

# Asset Management Plan

Orange County Sanitation District

Eros Yong  
Engineering Manager  
Operations Committee  
December 2, 2020



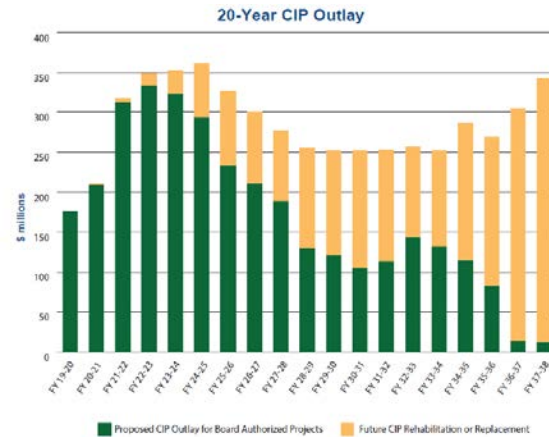
# Comprehensive Asset Management Program



Known Asset Replacement Value

**\$10.7B**  
assets

Comprehensive 20-year CIP



Rate structure supporting the 20-year CIP



Comprehensive condition assessment program



Tactical Asset Management

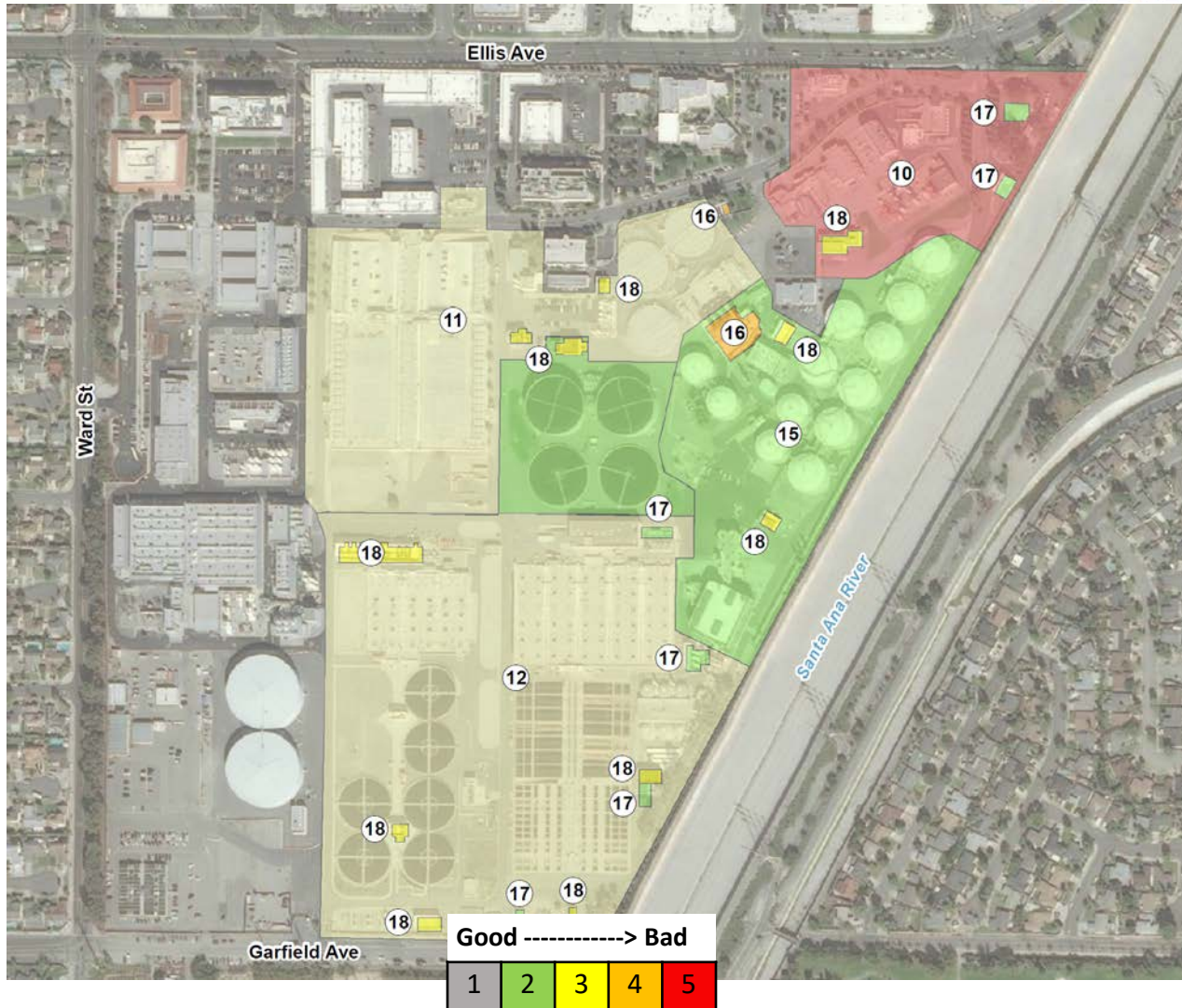


Proactive Maintenance





# What Did We Learn? Plant No. 1



# What Did We Learn? Plant No. 1



11 – Primary	
Civil	3
Structural	4
Mechanical	4
Electrical	3
Instrumentation	4

12 – Secondary (Trickling Filters)	
Civil	1
Structural	1
Mechanical	3
Electrical	4
Instrumentation	3

18 – Elec. Dist.	
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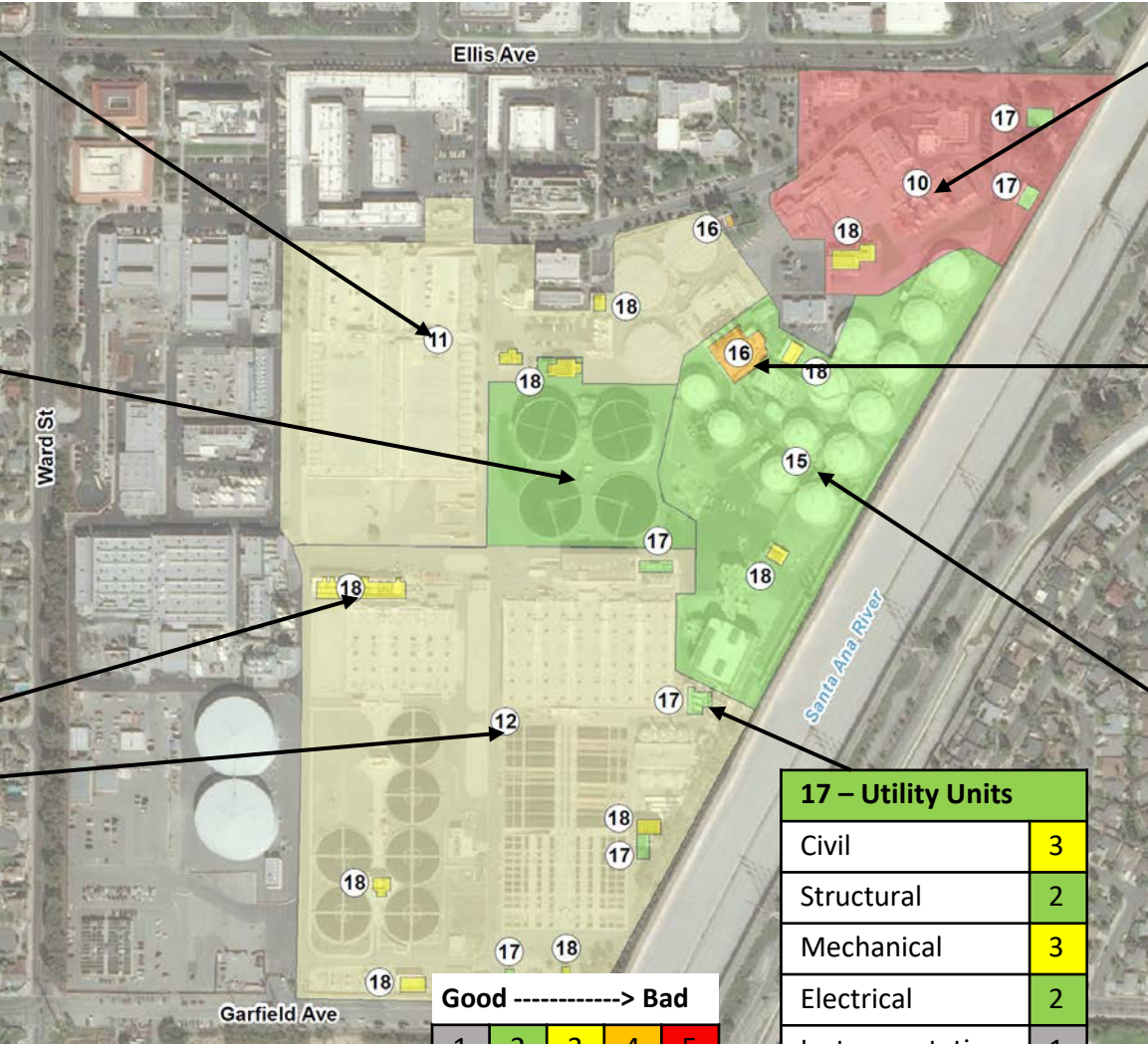
12 – Secondary (Activated Sludge)	
Civil	3
Structural	2
Mechanical	3
Electrical	3
Instrumentation	4

10 – Preliminary	
Civil	1
Structural	3
Mechanical	5
Electrical	5
Instrumentation	5

16 – CenGen	
Civil	-
Structural	3
Mechanical	4
Electrical	4
Instrumentation	4

15 – Solids Handling	
Civil	2
Structural	1
Mechanical	2
Electrical	2
Instrumentation	2

17 – Utility Units	
Civil	3
Structural	2
Mechanical	3
Electrical	2
Instrumentation	1





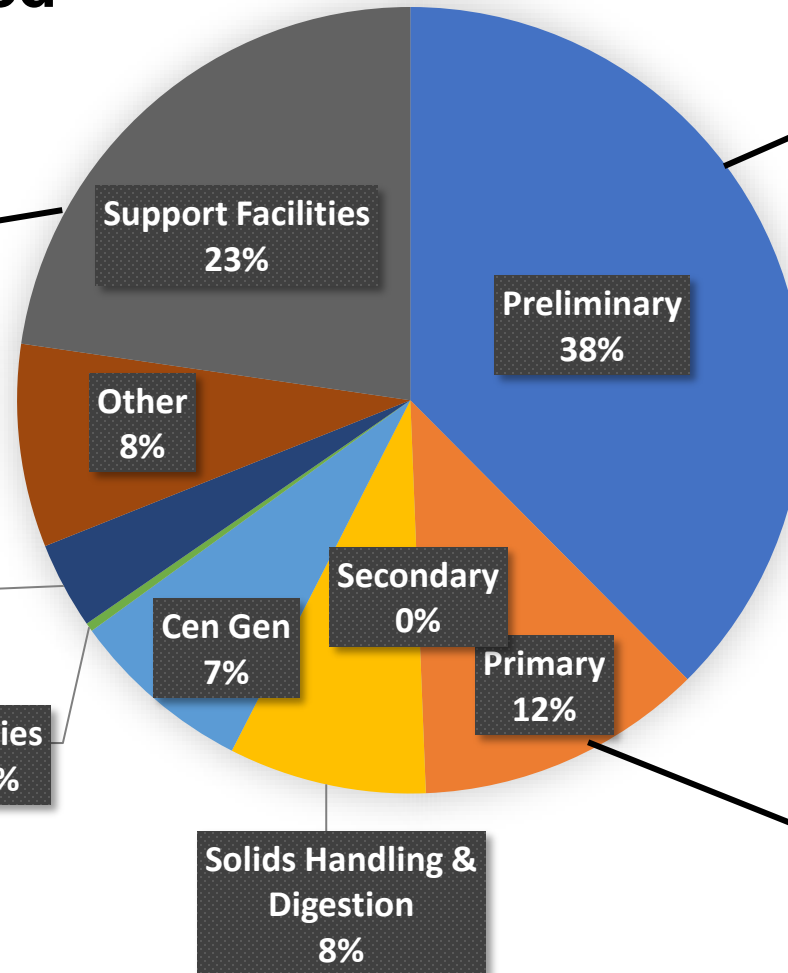
# CIP Budget Allocation Plant No. 1



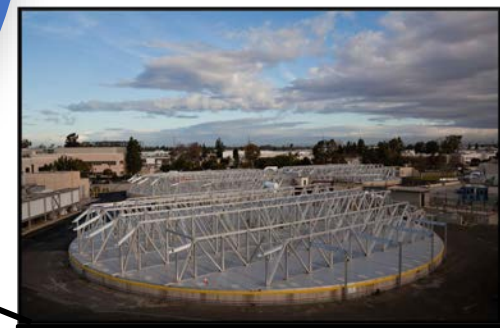
**\$1.08B Authorized**



P1-128 Headquarters Complex  
Project Budget: \$167M  
Advertise for Bid: Jan 2021

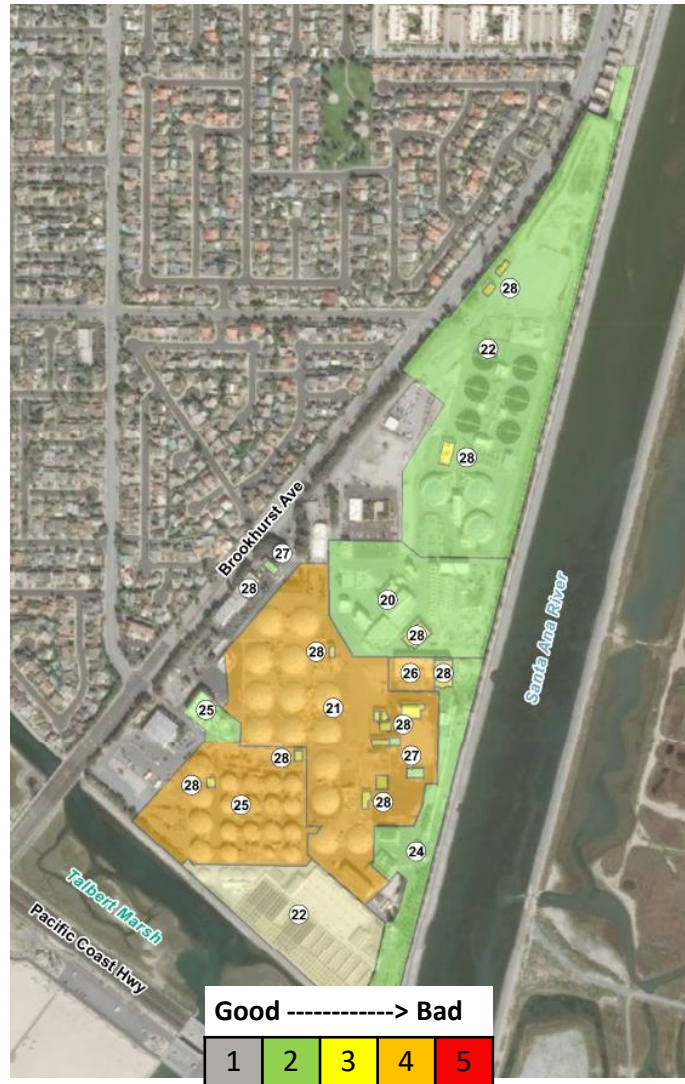


P1-105 Headworks Rehabilitation and Expansion at Plant No. 1  
Project Budget: \$406M  
Bid Opening: 12/15/20



P1-126 Primary Sedimentation Basins No. 3-5 Replacement  
Project Budget: \$118M  
Project Start: 2021

# What Did We Learn? Plant No. 2



# What Did We Learn? Plant No. 2



21 – Primary	
Civil	4
Structural	4
Mechanical	4
Electrical	3
Instrumentation	3

25 – Solids Handling (Dewatering/Thickening)	
Civil	2
Structural	2
Mechanical	2
Electrical	2
Instrumentation	2

25 – Solids Handling (Digesters)	
Civil	3
Structural	5
Mechanical	4
Electrical	4
Instrumentation	4

22 – Secondary (Activated Sludge)	
Civil	3
Structural	2
Mechanical	3
Electrical	3
Instrumentation	3

22 – Secondary (Trickling Filters)	
Civil	2
Structural	1
Mechanical	2
Electrical	3
Instrumentation	3

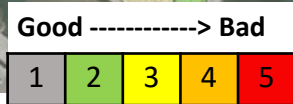
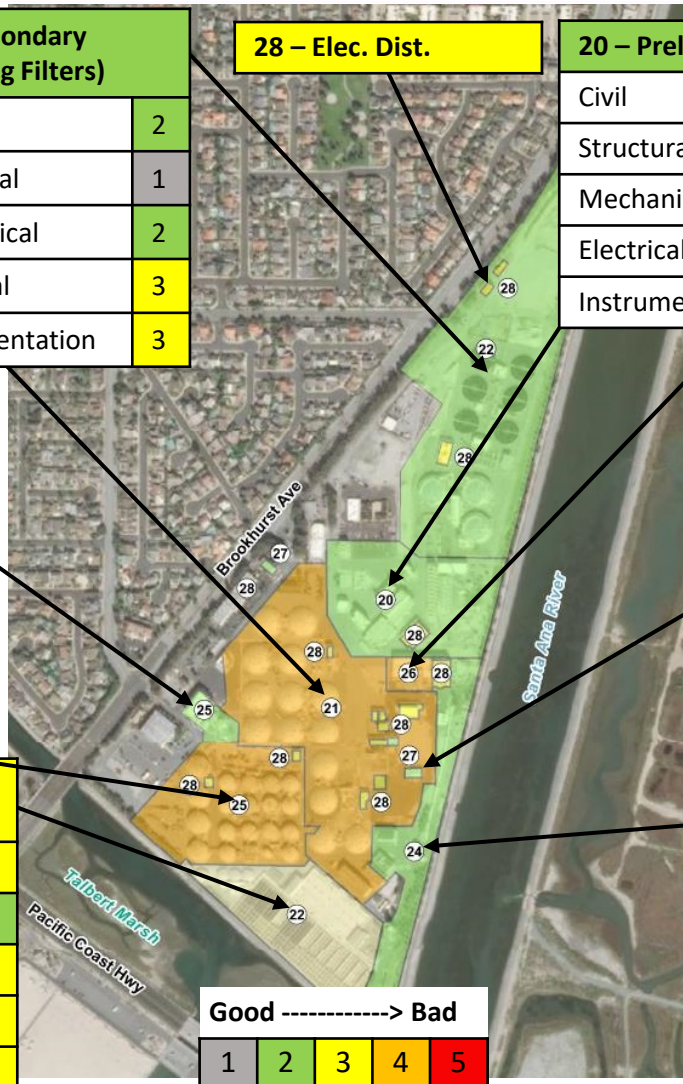
28 – Elec. Dist.	
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20 – Preliminary	
Civil	1
Structural	1
Mechanical	2
Electrical	2
Instrumentation	2

26 – CenGen	
Civil	-
Structural	3
Mechanical	4
Electrical	4
Instrumentation	4

27 – Utility Units	
Civil	3
Structural	3
Mechanical	3
Electrical	2
Instrumentation	1

24 – Effluent Disposal	
Civil	2
Structural	2
Mechanical	2
Electrical	3
Instrumentation	3

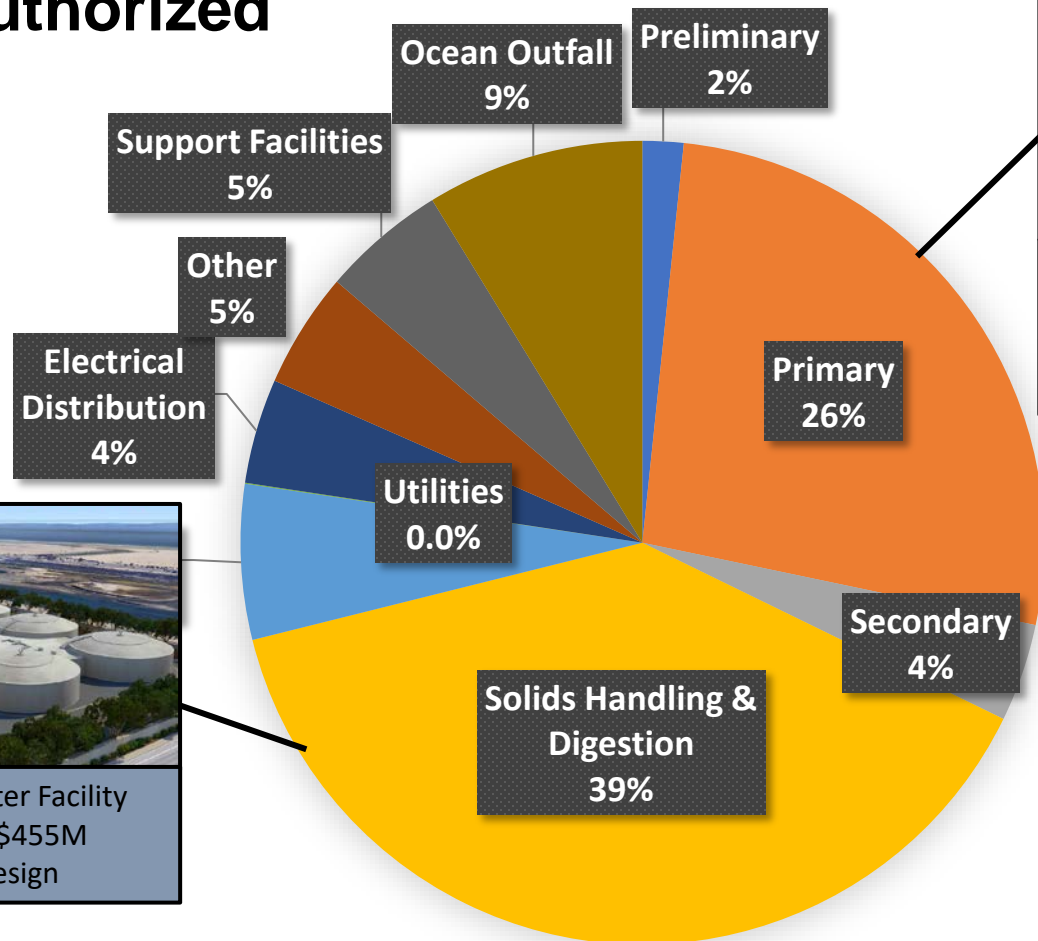




# CIP Budget Allocation Plant No. 2

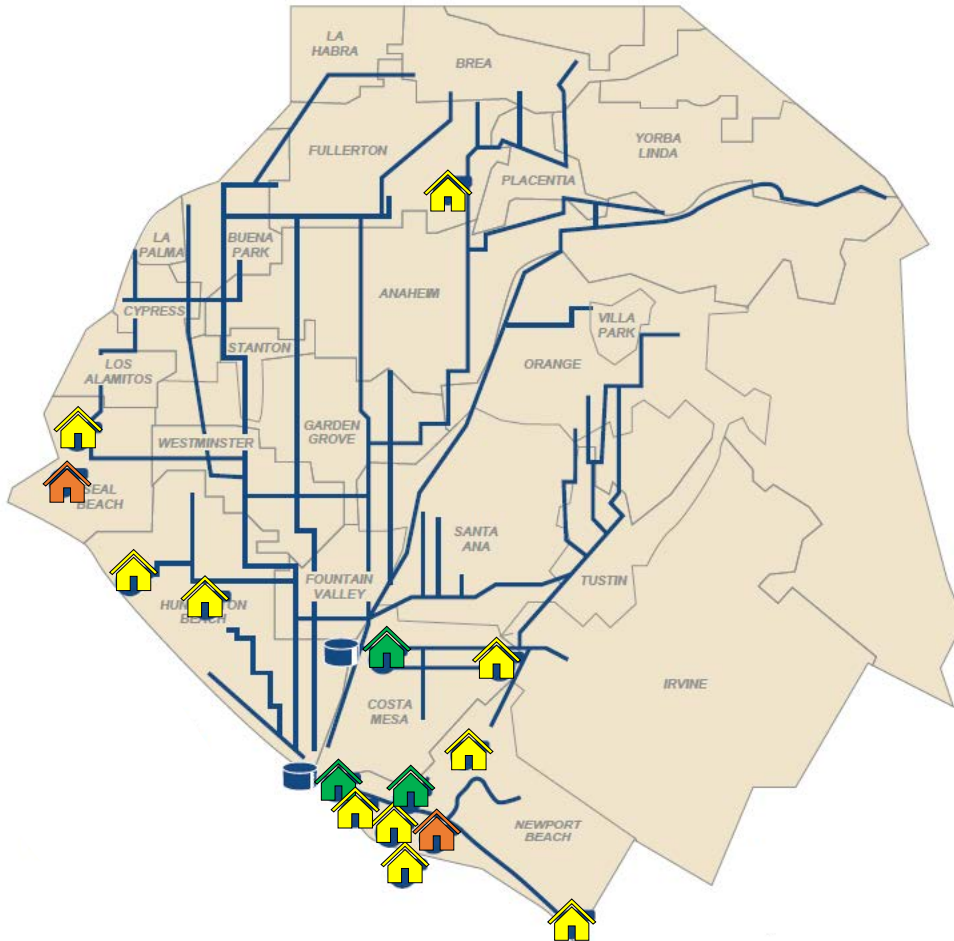


**\$1.94B Authorized**





# What Did We Learn? Pump Stations



Pump Stations	Civil	Structural	Mechanical	Electrical	Instrumentation	OVERALL SCORE
15th Street	3	4	3	2	2	3
A Street	3	4	3	3	2	3
Bay Bridge	4	4	4	4	5	4
Bitter Point	2	3	3	1	2	2
College Avenue	3	2	3	2	1	2
Crystal Cove	3	3	4	3	2	3
Edinger	4	3	3	3	3	3
Lido	1	4	4	4	4	3
MacArthur	4	3	4	3	1	3
Main Street	4	3	4	2	2	3
Rocky Point	1	3	2	2	2	2
Seal Beach	3	4	4	5	4	4
Slater	4	4	4	3	2	3
Westside	3	3	3	2	3	3
Yorba Linda	3	4	3	3	2	3

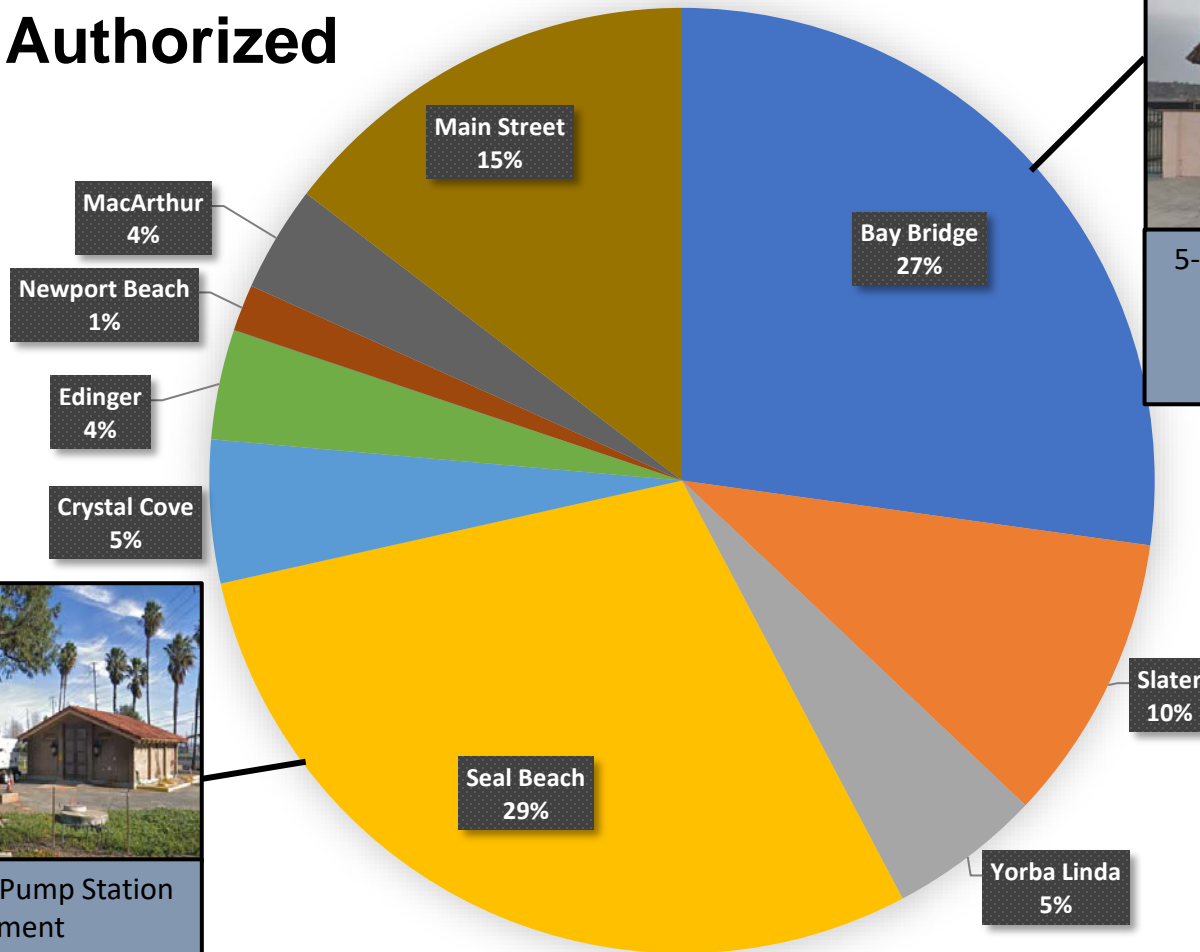
Good -----> Bad



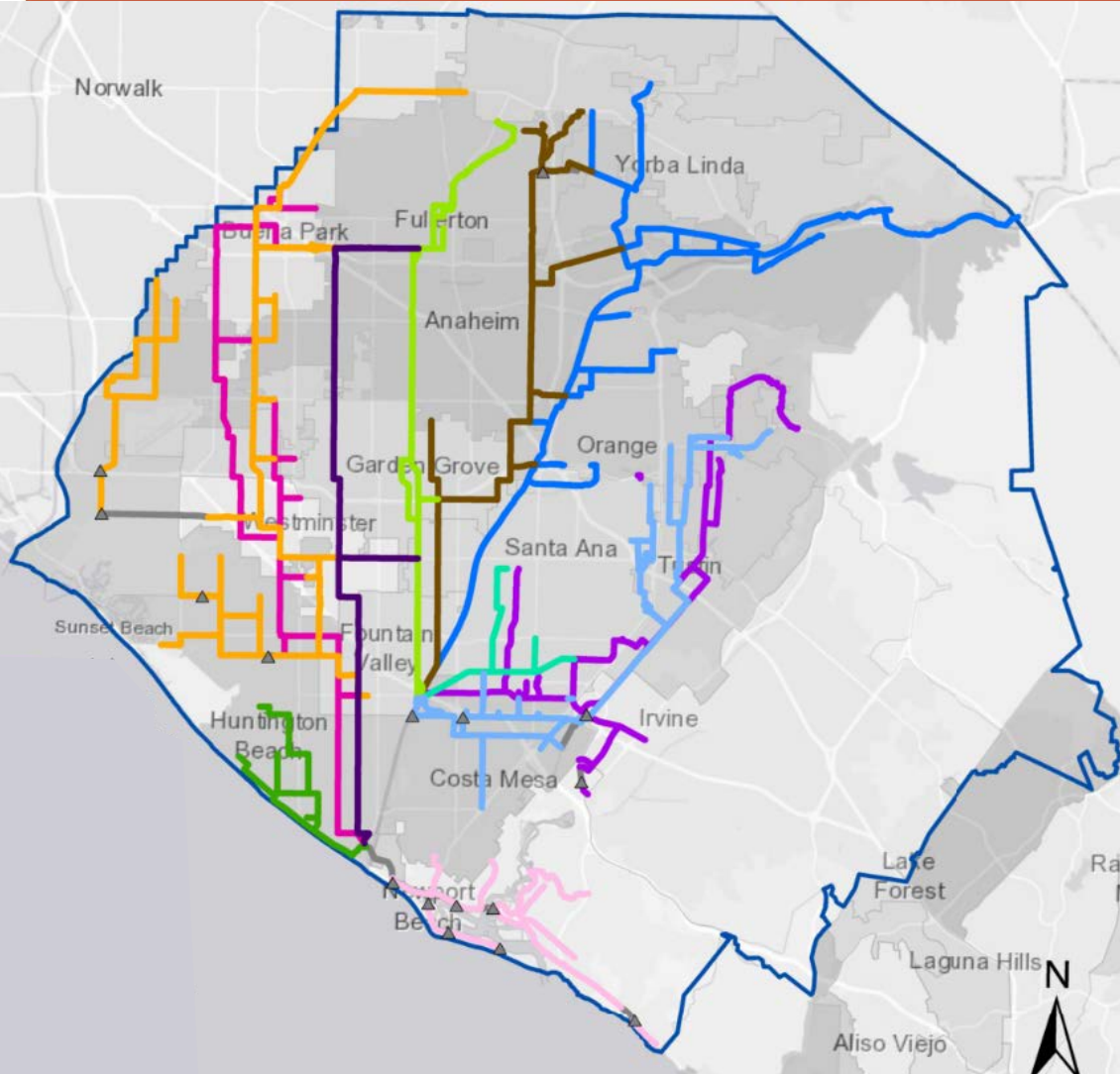
# CIP Budget Allocation Pump Stations



**\$270M Authorized**



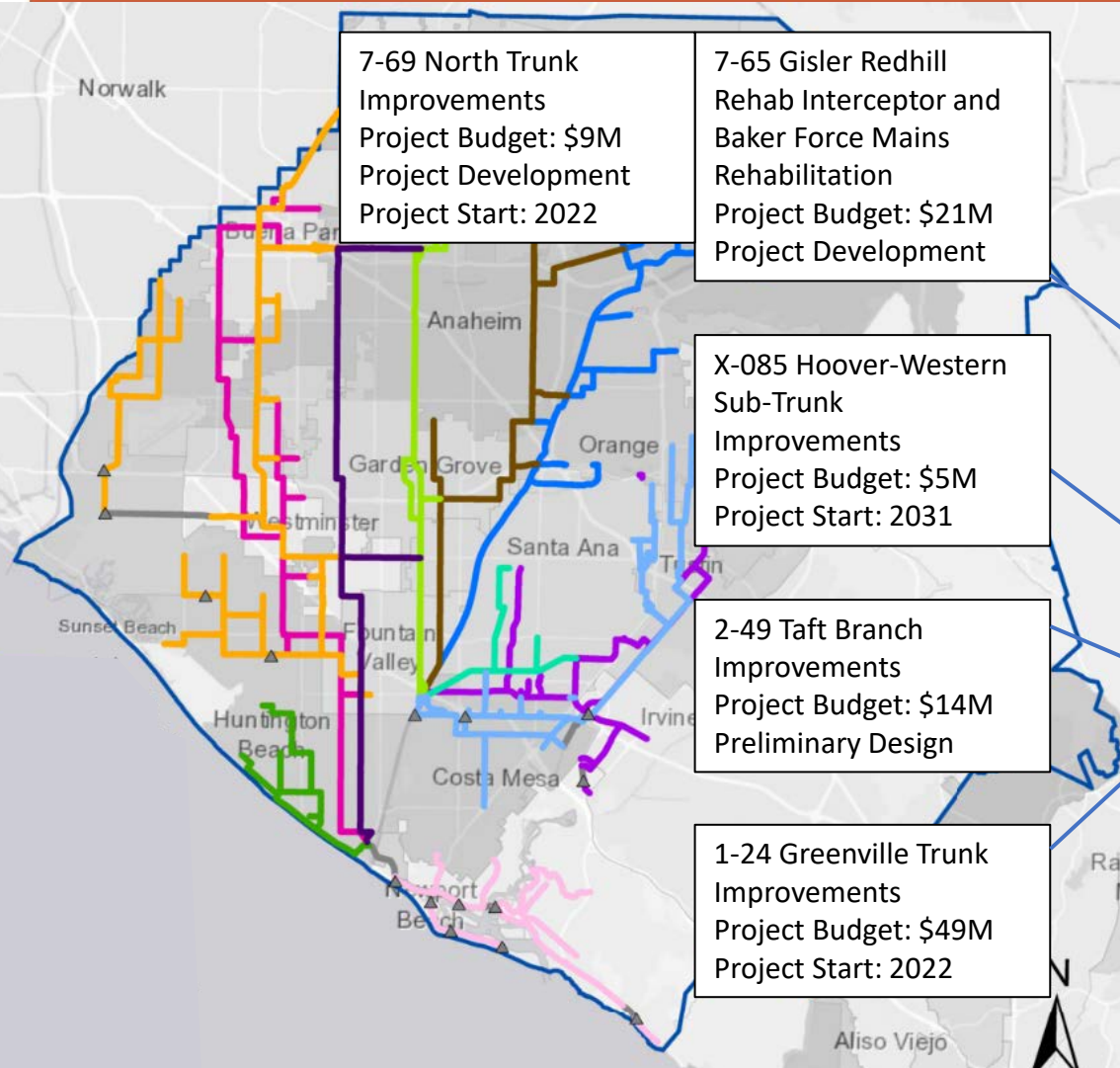
# What Did We Learn? Gravity Sewers



Gravity Sewer	Total Miles	% with Significant Structural Defects	% with Capacity Issues
Baker-Main	42.6	7.8%	3.6%
Bushard	21.4	2.5%	0.0%
Coast Hwy	11.4	2.0%	0.0%
Euclid	34.4	5.2%	0.0%
Knott	73.2	2.7%	0.0%
Miller-Holder	31.4	0.9%	2.3%
Newhope-Placentia	30.9	2.0%	0.0%
Newport	31.6	3.7%	0.0%
SARI	50.4	1.9%	3.6%
Sunflower	34.8	4.8%	0.0%
Talbert	8.4	2.0%	35.9%
Interplant	16.9	0.0%	0.0%
<b>Total</b>	<b>387.4</b>	<b>3.3%</b>	<b>2.5%</b>



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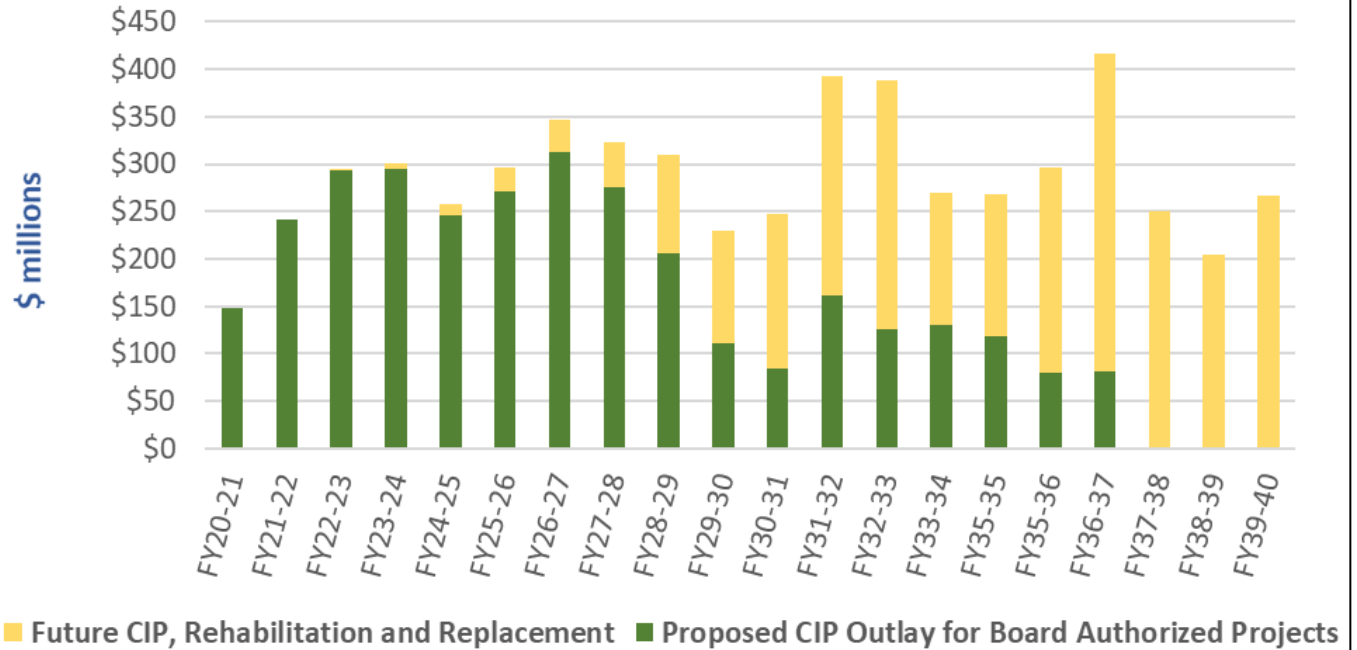
# 20-Year Plan for our Assets



Orange County Sanitation District, California



## 20 Year CIP Outlay



# Recommended Action



Receive and file the Orange County Sanitation District 2020 Asset Management Plan







**Questions?**