

### COMMENTS RECEIVED

#	Commenter	Date Received
1	Chino Basin Watermaster (CBWM)	April 19, 2017
2		
3		
4		

### RESPONSE TO COMMENTS

ID #	COMMENT	RESPONSE
CBWM-1	"The SED for the proposed BPA shows that raising the water quality objective will not have an adverse impact, and claims that it will lead to benefits in the region by accommodating and encouraging the continued discharge of "large quantities" of treated wastewater discharges to reaches of the Santa Ana River that recharge the Chino South GMZ. The BPA provides no minimum flows requirement for said "large quantities" of discharges to continue."	Estimates prepared to support development of the Wasteload Allocation Model (WEI, 2015) indicate that Rialto, RIX and Riverside are expected to discharge 58 - 74 mgd (collectively) of treated municipal wastewater to the Santa Ana River where it may recharge the Chino South GMZ. Staff does not believe that it is necessary to specify minimum flow requirements on POTWs as part of this proposed Basin Plan amendment. Such restrictions, like all discharge limits, are more appropriately considered during the NPDES permit reauthorization process.
CBWM-2	"Based on recycling that is planned to occur in the upper watershed, the SED should quantify how the planned reduction in POTW discharges and the proposed increase in nitrate objectives will affect water quality in the GMZ and then estimate the economic benefits associated with the increase in nitrate objective."	The updated Wasteload Allocation (WEI, 2015) developed by the Basin Monitoring Program Task Force evaluated a wide range of wastewater discharge/recycling scenarios. Variations in nitrate and TDS concentrations from streambed recharge overlying the Chino South GMZ were also estimated as part of this assessment. Because the proposed Basin Plan amendment recommends that existing effluent limits remain unchanged, staff believes that

		the estimated effects on water quality in the streambed recharge will also remain within the previously projected and modeled range.
CBWM-3	"Watermaster's initial impression found the analysis to be positive for the discharges as to raising the objective, however, it lacks a comparable analysis of the allocation of benefits and costs. It would be desirable to have such analysis to know whether or not the CDA and any other potentially impacted parties should be compensated by those who benefit from the increase in nitrate objectives."	The SED provides a first-order estimate of both costs and benefits to all affected parties. The question of whether the "allocation" of benefits and costs" is reasonable is a policy issue for the Regional Board to decide. The current and proposed nitrate objectives for the Chino South GMZ (4.2 mg/L and 5.0 mg/L, respectively) are both more stringent than CDA's specification for final product water quality (5.5 mg/L nitrate-nitrogen or 25 mg/L nitrate as nitrate). In a letter to Mark Norton (SAWPA), dated 2/5/2016, the Chino Desalter Authority (CDA) stated that raising the objective from 4.2 to 5.0 mg/L is not expected to have a significant adverse impact on their treatment operations provided that the nitrogen losses assumed in the wasteload allocation actually occur. Staff concurs with CDA's conclusion and is, therefore, not recommending any additional mitigation or "compensation" at this time.
CBWM-4	"The comparison of costs and benefits would also be improved if the claimed water quality benefits to the Chino South GMZ were quantified and incorporated into the calculation of the fair allocation of costs and benefits."	While the Regional Board must take into account "Economic Considerations" when adopting or revising water quality objectives, it is well-established that the Board is not required to engage in formal "Cost-Benefit Analysis" like that being suggested by this comment. Nevertheless, because nitrate makes up a small ( $\approx 1\%$ ) fraction of wastewater salinity, staff believes the any potential increase in nitrate is more than offset by restricting the total concentration of salt that can be discharged by the POTWs. The effluent limits for TDS at Rialto,

		<p>RIX and Riverside are 490, 550 and 650 mg/L, respectively. The volume-weighted average TDS concentration for the three combined discharges is about 593 mg/L - approximately 87 mg/L (13%) below the 680 mg/L TDS objective established for the Chino South GMZ. Thus, the net effect of maintaining the Regional Board's current POTW permitting policies is to reduce the overall treatment burden on CDA's operations by improving ambient water quality for both nitrate and TDS in the Chino South GMZ.</p>
CBWM-5	<p>"A fourth option, No-Project Alternatives could be considered that would conduct a scientifically defensible investigation to review the basis of the existing 50-percent nitrogen loss coefficient and update it if warranted. The existing nitrogen loss coefficient was based on an assessment of existing limited data and best professional judgment. The proposed increase in the nitrate objective in the Chino South GMZ depends in part on the validity of the existing nitrogen loss coefficient. It seems prudent, given the limited data available to estimate the existing nitrogen loss coefficient and accumulation of new data since the assessment, for the Regional Board to conduct new field work if required, and update the nitrogen loss coefficient."</p>	<p>The Basin Monitoring Program Task Force carefully considered this alternative. However, there was no evidence indicating that the previous studies used to derive the current nitrogen loss coefficient were deficient in any way or that a new study would produce significantly different results. Data from the 2012 and 2015 Ambient Water Quality Update reports indicate that average nitrate concentrations in the area of Chino South GMZ most proximate to Reach 3 of the Santa Ana River range from about 4 to 5 mg/L. Since wastewater discharges to this stream segment average about 9 to 10 mg/L, staff believes this data confirms that the prior studies produced an accurate estimate of the site-specific nitrogen loss coefficient that remains valid today.</p>
CBWM-6	<p>"Finally, the Basin Monitoring Program Task Force is currently updating the Wasteload Allocation, which is scheduled to be completed early next year. It may be prudent to assess the need to increase the nitrate objective after the update is completed later this year."</p>	<p>The Basin Monitoring Program Task Force recommended against this alternative because recent experience shows that reviewing and approving an updated Wasteload Allocation can take much longer than expected - sometimes several years. The NPDES permits for Rialto, RIX and Riverside will expire in 2018. The proposed</p>

		Basin Plan amendment provides the regulatory certainty required to ensure that the permit reauthorization process can proceed without significant delay even if the new Wasteload Allocation (presently under development) has not yet been adopted. Board staff agree with this approach.
CBWM-7	"We are interested in understanding what the outcome will be if the updated volume-weighted nitrate concentration in the Santa Ana River recharge in the Chino South GMZ for the most critical 10-year period is greater than 5.0 mg/L. For instance, will the Regional Board need to do a new basin plan amendment within a year to increase the Chino South GMZ objective again?"	Staff is unwilling to speculate on what the Regional Board might decide to do in response to the hypothetical question posed by this comment. If such a scenario were to occur, the Regional Board would have a wide range of options available for its consideration. However, the Regional Board would be required to develop a new Alternatives Analysis, prepare a new Economic Analysis, draft a new Substitute Environmental Document (SED), offer a new opportunity for public review and comment, and hold a new hearing before considering any further changes to water quality objectives or modification of the salt management plan specified in the Basin Plan.
CBWM-8	"If the updated volume-weighted nitrate concentration in the SAR recharge in the Chino South GMZ for the most critical 10-year period is less than 4.2 mg/L then the current basin plan amendment would be unnecessary."	There is no way to predict how the average nitrate concentrations from streambed recharge to the Chino South GMZ may change in the new Wasteload Allocation Model. Nor is there any way to predict when the regulatory review and approval process will be completed. Staff believe that the proposed Basin Plan is necessary in order to develop reasonable and appropriate effluent limits, in a timely manner, despite such uncertainty. Staff recommends that the current NPDES effluent limits for Rialto, RIX and Riverside remain unchanged in order to assure continued compliance with the 10

		mg/L TIN objective for Reach 3 of the Santa Ana River and, when combined with the 50% nitrogen loss coefficient, will ensure that nitrate concentrations in wastewater recharging to the Chino South GMZ will not exceed 5 mg/L.
--	--	--