

# **San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse**

October 2018





## **San Gabriel River Watershed Project to Reduce Discharge in Support of Increased Recycled Water Reuse**

- **Presentation Objective:**
  - Overview of the Sanitation Districts
  - Overview of Existing Operations
  - Overview of the Proposed Reuse Project
  - Overview of San Gabriel River 1211 Efforts

# **Overview of the Sanitation Districts of Los Angeles County**



# Sanitation Districts of Los Angeles County

*Collect and treat sewage  
from 5.6 million people*

## GOVERNANCE

24 special districts with one staff

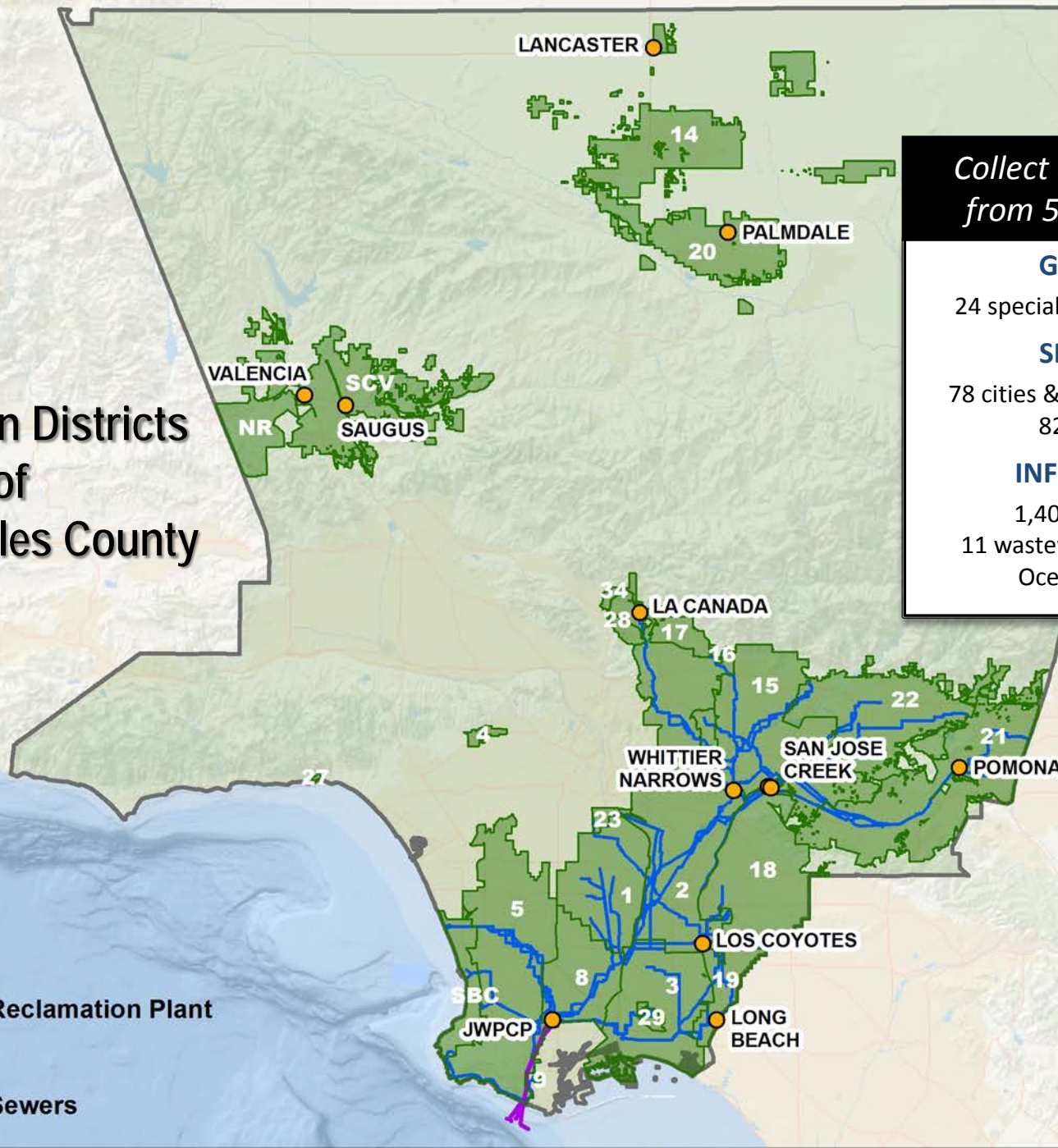
## SERVICE AREA

78 cities & unincorporated county  
824 square miles

## INFRASTRUCTURE

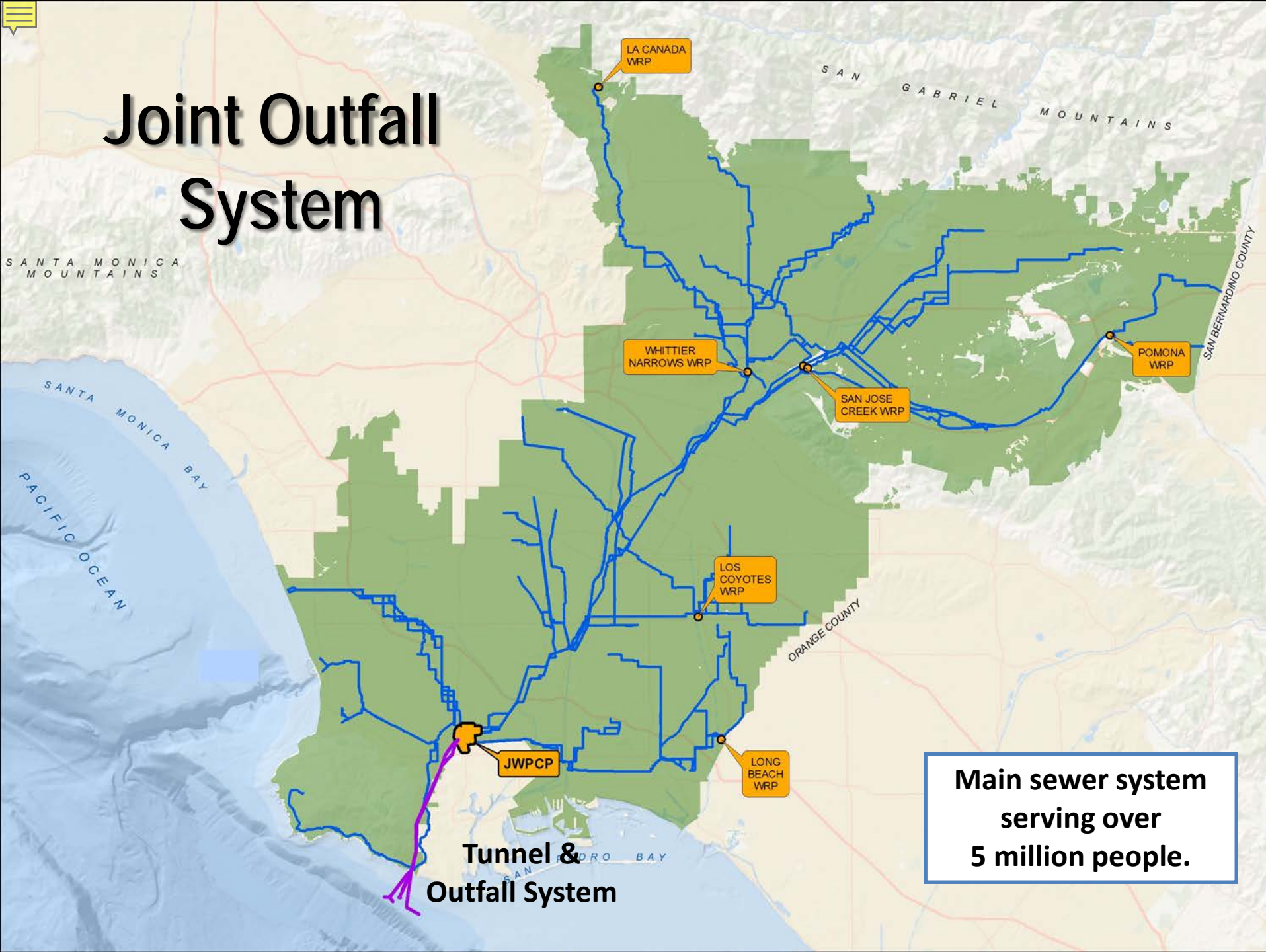
1,400 miles of sewers  
11 wastewater treatment plants  
Ocean outfall system

- Water Reclamation Plant
- Outfall
- Trunk Sewers



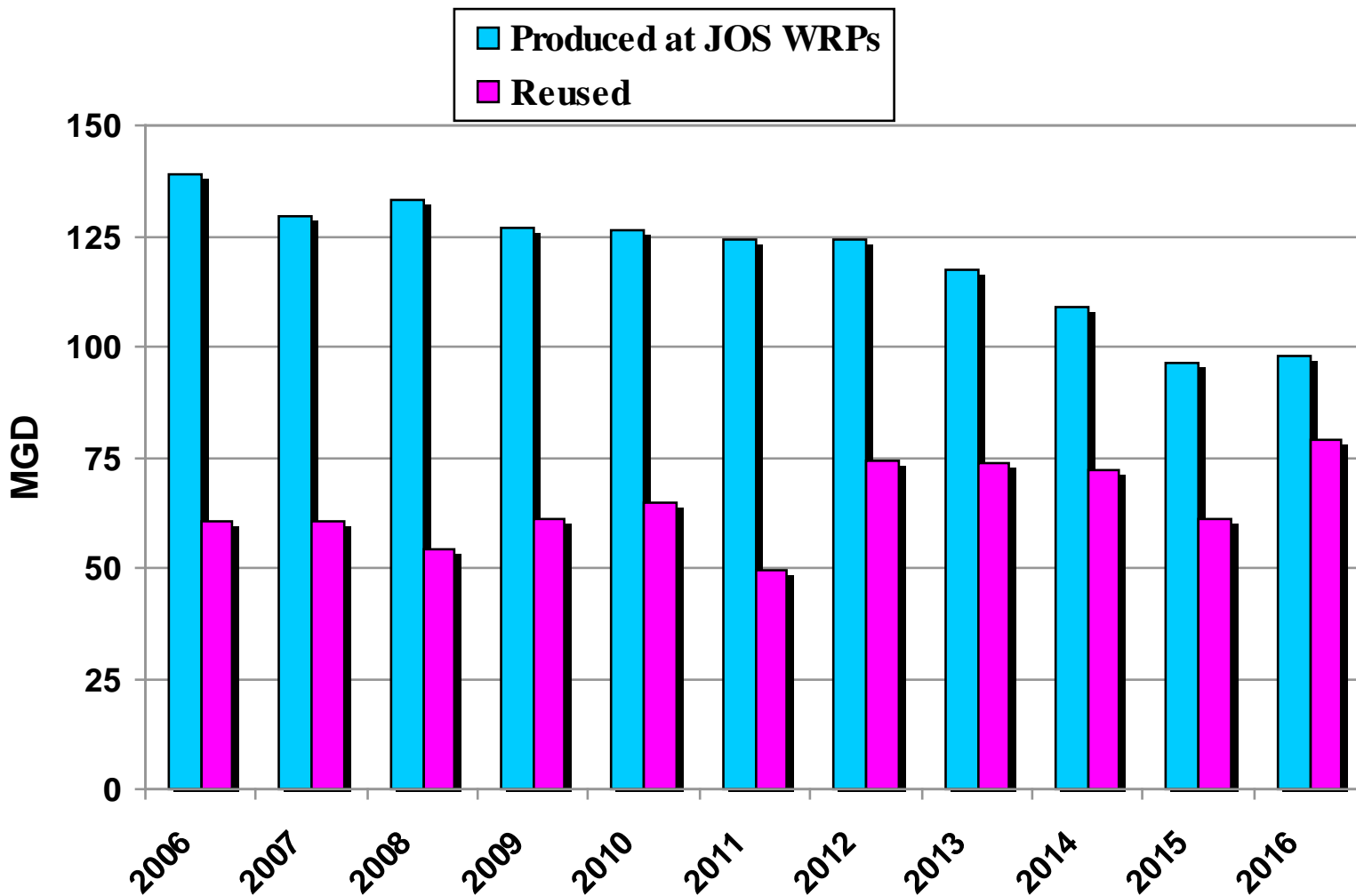


# Joint Outfall System





# Production/Reuse





# Nation's Leader in Water Recycling

*Largest supplier of recycled water over the last 50 years*



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**GALLONS RECYCLED IN 2016**

# Overview of Existing Operations







**Sanitation Districts'  
WRP Discharge  
Locations  
to the San Gabriel  
River Watershed**



# San Gabriel River Watershed Project to Reduce Discharge in Support of Increased Recycled Water Reuse

Water Reclamation Plant	Existing Annual Daily Average Discharge* (mgd)	Proposed Annual Daily Average Discharge* (mgd)
<b>San Jose Creek WRP</b>		
SJC001	19	19
SJC001A	5	5
SJC001B	8	8
<b>SJC002</b>	<b>16</b>	<b>5</b>
SJC003	0	0
<b>Pomona WRP</b>		
<b>POM001</b>	<b>4</b>	<b>0</b>
<b>Whittier Narrows WRP</b>		
<b>WN001</b>	<b>1</b>	<b>1</b>
<b>Los Coyotes WRP</b>		
<b>LC001</b>	<b>18</b>	<b>2</b>
<b>Long Beach WRP</b>		
<b>LB001</b>	<b>11</b>	<b>0</b>
<b>TOTAL</b>	<b>82</b>	<b>40</b>

\*Water Years 2011-2015



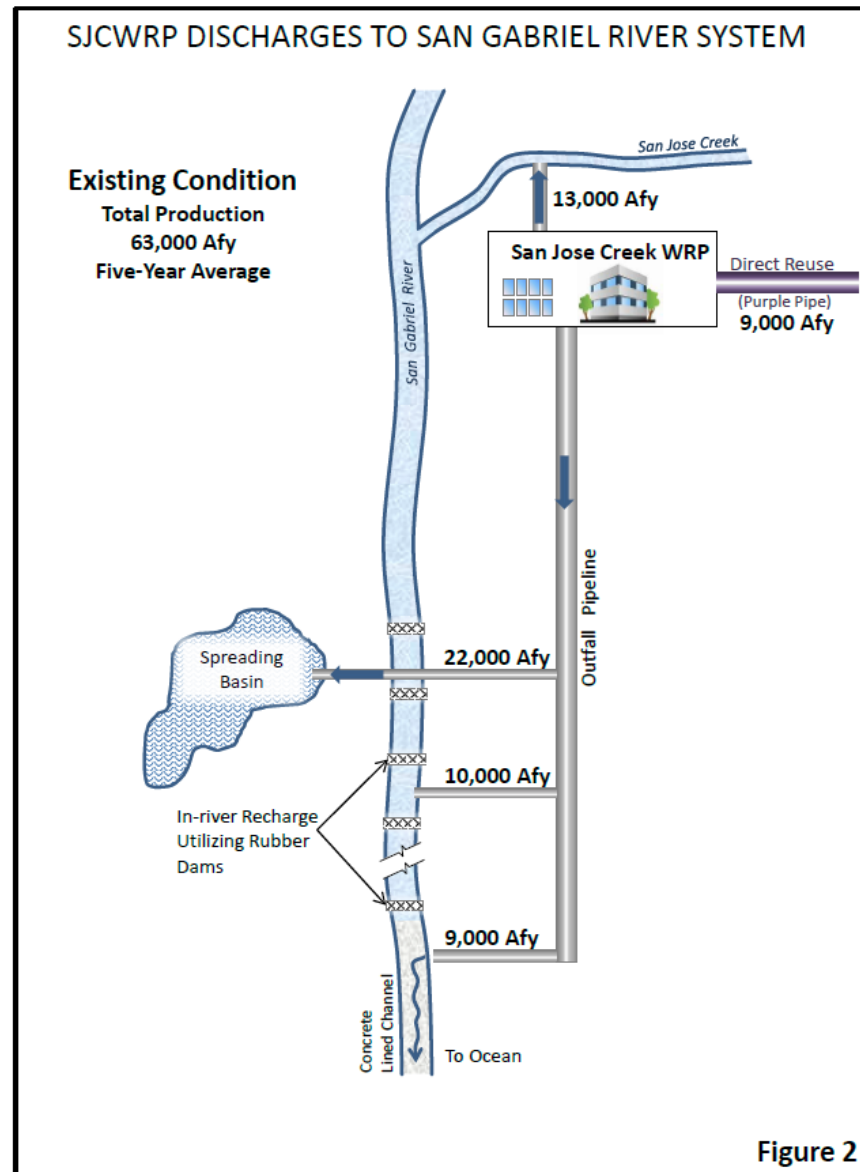
# Groundwater Recharge Operations







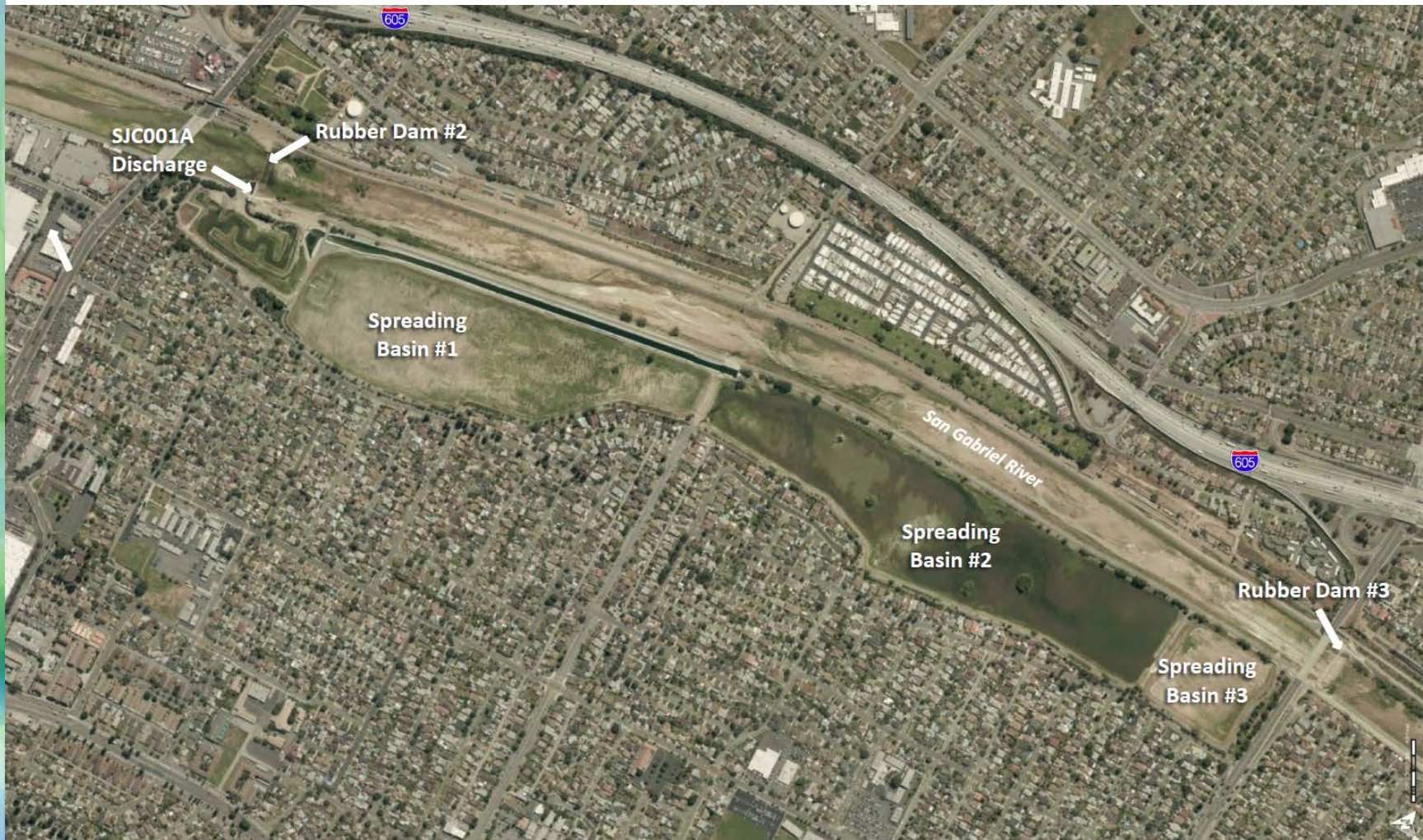
# SJCWRP Existing Discharges







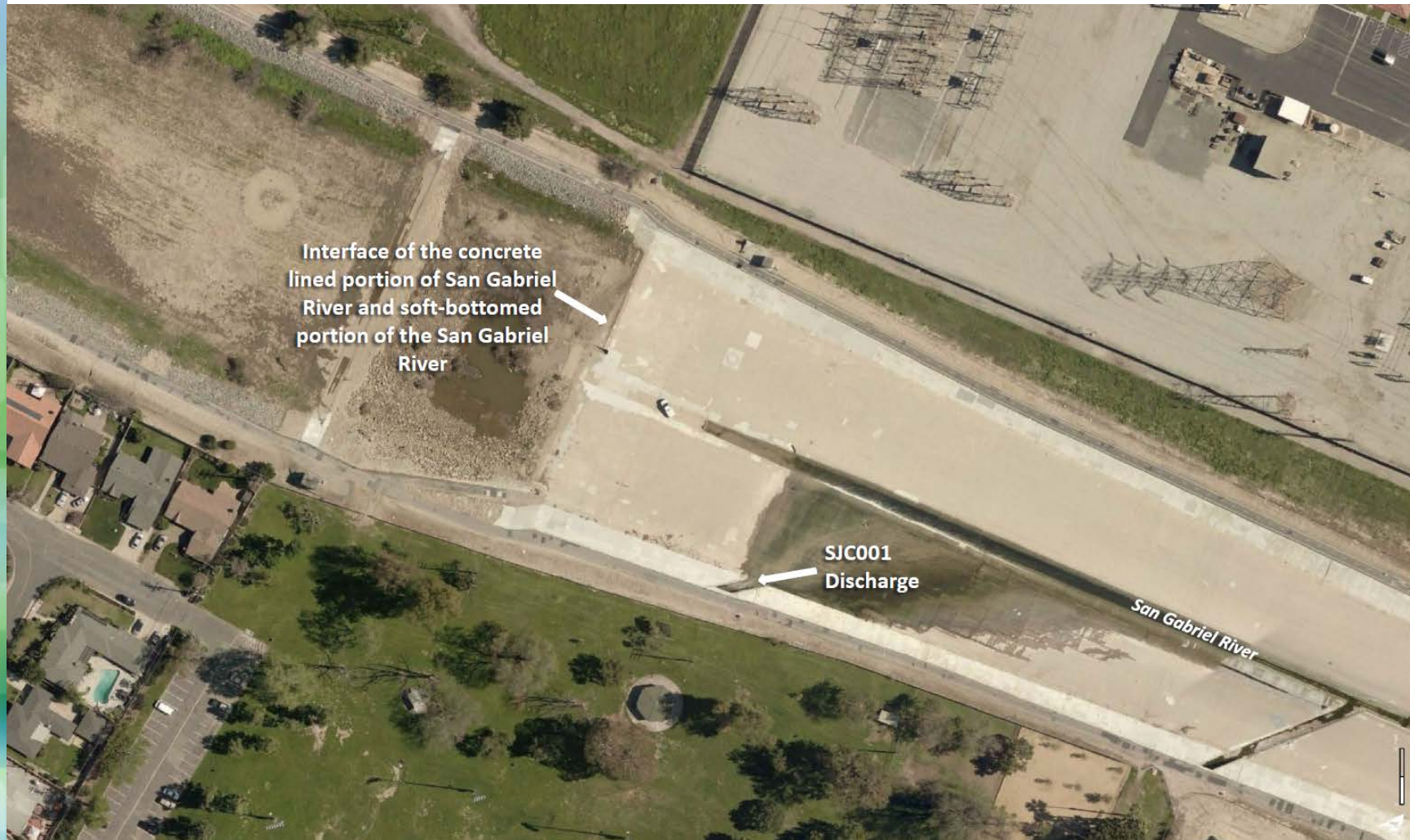
# San Gabriel River Coastal Spreading Grounds







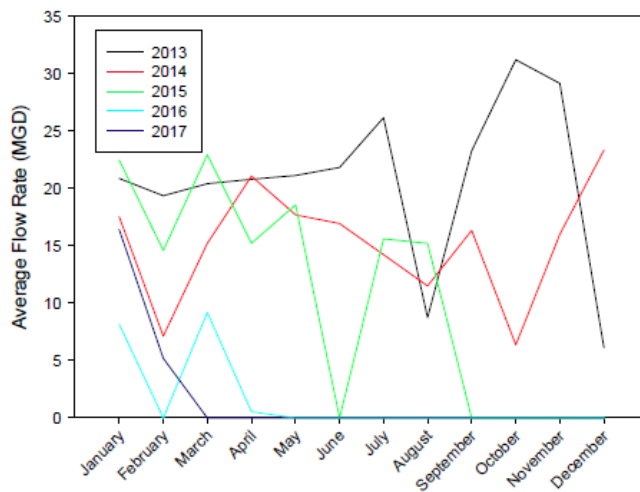
# San Gabriel River Lined Channel



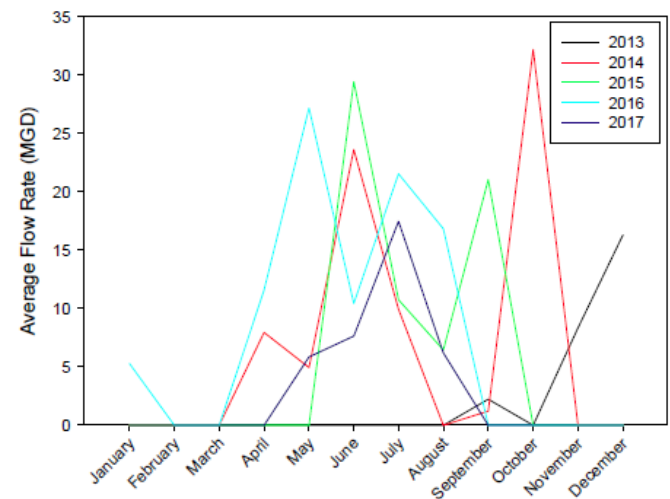


# WRP Average Monthly Discharge Charts

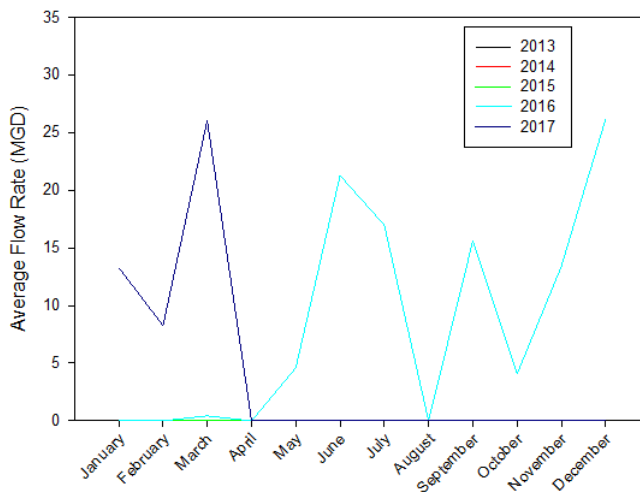
San Jose Creek WRP  
Discharge 001  
Average Monthly Discharge Rate (MGD)  
2013 - 2017



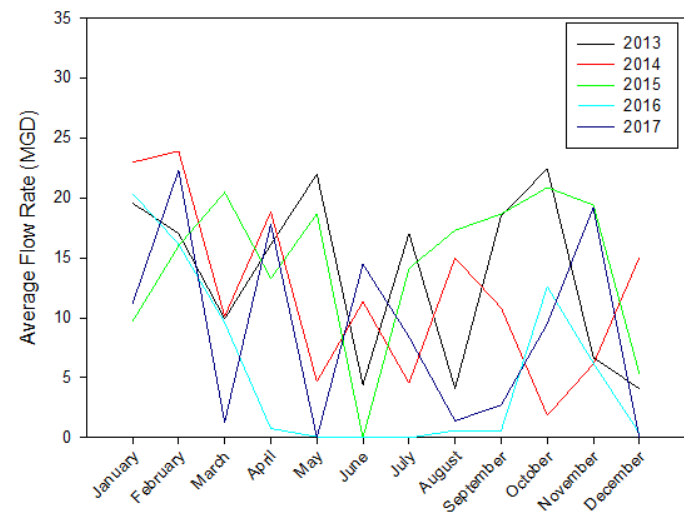
San Jose Creek WRP  
Discharge 001A  
Average Monthly Discharge Rate (MGD)  
2013 - 2017



San Jose Creek WRP  
Discharge 001B  
Average Monthly Discharge Rate (MGD)  
2013 - 2017



San Jose Creek WRP  
Discharge 002  
Average Monthly Discharge Rate (MGD)  
2013 - 2017



# Overview of the Proposed Reuse Project







# Currently Known Recycled Water Requests

WRP Supplying Recycled Water	User	Quantity
San Jose Creek WRP	WRD - ARC	22,000 AFY
	Upper San Gabriel Valley MWD	72 AFY
	La Puente Valley MWD	56 AFY
	Rose Hills Memorial Park	50 AFY
San Jose Creek and Los Coyotes WRPs	Central Basin Municipal Water District	2,000 AFY
Pomona WRP	City of Pomona	3,360 AFY
Long Beach WRP	WRD - Leo Vander Lans Facility	Maximize recycled water use
	City of Long Beach	

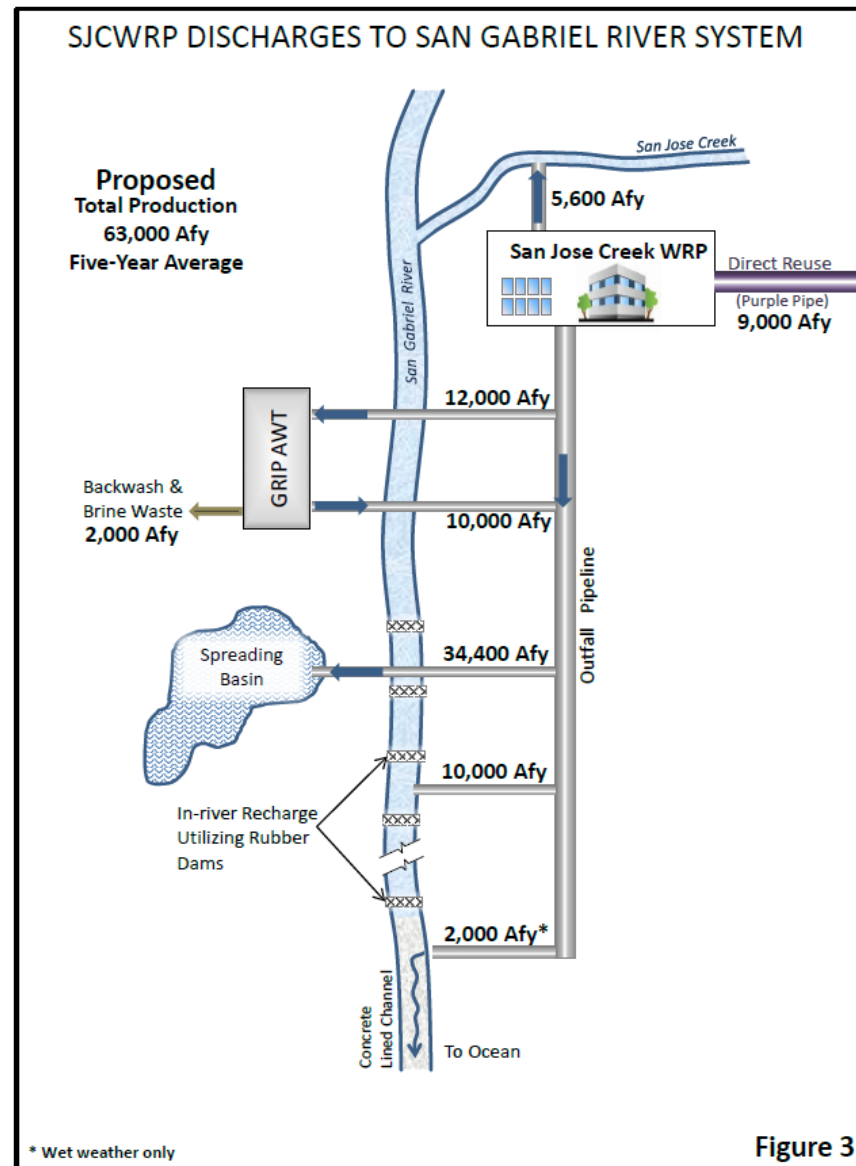


# **Water Replenishment District's Albert Robles Center for Water Recycling & Environmental Learning (ARC)**



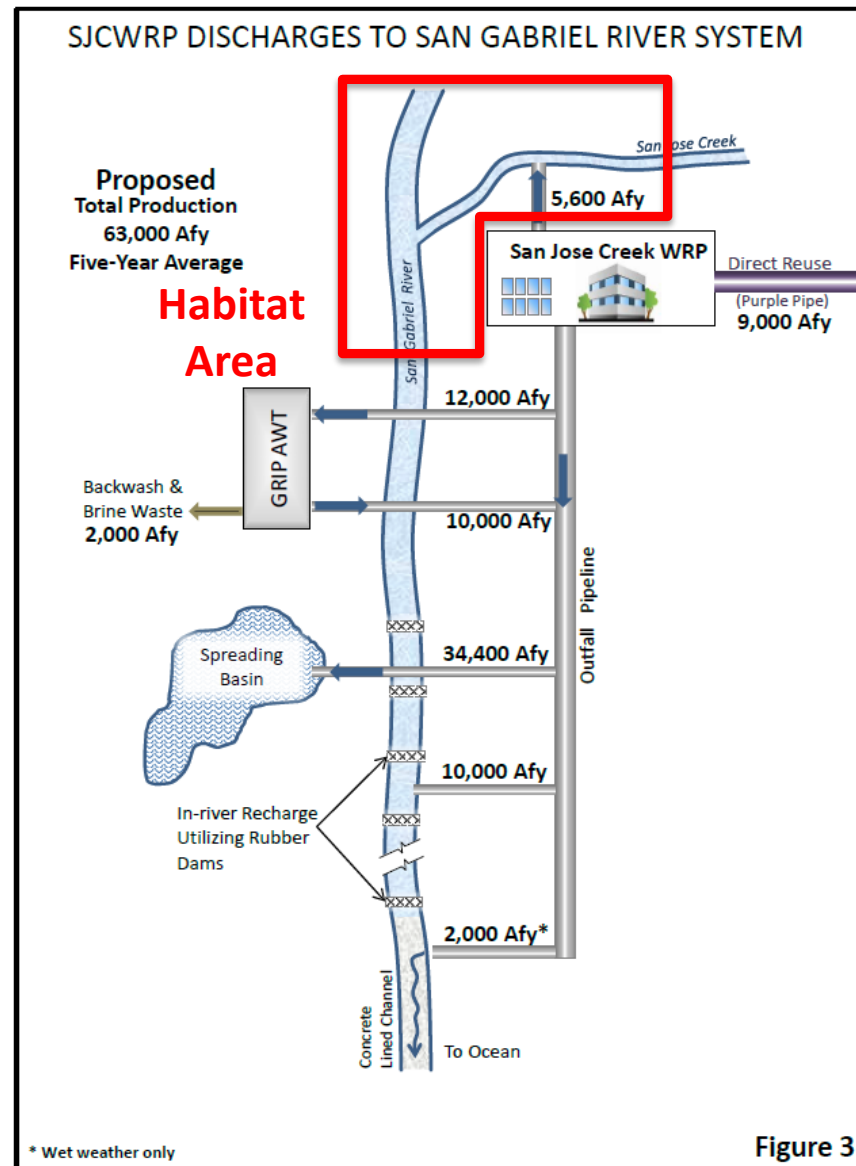


# San Jose Creek WRP Proposed Discharges





# San Jose Creek WRP Proposed Discharges







# Species of Concern – least Bell's Vireo









# Water Demand per Month

	ET (in)	%	gal/mo ET	gpd ET	mgd ET	AF/d ET
Jan	1.75	4%	16,512,944	532,676	0.533	1.635
Feb	1.76	4%	16,607,304	535,719	0.536	1.645
Mar	4.28	9%	40,385,943	1,302,772	1.303	4.000
Apr	5.55	12%	52,369,622	1,689,343	1.689	5.186
May	5.31	11%	50,104,990	1,616,290	1.616	4.962
Jun	5.22	11%	49,255,753	1,588,895	1.589	4.878
Jul	6.4	13%	60,390,195	1,948,071	1.948	5.981
Aug	5.98	12%	56,427,089	1,820,229	1.820	5.588
Sept	4.63	10%	43,688,532	1,409,307	1.409	4.327
Oct	3.26	7%	30,761,256	992,299	0.992	3.046
Nov	2.34	5%	22,080,165	712,263	0.712	2.187
Dec	1.48	3%	13,965,232	450,491	0.450	1.383
<b>Total</b>	<b>47.96</b>	<b>100%</b>	<b>452,549,025</b>	<b>1,216,530</b>	<b>1.217</b>	<b>3.735</b>





# **Adaptive Management Monitoring Strategies**

- Stem Water Potential (SWP) to directly assess water availability to individual plants
- Canopy Volume (CV) to measure plant response to stress
- Soil moisture monitoring
- Vegetation Mapping to compare total areas annually
- Recruitment analysis



# California Water Code Section 1211





# California Water Code

## Section 1211

- (a) Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater, the owner of any wastewater treatment plant shall obtain approval of the board for that change. The board shall review the changes pursuant to the provisions of Chapter 10 (commencing with [Section 1700](#)) of Part 2 of Division 2.



# 1211 Components

- Water Rights



- Habitat Impacts







# Water Rights

Water rights not expected to be an issue for the San Gabriel River watershed because:

- San Gabriel River is fully appropriated.





# Habitat Impacts

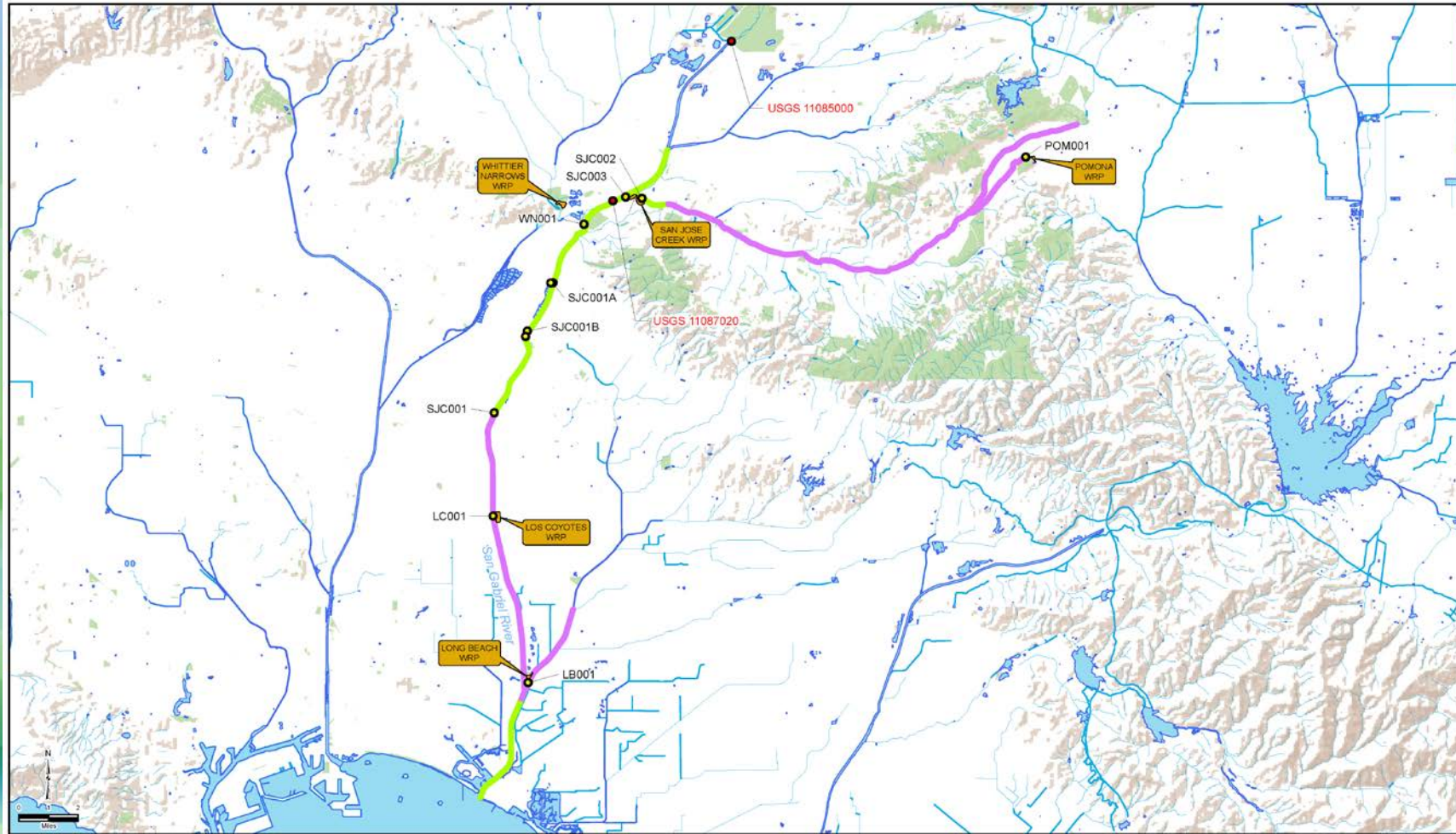


FIGURE 1

LACSD Discharges to San Gabriel River System

January 31, 2018

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# CEQA – IS/MND

- With AMP there will be no loss of LBV habitat
- The Project will have Less Than Significant Impact with Mitigation
  - Hydrological Resources
    - Groundwater is not affected
    - Users of the recycled water manage the groundwater
  - Biological Resources
    - least Bell's Vireo
    - Adaptive Management Plan

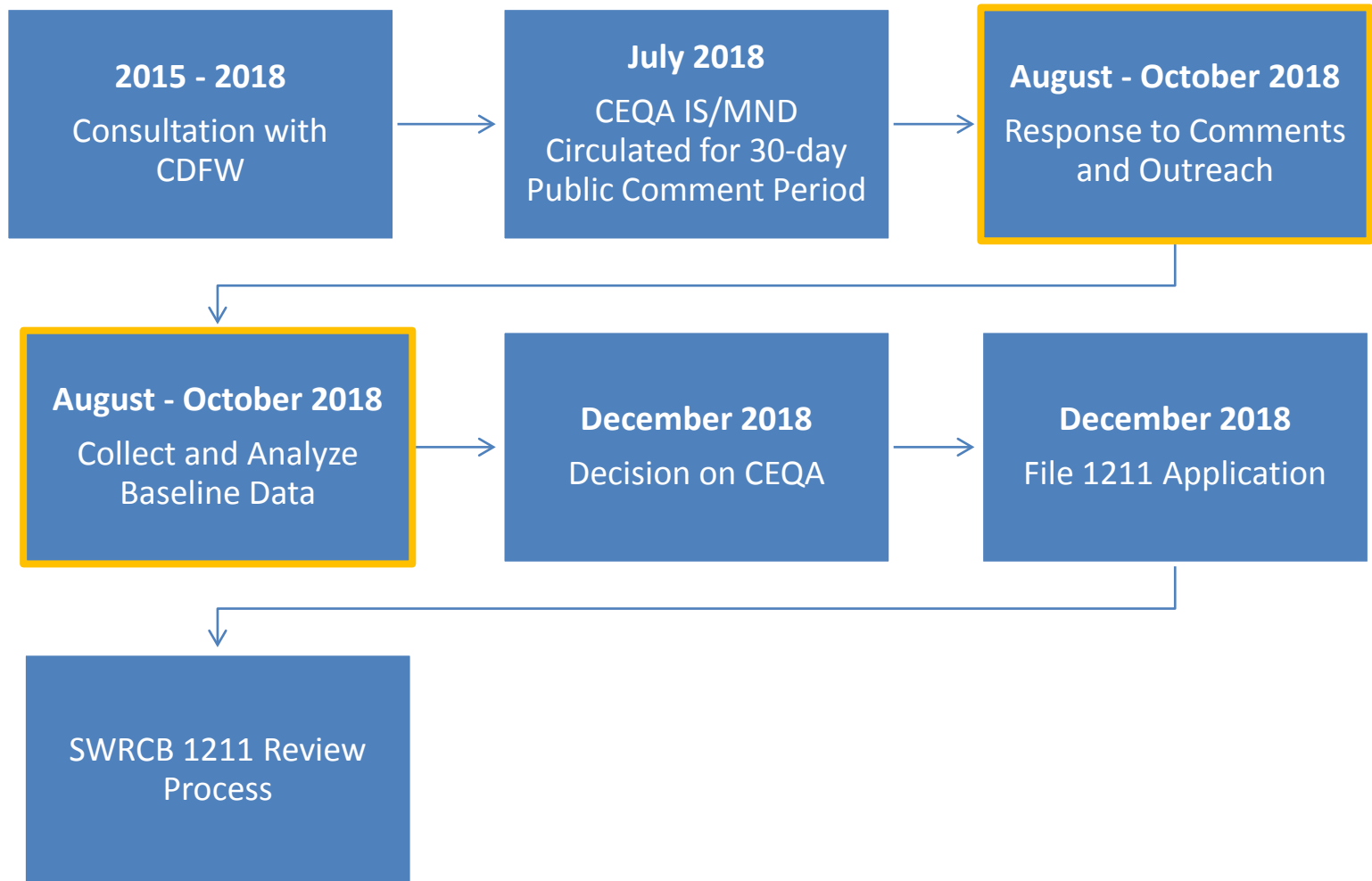


# Next Steps





# San Gabriel River Watershed Project to Reduce Discharge in Support of Increased Recycled Water Reuse



# Thank You!

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