrogen Coefficients). Additionally, the Santa Ana River Water Board has approved studies by dischargers to define site-specific nitrogen loss coefficients for nitrogen instead of the default value of 25%. Santa Ana River Water Board Order No. R8-2008-0008 incorporates such a study that demonstrated consistent nitrogen removal rates in Eastern Municipal Water District discharge and allowed a higher nitrogen loss coefficient of 60%. We believe a similar approach would be more beneficial to Coachella Valley compared to the approach in the Tentative Order, as it would give wastewater and recycled water agencies more flexibility to develop cost-effective recycled water programs without the significant costs of unnecessary treatment to remove nitrogen.

# Response

See Regional Water Board staff response to DWA-2 (page 79). Such an approach would be inappropriate in this case.

# **COMMENTS FROM UNITED STATES GOLF ASSOCIATION (USGA)**

# Comments

The United States Golf Association (USGA), through our regional partners that include the Southern California Golf Association, has heard about the Water Board's Tentative Waste Discharge Requirements Order. We believe this regulatory change is unnecessary and will detrimentally impact the use and accessibility of recycled water in the Coachella Valley golf course industry. We wanted to take a brief moment to share our thoughts and information that is pertinent to this important discussion in your community.

The USGA, as golf's governing body, is committed to sustainable golf. Over the last century, we have been the single largest investor to propel environmental turfgrass research through the Mike Davis Program for Advancing Golf Course Management. We also employ or work with experts in this field. As part of this work, we have dedicated millions of dollars to scientifically demonstrate the benefits of golf courses acting as bio-filters and capturing nutrients through peer-reviewed, third-party published research. This research shows the multiple benefits of using recycled water for golf course irrigation. First, the impact on potable water consumption is reduced. Second, the nutrient-rich recycled water helps golf courses reduce the requirement for synthetic fertilizer input. When a golf course follows best management irrigation practices, it has been scientifically demonstrated that there is no discernable nutrient leaching from the turfgrass system.

Regulation in this area could have a direct effect on how golf courses in your region could utilize available recycled water, and the resulting affordability of such resources to golf course owners – many of which are affordable, public places for outdoor recreation.

The recycled water produced by WRP-10, as we understand from our local partners, is primarily used for golf course irrigation and other large landscape customers. Studies provide credible support that properly managed turfgrass functions as an excellent bio-filter. A study published by Evanylo et al., in 2010 in the journal "Water" reported the high assimilative capacity of turfgrasses in preventing nitrogen leaching, even when an elevated amount of irrigation was applied. The Tentative Order does not provide scientific support or data to substantiate that adding additional treatment would provide greater benefits than the current plan to expand recycled water use and eliminate discharges of WRP 10 effluent to the percolation ponds.

We have seen that The State has widely recognized recycled water as a critical water supply, and the golf industry, as a whole, has widely embraced its use for irrigation if available. Recycled water is an important component of our water conservation strategy, in which we have committed \$30 million, in the next 15 years, to help the game reduce its use of this valuable resource. Any new regulation that may increase the cost of recycled water or dissuade the development of new recycled water projects should be carefully analyzed. The negative impacts of this order could easily outweigh the benefits.

# Response

See Regional Water Board staff responses to "Issue 1" in the Discharger's main comment letter (page 8). The Tentative Order does not prescribe effluent limits for the production, distribution or application of recycled water, including at golf courses. The effluent limits are only applicable to secondary treated wastewater that is discharged to percolation ponds for disposal.

# <u>COMMENTS FROM THE GOLF COURSE SUPERINTENDENTS ASSOCIATION OF</u> <u>AMERICA</u>

# Comments

The facility treats 8.3 million gallons providing recycled water for golf facilities in Indian Wells and Palm Desert. The proposed reduction from the current 15mg/L to 10mg/L by 2034 would be costly to end users and the district, but more importantly for the golf industry, would impact the district's ability to expand the non-potable system in a cost-effective manner.

Golf courses as part of the Coachella Valley Golf Industry Water Task Force, have worked diligently over the past decade to reduce groundwater use as well as reliance on other potable sources. Connections to recycled water have played a major role in these reductions and will continue to do so in the future.

Implementing this nitrogen reduction is costly and unnecessary. A research paper, *"Nitrate Leaching in Overseeded Bermudagrass Fairways,"* authored by Dr. Robert Green (Center for Turf, Irrigation, and Landscape Technology at Cal Poly University, Pomona), found that leaching loss represented 3% or less of the applied Nitrogen. The study was co-funded by the Coachella Valley Water District and Hi-Lo Desert GCSA and used as a reference in the recently drafted Coachella Valley Salt and Nutrient Management Plan.

Additionally, increased nitrogen in recycled water can be beneficial to golf courses by decreasing their fertilizer use (which results in further cost and water savings).

In closing, we request that the California Regional Water Quality Control Board keep the current median nitrogen concentration at 15mg/L.

# Responses

The Tentative Order does not prescribe effluent limitations for recycled water. The prescribed effluent limitations are limited to wastewater that is discharged to percolation ponds for disposal.

# COMMENTS FROM ELLEN LLOYD TROVER

#### Comments

I wear several "hats;" and based on my 76 years of experience in the Coachella Valley, I oppose the Tentative Order as presented. Much of my life has involved water: quality, scarcity, and its role in developing our local economy. This letter expresses my personal belief that the restrictions on nitrogen need additional analysis.

As someone with a lifelong interest in water: My parents were the owners and operators of the construction company that built the Distribution System from the Coachella Branch of the All-American Canal throughout Improvement District One, delivering canal water through laterals to the highest point on each 40 acre parcel, under contracts with the US Bureau of Reclamation. They moved here when I was 5 months old. One of my hats is published Historian and was asked to write a White Paper on the history of water in the valley for CVWD's 100th anniversary.

As an environmentalist: I have been the California State Senate appointee to the Governing Board of the Coachella Valley Mountains Conservancy since January 2007; our Board reviewed the Coachella Valley Salt and Nutrient Management Plan and have granted State Prop 1 funds to aid the project. I believe the provisions in Order regarding nitrogen would be premature, when the assimilative capacity of the groundwater basin has not yet been determined under the SNMP.

As a grower: I grew up on the "family" farm on the northeast comer of Ave. 54 and Monroe Street, begun by my parents in 1950. My mother was a member of a family that has farmed in Virginia since Colonial days; after my father's death and my mother breaking her hip (6 weeks later), I had to take over management of the farm, retiring from my law practice. I'm a member of the County Farm Bureau Board and Corporate Secretary. I am proud of this heritage, and proud that agriculture supported our Nation during its darkest days of two World Wars when importing food was not feasible. Clean water is vital to the farming community and we have been fortunate to have had CVWD by our side since 1918; we have relied upon their expertise in science and engineering to enable our valley to prosper; their ongoing efforts to protect our water supplies, including groundwater, have been continuous. Indeed in the early 2000s, I served on a CVWD citizens' task force for groundwater management as the District recognized the growing need to protect our aquifer from overdraft, exacerbated by golf courses using well water, and un-recycled water being lost to the Salton Sea.

As a resident concerned about our economy. For my entire life, the local economy has been based on three sectors: tourism, agriculture, and retirement living. Before we had our music festivals, when I told someone I was from the Coachella Valley, they usually knew where it was because they 1) knew movie stars lived/visited here (including Elvis),

2) ate grapefruit, grapes and dates, 3) knew about our golf courses (ABC's Wide World of Sports, etc.). Our exotic landscaping and acres of turf should be watered by recycled water and studies have shown that it produces lush growth while simultaneously removing nitrogen from the water.

As a resident of the eastern valley: At the "grand" age of 4, I started school in the City of Coachella. There is a lot of political talk about disadvantaged communities; these are my neighbors and friends. Life is hard in many, many ways, adding unnecessary expense to recycled water and sanitation charges is a mistake, whether it is to the bill of the widow(er) in Palm Springs, or the farm laborer in Mecca.

I am obviously fortunate to have an advanced education, and my husband is a retired physicist. But, I know that real life experience and direct knowledge is more valuable than theory. That's another reason I believe the discharge requirements are premature when the stakeholders in the valley are working on the SNMP.

A personal note: Gordon Cologne was one of my sponsors to the California State Bar.

#### Responses

The commentor's concerns with and opposition to the Tentative Order are noted. Refer to the Regional Water Board staff responses to "Issue 1" and "Issue 2" from the Discharger's main cover letter.

#### **COMMENTS IN FORM LETTERS**

The Regional Water Board received substantively identical letters from the following municipalities and organizations:

- (1) Dessert Valleys Builders Association
- (2) Coachella Valley Engineers
- (3) Coachella Valley Economic Partnership
- (4) The City of La Quinta
- (5) Riverside County Farm Bureau
- (6) City of Rancho Mirage
- (7) Coachella Valley Community Association Institute

# (8) Coachella Valley Irrigated lands Coalition

These comment letters will be addressed collectively.

# FORM LETTER-1

#### Comment

Lack of Scientific Evidence: The recycled water produced by WRP-10 is primarily used for golf course irrigation and other large landscape customers. Studies and State policy provide credible support that properly managed turfgrass functions as an excellent biofilter, and when applied properly, benefits turfgrass irrigators by decreasing the need to fertilize. The Tentative Order does not provide scientific support or data to substantiate that additional treatment would provide greater benefits than the current plan to expand the use of recycled water and eliminate discharges of WRP 10 effluent to the percolation ponds.

#### Response

See Regional Water Board staff response to "Issue 1" in the Discharger's main comment letter (page 7). The Tentative Order does not prescribe effluent limits for recycled water.

# FORM LETTER-2

#### Comment

Conflict with Other Regional Water Board Policies: CVWD and other water and wastewater agencies of the Coachella Valley are developing a Salt and Nutrient Management Plan (SNMP) for the valley in collaboration with other salt and nutrient contributors and interested parties.

The Regional Water Board is a key stakeholder in the process and approved a workplan to guide the progress. A key parameter in evaluating Basin Plan compliance is assimilative capacity. One of the goals of preparing the SNMP is to quantify and compare the total assimilative capacity for the Coachella Valley groundwater basin. This process will estimate the total load of nutrients into the basin, including those from the WRP 10 facility, under current and future operations, to assess whether the available assimilative capacity is sufficient to absorb the existing loads of nutrients in the basin, such that groundwater quality can be met into the future.

The limits within and timing of the Tentative Order do not allow for the SNMP to complete this process to establish a basin-wide and cost-effective approach for managing nutrients.

# Response

See Regional Water Board staff responses to "Issue 2" in the Discharger's main comment letter (page 11). The CV-SNMP is not a Regional Water Board "policy." The downgradient groundwater already exceeds the established WQO for nitrate + nitrite as Nitrogen. The CV-SNMP process also has no bearing on the need for total nitrogen effluent limits in this case, as downgradient groundwater is already beyond its assimilative capacity for nitrate and in a condition of pollution. As for TDS, a conservative approach is warranted until the CV-SNMP process is completed.

# FORM LETTER-3

#### Comment

Needlessly Increases Sanitation Rates: The estimated cost of the added treatment to reduce nitrogen to 10 mg/L at WRP 10 is \$155.2 million in capital improvements and an increase in O&M of \$2.8 million per year. Mandating the additional treatment to remove nitrogen will impact wastewater affordability, increasing rates by 62% to 148%, depending on how the infrastructure is financed. There are disadvantaged communities throughout the Coachella Valley, including many low-income and elderly customers living on fixed incomes, who will be negatively and disproportionally impacted.

#### Response

See Regional Water Board staff responses to "Issue 1" in the Discharger's main comment letter (page 8). The Discharger has not provided any support for its cost estimates, and as long as the Discharger proceeds according to its stated intentions, it will not be required to undertake nitrogen treatment in order to comply with the prescribed effluent limitations for wastewater discharges to the percolation ponds.

# FORM LETTER-4

# Comment

Undermines Water Sustainability of the Coachella Valley: In various planning documents, the State recognizes recycled water as a critical water supply. Recycled water is a local supply that improves long-term water resilience. CVWD has invested heavily in its recycled water program as an alternative water supply for golf courses and large landscape customers that would otherwise pump high-quality groundwater directly

from the aquifer. Recycled water is an important component of our water conservation strategy. Any regulation that may increase the cost of recycled water or dissuade the development of new recycled water projects should be carefully analyzed. The negative impacts of this order could easily outweigh the benefits.

# Response

See Regional Water Board staff responses to "Issue 1" in the Discharger's main comment letter (page 8). As long as the Discharger proceeds according to its stated intentions, it will not be required to undertake nitrogen treatment in order to comply with the prescribed effluent limitations for wastewater discharges to the percolation ponds.