Data Description

Wetlands project: Tessa S., Lauren H., Harrison L.

Sonde Data

Water Quality

- Hourly data from 10/2020 - 12/2021
- Two sites to compare: lagoon C & Wetland Basin 3
- Data on water quality parameter measurements
- Independent (site, time, date) vs. Dependent (water quality) Variables

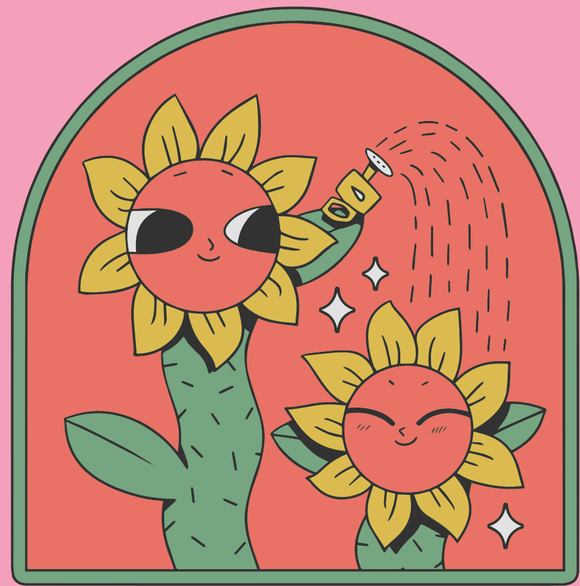
Variables

On Water Quality

1. **Water Temp:** Changes in temp can alter existing species composition
2. **pH:** Acidic/basic, influences solubility, low pH = high solubility = toxicity of heavy metals
3. **Conductivity:** Water's capability to pass through an electric current; increased conductivity indicates pollution (untreated wastewater, stormwater runoff)
4. **Turbidity:** The amount of light scattered by materials in the water (clay, silt, (in)organic matter, algae, living organisms)
5. **Dissolved Oxygen (DO):** Important for aquatic organisms survival, DO decreases as organic matter decays (eutrophication)
6. **Ammonia:** Product of microbiological decay of nitrogenous matter; excess harmful to vegetation and toxic to aquatic life

7 **Oxidation Reduction Potential:** DO commonly used as measurement to see if oxygen levels can support aquatic life; whereas ORP measures sanitation levels

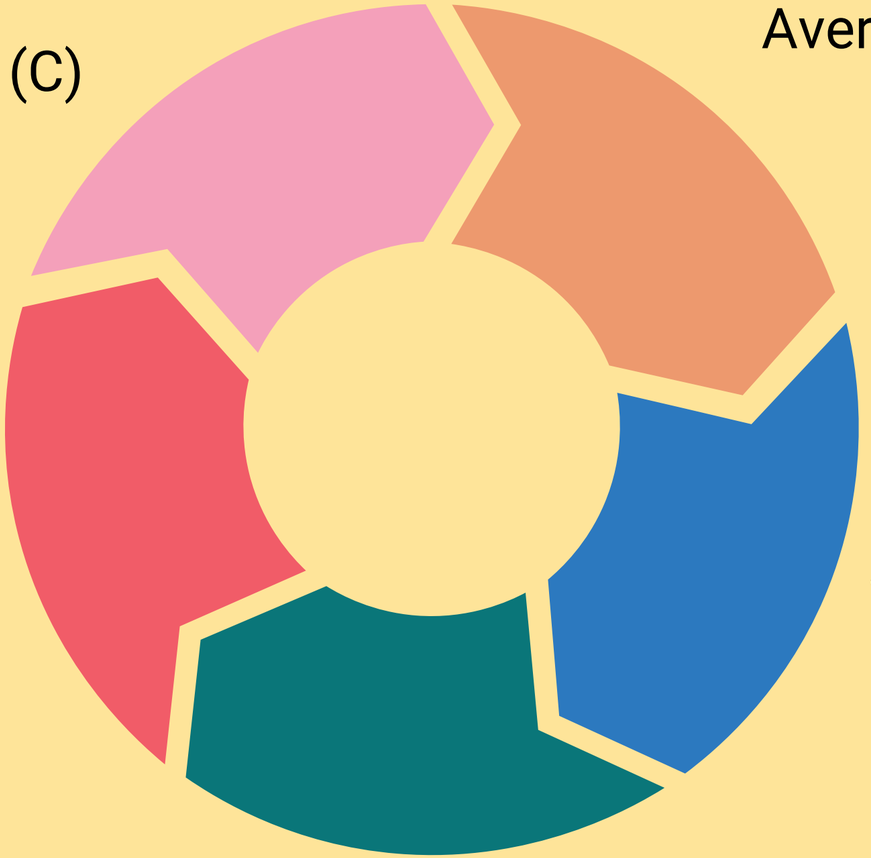
8 **Nitrate:** Occurs naturally at safe levels (< 3 mg/L); however, concerns with levels over 10 mg/L (runoff, leakage, fertilizer)



Climatic Conditions (SUD Data)

Average Air Temp (C)

Average Windspeed

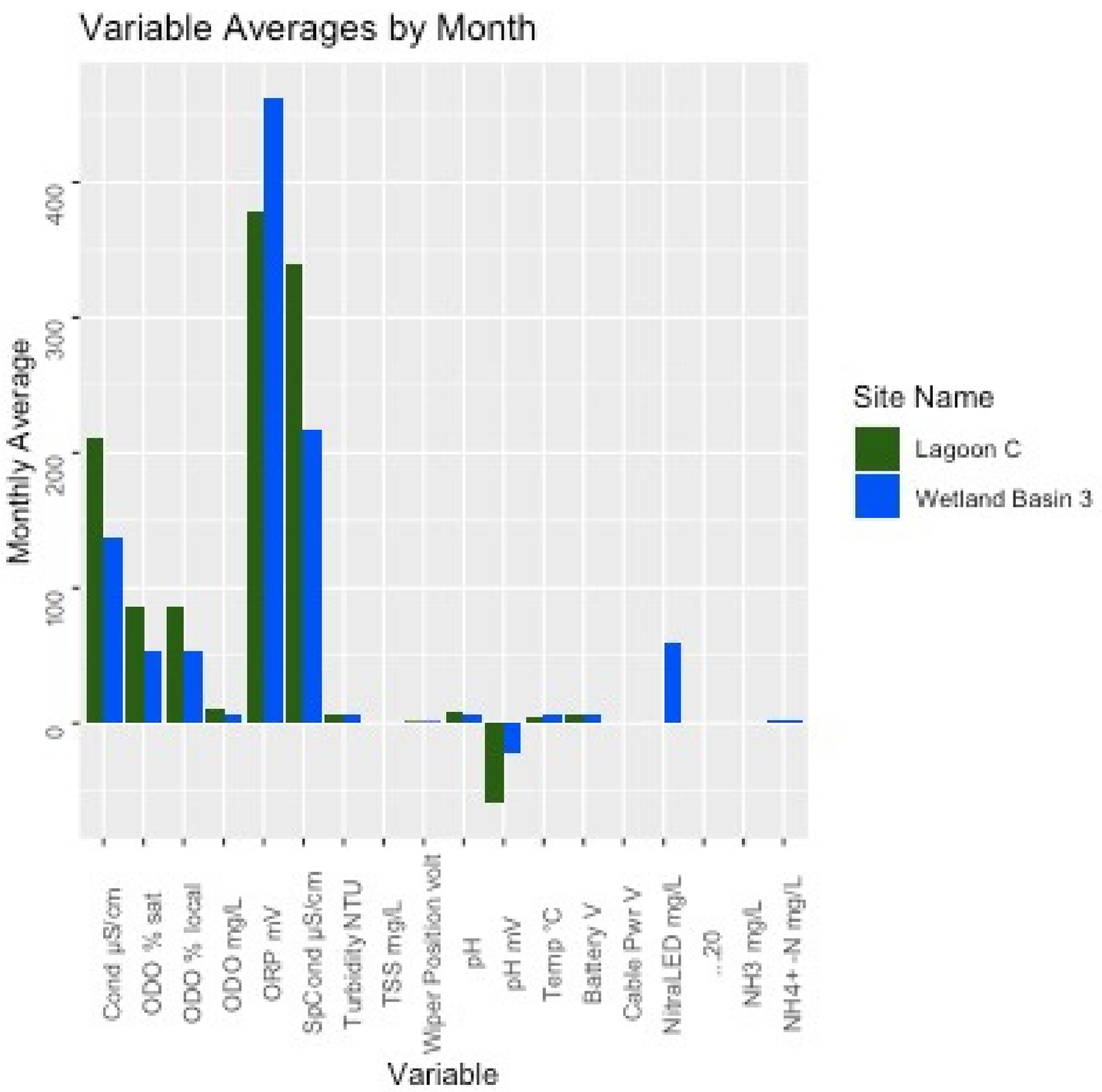


Time of Air Speed min/max

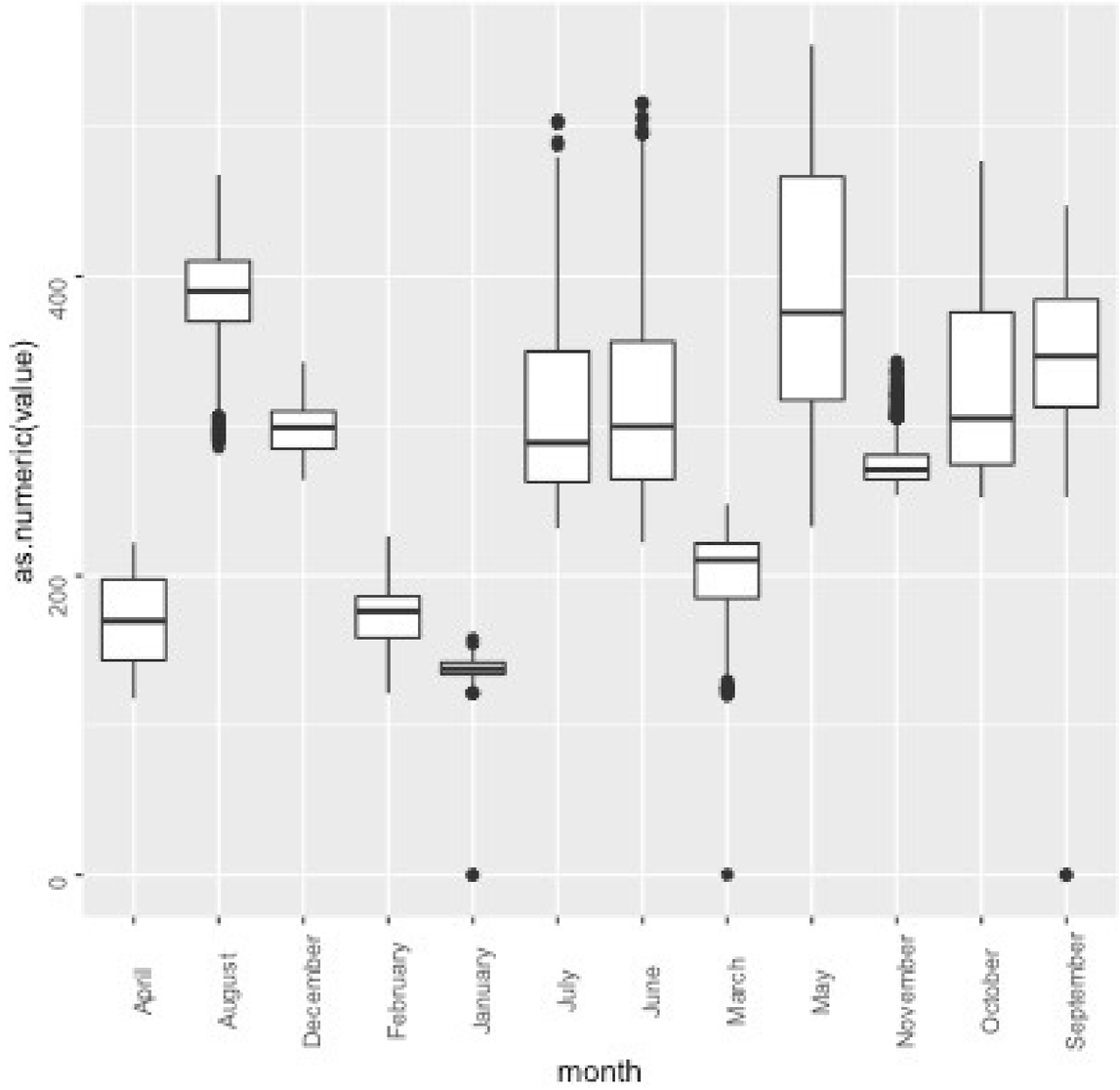
Volumetric Water Content

Time of Windspeed min/max

Worst Graph


Variable Averages by Month
Monthly Average
0
100
200
300
400
Cond µS/cm
ODO % sat
ODO % local
ODO mg/L
ORP mV
SpCond µS/cm
Turbidity NTU
TSS mg/L
Wiper Position volt
pH
pH mV
Temp °C
Battery V
Cable Pwr V
NitraLED mg/L
...20
NH3 mg/L
NH4+ -N mg/L
Variable
Site Name
Lagoon C
Wetland Basin 3

Best Graph



Select:

Year

2021

Site

Wetland Basin 3

Variable

Cond µS/cm