

# Donax WRF Process Improvements Project

- Plant treated 30.1 MG in August 2023 and 49.3 MG in August 2021 (pre-commissioning), which is a 38.9% reduction in volume.
- The biological treatment process requires the correct mix of microorganisms, plus oxygen and food (raw wastewater with carbon compounds) to function as designed.
- Post lan, the raw wastewater is low in carbon, but carbon can be added at a cost. Operations staff is adding carbon to improve nitrogen removal.
- Carbon is not directly measured. Instead, Carbonaceous Biological Oxygen Demand (CBOD) is measured to determine carbon loading.
- Plant received a CBOD of 21,537 lbs. in August 2023 and 55,383 lbs. in August 2021 (pre-commissioning), which is an 61.1% reduction in carbon loading.
- Contractor is 90% complete addressing Substantial Completion punch list items.
- Plant is meeting permitted effluent standards

# Regulatory Effluent Parameters

PARAMETER	PUBLIC ACCESS REUSE (DONAX PERMIT LIMIT)	ADVANCED WASTE TREATMENT GOALS	PERFORMANCE AFTER IAN
<b>CBOD</b>	30 mg/L	5.0 mg/L	<2.0 mg/L
<b>TSS</b>	5.0 mg/L	5.0 mg/L	<1.0 mg/L
<b>NITROGEN</b>	12.0 mg/L	3.0 mg/L	10 to 14 mg/L
			5.0 to 7.0 mg/L With Supplemental Carbon - Current Operations
			Note: Nitrogen could be lowered at additional cost for higher supplemental carbon dosage.
<b>PHOSPHORUS</b>	REPORT	1.0 mg/L	0.5 to 1.5 mg/L

## Wastewater Collection System

- 165 total lift stations controlled from 135 control panels
- 132 lift stations have LCEC power
- All lift stations operating in automatic mode

## Phase 4B Sewer System Expansion

- Contractor is working in several project areas.
- Middle Gulf Drive lift station wet well is being installed this week. At that point all wet wells will be installed. Next steps will be finishing laterals and then electrical work will begin.