

Data Dictionary:

- Data range: 10/2020 - 12/2021
- Two Data Sets: SONDE Data & SUD Data
- SONDE Data includes all water quality parameters
- SONDE Data observes these values in 2 sites:
Wetland Basin 3 & Lagoon C
- SUD Data includes climatic conditions
- Measurements taken 24 hours a day

Water Quality Variables:

Water Temp (°C)	Hourly water temperature in <i>Wetland Basin 3 & Lagoon C</i>
pH	Acidic or basic; pH influences solubility; low pH = high solubility = toxicity of heavy metals in water
Conductivity (µS/cm)	Measured in microsiemens per centimeter; water's capability to pass through an electric current; increased conductivity indicates pollution (untreated wastewater, stormwater runoff)
Turbidity	Relative clarity of water; the amount of light scattered by materials in the water (clay, silt, (in)organic matter, algae, living organisms)
Dissolved Oxygen (in % and levels)	Measures percent of dissolved oxygen saturation and dissolved oxygen levels; important for aquatic organisms survival, DO decreases as organic matter decays (eutrophication)
ORP mV	Oxidation Reduction Potential; measured in millivolts; determines how effective disinfection is; measurement of sanitation
Ammonia	Product of microbiological decay of nitrogenous matter; excessive harmful to vegetation and toxic to aquatic life
Nitrate	Occurs naturally at safe levels (< 3 mg/L); however, concerns with levels over 10 mg/L (runoff, leakage, fertilizer)

Climatic Conditions:

Air Temp	Hourly measurements on air temp with timestamps on min, mean, and max
Wind Speed	Hourly measurements on wind speed with timestamps on min, mean, and max
Volumetric Water Content	Ratio of volume of water to volume of soil