

St. Charles Wetland Assimilation Monitoring Report

September 2018



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Summary of Activities: September 2018

Site visits

September 26, 2018: Comite Resources field staff Jason Day and Joel Mancuso traveled to the Luling assimilation wetland to conduct monthly monitoring. Leaf litter biomass and water levels were collected from each site (Treatment, Mid, Out & Reference). Dissolved oxygen, conductivity, temperature, salinity and pH were measured at the Treatment, Mid, Out, and Reference sites as well as the discharge Pipe (see data below). Nutria were visible at the Treatment site.



Joel Mancuso collecting leaf litter at the Treatment site on September 26, 2018.

Dissolved Oxygen was highest at Pipe (2.9 mg/L) and much lower at the assimilation sites (0.6-0.9 mg/L), with the Reference site having an intermediate concentration of 1.20 mg/L. Conductivity ranged from 208.2 mS at the Reference site to 820.1 mS at the Mid site. Water temperature ranged from 25.6 °C at the Reference site to 27.4 °C at the discharge Pipe, with the difference due to shading. Salinity ranged from 0.1 at the Reference site to 0.4 PSU at the Treatment site. pH fluctuated was 7.1 at all sites with exception of the Out site having a pH of 7.2. Water level was 53.5 cm at the Tmt site, 31.8 cm at the Mid site, 15.7 cm at the Out site, and 51.8 cm at the Reference site. All these parameters are within expected normal ranges and there are no issues of concern.

Discrete water quality probe data from the Luling assimilation wetlands on September 26, 2018.

Site	DO (mg/L)	Cond (mS)	Temp. (°C)	Sal (PSU)	pH	Water Level (cm)
Pipe	2.90	820.1	27.4	0.4	7.1	
Tmt	0.67	689.7	24.4	0.3	7.1	53.5
Mid	0.66	730.4	25.1	0.4	7.1	31.8
Out	0.86	511.6	26.5	0.2	7.2	15.7
Ref	1.20	208.2	25.6	0.1	7.1	51.8



The Reference site on September 26, 2018.