CEQA Scoping Meeting for Proposed Basin Plan **Amendments to Update Salt** and Nutrient Plan for the Santa Ana Region

Cindy Li Regional Water Quality Control Board-Santa Ana Region

CEQA Scoping Meeting

- Scoping Meeting held pursuant to California Public Resources Code Section 21083.9
- Substitute Environmental Documents (SED) will be prepared pursuant to Public Resources Code Section 21080.5

Groundwater Management Zones in the Santa Ana Region



34°0'0'

BPA Project #1: Revision of the nitrate-nitrogen objective for Chino South Groundwater Management Zone

4.22mg/L \rightarrow 5.0 mg/L



Ambient Nitrate-N Concentrations in Chino South GMZ Increasing Over Time



Average TIN Concentrations in Water Recharged to the Chino-South GMZ from Reach-3 of the Santa Ana River (2020 land use conditions)

Metric	Scenario 8d: Max. Recycle	Scenario 8e: Intermediate	Scenario 8f: Max. Discharge
Long-term Average (63 years)	4.03 mg/L	4.10 mg/L	4.14 mg/L
Single Highest 10-year Average	4.25 mg/L	4.31 mg/L	4.34 mg/L
Probability that average recharge quality will exceed 4.2 mg/L in any 10-yr. period	11.1%	30.2%	44.4%
Maximum amount the Basin Plan objective is exceeded	0.05 mg/L 1.1%	0.11 mg/L 2.6%	0.14 mg/L 3.3%

POTW Discharge Locations



Proposed BPA Project #2: Update

Wasteload Allocation

Table 5-5 in the Current Basin Plan						
Publicly Owned Treatment	Alternative 2010A – Reclamation in 1995 Basin Plan			Alternative 2010B – Reclamation Plans Advocated by POTWs/others		
Works (POTW)	Surface Water Discharge (MGD)	TDS (mg/L)	TIN (mg/L)	Surface Water Discharge (MGD)	TDS (mg/L)	TIN (mg/L)
Beaumont – "max benefit" ²	2.3	490	6.0	1.0	490	6.0
Beaumont – "antideg" ^{2, 3}	2.3	320 ³	4.1 ³	1.0	320 ³	4.1 ³
YVWD – Wochholz – "max benefit"	5.7	540	6.0	0.0	540	6.0
YVWD – Wochholz – "antideg" ³	5.7	320 ³	4.1 ³	0.0	320 ³	4.1 ³
Rialto	12.0	490	10.0	10.0	490	10.0
RIX	49.4	550	10.0	28.2	550	10.0
Riverside Regional WQCP	35.0	650	13.0	26.1	650	13.0
Western Riverside Co. WWTP	4.4	625	10.0	3.3	625	10.0
EMW D ⁴	43	650	10.0	6.0	650	10.0
E∨MWD – Lake Elsinore Regional	7.2	700	13.0	2.0	700	13.0
Lee Lake WRF	1.6	650	13.0	1.6	650	13.0
Corona WWTP # 1	3.6	700	10.0	2.0	700	10.0
Corona WWTP # 2	0.2	700	10.0	0.5	700	10.0
Corona WWTP # 3	2.0	700	10.0	0.5	700	10.0
IEUA Facilities ⁵	80.0	550	8.0	37.4	550	8.0

Summary of Proposed Updates to WLAs

2020 Waste Load Allocation for TIN & TDS Discharges to Surface Water¹

Permittee	Discharge Outfall	Plant	Plant	Max.	Max.	TIN	TDS
		Capacity	Production	Reuse	Discharge	Limit ²	Limit ³
	-001				1.8 mgd	6 mg/L	400 mg/L
Beaumont WWTP #1	-007	8.0 mgd	4.0 mgd	1.31 mgd	0.7 mgd	6 mg/L	330 mg/L
	-009, -008, -010, -011		2019	101.05	1.25 mgd	6 mg/L	330 mg/L
YVWD		11.0 mgd 3.8	3.8 mgd	0.55 mgd	4.25 mgd	6 mg/L	540 mg/L
				3.2 mgd	1.6 mgd	6 mg/L	580 mg/L^4
Rialto		11.7 mgd	9.0 mgd	1.0 mgd	8.8 mgd	10 mg/L	550 mg/L
RIX		40.0 mgd⁵	34.5 mgd	10.8 mgd	31.8 mgd	10 mg/L	550 mg/L
Riverside		46.0 mgd	33.9 mgd	5.0 mgd	33.9 mgd	10 mg/L	650 mg/L
WMWD	via WRCRWA outfall	5.0 mgd	1.2 mgd	1.2 mgd	0.95 mgd	6 mg/L	550 mg/L
WRCRWA		14.0 mgd	12.0 mgd	6.0 mgd	12.0 mgd	10 mg/L	625 mg/L
IEUA's RP-1	-001	32.0 mgd	28.1 mgd	24.0 mgd	10.8 mgd		
IEUA's Carbon Canyon		14.0 mgd	6.2 mgd	3.0 mgd	5.35 mgd	0 mg/16	$EE0 ma/1^7$
IEUA's RP-5		15.0 mgd	12.4 mgd	8.1 mgd	9.8 mgd	o ilig/L	550 mg/L
IEUA's RP-1 & RP-4	-002 & RP4	16.0 mgd	11.7 mgd	10.3 mgd	6.95 mgd		
Corona-WWTP #1		16.8 mgd	11.6 mgd	10.1 mgd	7.8 mgd	10 mg/L	700 mg/L
Corona-WWTP #3		1.0 mgd	1.0 mgd	1.0 mgd	0.5 mgd	10 mg/L	700 mg/L
Lee Lake		2.3 mgd	1.2 mgd	1.2 mgd	0.7 mgd	13 mg/L	650 mg/L
EVMWD @ Temescal	-001, -004, -005	12.0 mgd	9.3 mgd	8.8 mgd	6.4 mgd	13 mg/L	700 mg/L
EMWD @ Temescal ⁸	-001	74.0 mgd	na	na	52.5 mgd	10 mg/L	650 mg/L

¹ All data was reproduced from Table 3 in Addendum to the 2008 Santa Ana River Wasteload Allocation Model Report: Scenario 8 - Final Memorandum. (WEI; Jan. 5, 2015)

² Effluent limit expressed as a volume-weighted 12-month running average (except for EMWD)

³ Effluent limit expressed as a volume-weighted 12-month running average (except for EMWD)

⁴ Check for possible typographic error in Table 3 of WEI's 2015 Report for Scenario 8

⁵ Permitted discharge is 64 mgd to allow for over-extraction needed to maintain hydraulic containment of the infiltrated effluent.

⁶ IEUA's effluent limits for TIN is expressed as the volume-weighted collective average of all four discharges.

⁷ IEUA's effluent limits for TDS is expressed as the volume-weighted collective average of all four discharges.

⁸ Effluent limits for EMWD are expressed as a monthly average for 1 month/year in any year or as monthly average for 6 months only during the wettest years.

Assimilative Capacity Exists for TDS and Nitrate-N in Riverside A GMZ

Parameter	Nitrate-N	TDS
Water Quality	6.2 mg/L	560 mg/L
Objective		
Current Average	5.4 mg/L	420 mg/L
Quality		
Est. Assimilative	o.8 mg/L	140 mg/L
Capacity		

Some of the assimilative capacity can be allocated to POTW discharges

Streambed Recharge Quality (WQO=560 mg/L; CAQ=420 mg/L; AC=140 mg/L)	WLAM: Recycled Water Planning Scenario		
	8e (Intermediate)	8f (Max. Discharge)	
Highest Estimated Single Year Value	530	530	
Highest Value of All 10-yr. Rolling Averages	457	458	
Average of All 10-yr. Rolling Averages	415	417	
Pct. of All 10-yr. Periods Exceeding 420 mg/L	52%	52%	

Some of the assimilative capacity can be allocated to POTW discharges

Streambed Recharge Quality (WQO=6.2 mg/L; CAQ=5.4 mg/L; AC=0.8 mg/L)	WLAM: Recycled Water Planning Scenario			
	8e (Intermediate)	8f (Max. Discharge)		
Highest Estimated Single Year Value	7.3 mg/L	7.3 mg/L		
Highest Value of All 10-yr. Rolling Averages	6.2 mg/L	6.2 mg/L		
Average of All 10-yr. Rolling Averages	5.5 mg/L	5.5 mg/L		
Pct. of All 10-yr. Periods Exceeding 5.2 mg/L	57%	59%		

Justification for Allocation of Assimilative Capacity

- Model projection (20-yr) shows that WQOs will be met
- Allocation of assimilative capacity is consistent with the state's Antidegradation Policy and the State Water Board's Recycled Water Policy
- Modifying the wastewater treatment plants to meet more stringent effluent limits will increase capital and O&M treatment costs without additional human health benefits or improvements to the environment.

Substitute Environmental Document Will be Prepared

We need your comments on:

- Appropriate scope and content
- Range of actions, alternatives
- Mitigation measures, and
- Significant environmental effects

Environmental Factors Potentially Affected by the Projects

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Geology /Soils
- Greenhouse Gas Emissions
- Hydrology / Water Quality
- Land Use / Planning

- Mineral Resources
- Noise
- Population / Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities / Service Systems
- Mandatory Findings of Significance

BPA Schedule

- CEQA Scoping comments due: December 16, 2016
- Draft SED: January 2017
- Draft BPA amendment package: March 2017
- Anticipated Board hearing/SED certification: May 2017

Please send your comments to:

Cindy Li, PG, PhD Santa Ana Regional Water Quality **Control Board** 3737 Main Street, Ste 500 Riverside, CA 92501 cindy.li@waterboards.ca.gov