## **Donax WRF Process Improvements Project**

- The biological treatment process requires the correct mix of microorganisms, plus oxygen and food (raw wastewater with carbon compounds) to function as designed.
- Post Ian, 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 24,049 lbs. in October 2023 and 41,318 lbs. in October 2021, which is a 41.8% 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	CURRENT PERFORMANCE
CBOD	30 mg/L	5.0 mg/L	<2.0 mg/L
TSS	5.0 mg/L	5.0 mg/L	<1.0 mg/L
NITROGEN	12.0 mg/L	3.0 mg/L	>10 mg/L Without Supplemental Carbon
			4.2 mg/L With Supplemental Carbon (30-Day Average)
PHOSPHORUS	REPORT	1.0 mg/L	0.9 mg/L (30-Day Average)

## 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 all five project areas.
- Current focus of work are LCEC service connections to lift station control panels, and site restoration.