

Santa Magarita Water District Wastewater Master Plan

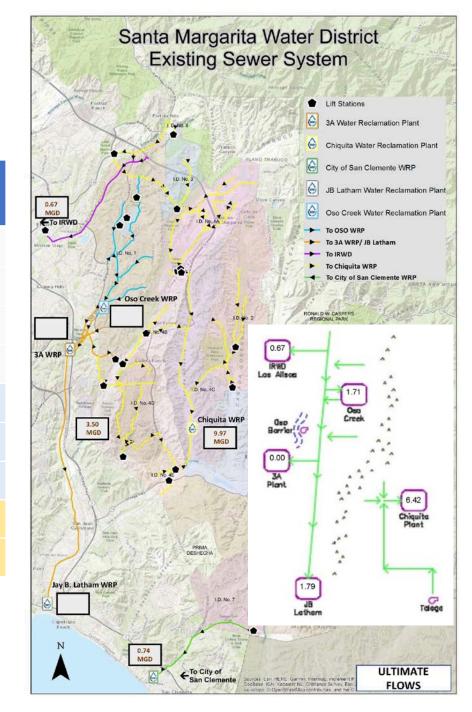
SOCWA Board Mtg February 4, 2021

APPROACH



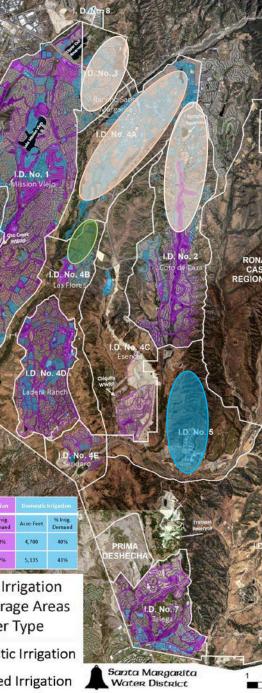
Ultimate Wastewater Flows (by Sewershed)

Facility	Current Flow (MGD)		Future Flow (MGD)		
Oso Creek WRP	1.71				
3A WRP					
J.B. Latham	1.79				
Basin Subtotal		3.50		3.50	
City of San Clemente	0.74		0.74		
Chiquita WRP	5.68		9.97		
Basin Subtotal		6.42		10.71	
Los Alisos WRP	0.67	0.67	0.67	0.67	
	Total Flow	10.59		14.88	



Desired Recycled Water Demands (2019)

	Desired Additional Future Recycled Water Demand (AFY)	Committed Additional Future Recycled Water Demand (AFY)	Current Recycled Water Demand (AFY)	Area	ID
LD. No. Mission V	134	-	2,766	Mission Viejo	1
	210	-	1,040	Coto de Caza	2
Que Creat Viela	150	-	0	RSM-Melinda	3
WURK	1,000	-	0	City of RSM	4A
	-	197	103	Las Flores	4B
	-	279	561	Sendero/Esencia	4C & E
	387	-	1,513	Ladera Ranch	4D
Lader	87	-	1,013	Talega	7
	20	-	0	Hidden Ridge	8
	40	-	250	Lakefill	1
Resyded Irrigation Domest	-	4,645	5	Lapeyre	4E & 5
YEAR Acre Feet % Irrig. Acre Feet Calendar 7,000 60% 4,700	-	-	141	Construction	4C & E
Year 2017 Jobs Jobs Jobs S Year AVG [2013 2017] 6,690 57% 5,135	-	487	213	Other Agency	
Dedicated Irrigat	-	-	100	District Use	
Meter Coverage A by Water Type	2,028	5,608	7,705	Total	
Domestic Irrig		13,313	otal Future Committed Flow	Т	
Recycled Irrig	15,341		Total Future Desired Flow		



100% WW Recycled & Max Sources of Recycled Water (2019)

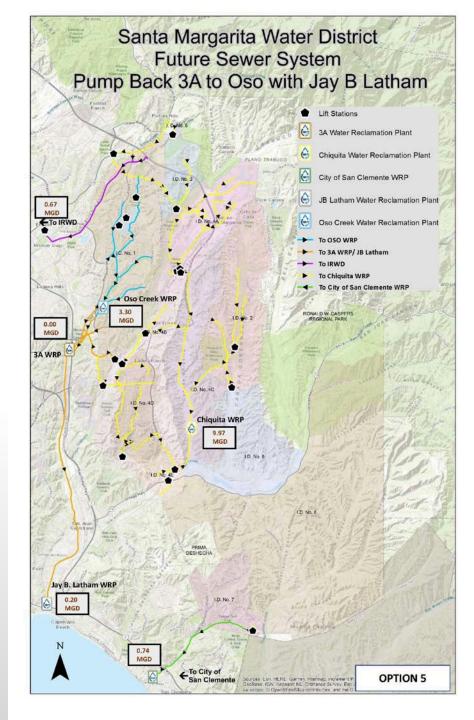
Current Demand ~ 7,705 AFY Committed Demand ~ 13,313 AFY Desired Demand ~ 15,341 AFY

Facility	Total Tertiary Treatment Capacity (MGD) SMVVD Tertiary Treatment Capacity (MGD)	Current SMWD Source Average		Committed Future Tertiary Capacity		100% Wastewater Recycled Tertiary Water		Maximized Recycled Water	
		(MGD)	(MGD) (MGD)	(AFY)	(MGD)	(AFY)	(MGD)	(AFY)	(AFY)
WRP									
Oso Creek WRP	3.00	3.00	1.54	1,728			3.3	3,697	3,697
3A WRP	2.40	0.00	0.00	-					
Latham	0.00	0.00	0.00	0					
					1.54	1,724	3.30	3,697	3,697
Los Alisos WRP	N.A.	N.A.	N.A.	N.A.	0	0	0	0	0
Chiquita WRP	6.00	6.00	3.94	4,409	8.97	10,053	8.97	10,053	10,053
City of San Clemente	4.40	0.00	0.60	676	0.60	676	0.60	676	2,676
							9.58	10,728	12,728
WRP Total	15.80	9.00	6.08	6,813	11.12	12,452	12.88	14,425	16,425
Urban Return									
Arroyo Trabuco	-	-	-	307		307		307	307
Oso Barrier		-	-	841		841		841	841
Gobernadora	-	-	-	199		199		199	199
Horno	-	-	(* 1	155		155		155	155
Tick	-	-	-	119		119		119	119
Urban Return Total	-	-1	-	1,621		1,621		1,621	1,621
RMVMWC ⁽¹⁾		-	-	788		2,500		0	0
		Total Recycled	Water Supply	9,222		16,573		16,046	18,046

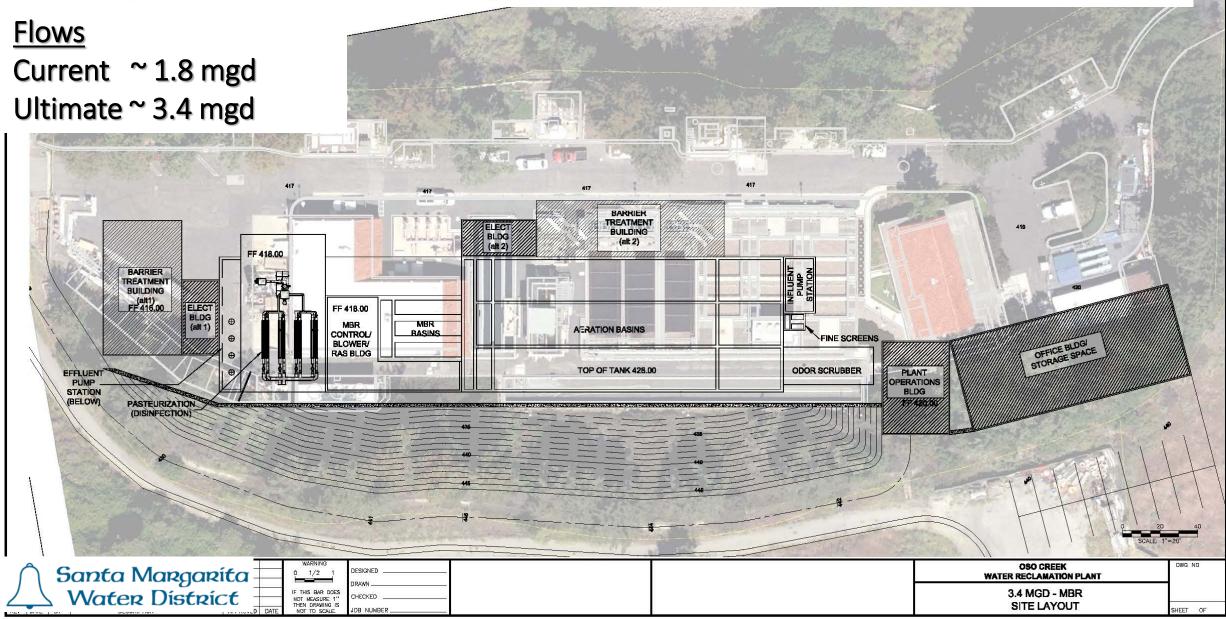
Ultimate Goal – Nominally Recycle 100% of Wastewater Generated

- Effective 100% recycled water production
- Expand Oso Creek WRP

- Produces 15,878 AFY of recycled water
 - Supplies full "Desired" Recycled Water Demands ~ 15,340
- Allows for use of RMVMWC for potable water



Proposed Reconfiguration of Oso Creek WRP



Ultimate Chiquita WRP Plant Layout

<u>Flows</u> Current ~ 5.68 mgd Ultimate ~ 9.97 mgd



City of San Juan Capistrano - Wastewater

- No Impact on Latham Flows
- Future Projects
 - Collection System Rehab/Replacement
 - Manhole Rehab/Replacement
- Anticipate Annexation Complete FY '21/22

