Appendix 4: Latitude gradient plots. South is to the left and north is to the right. A p-value < 0.05 indicates a significant relationship. The rho value indicates the strength of the gradient. Negligible (rho ≤ 0.09), weak (0.10 ≤ rho ≤ 0.39), moderate (0.40 ≤ rho ≤ 0.69), strong (0.70 ≤ rho ≤ 0.89) and very strong (rho ≥ 0.90) (Schober et al. 2018).

Statistically Significant Latitude Gradient Plots

Surface Water Analytes

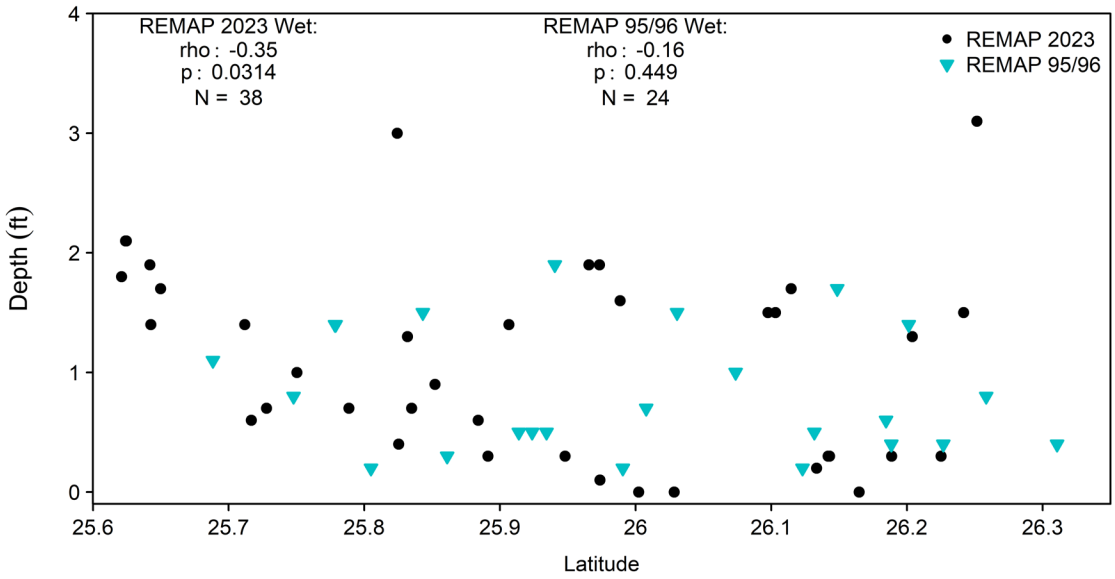

Figure 4-1: Surface water depth (ft) latitude gradient plot, comparing REMAP 1995-1996 wet season data and REMAP 2023 data

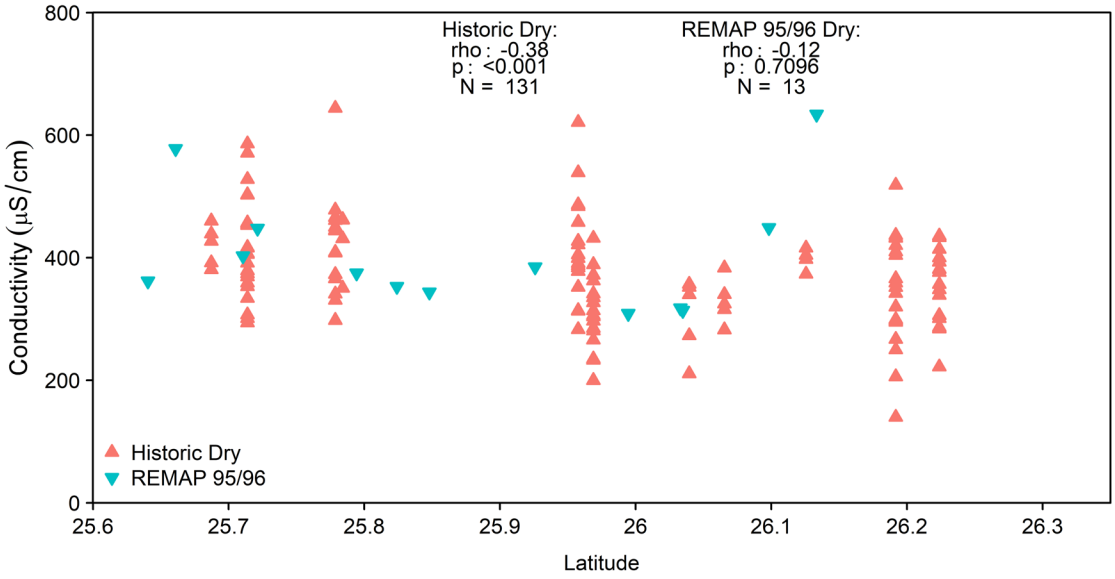

Figure 4-2: Dry season surface water specific conductance (µS/cm) latitude gradient plot, comparing historic data and REMAP 1995-1996 data

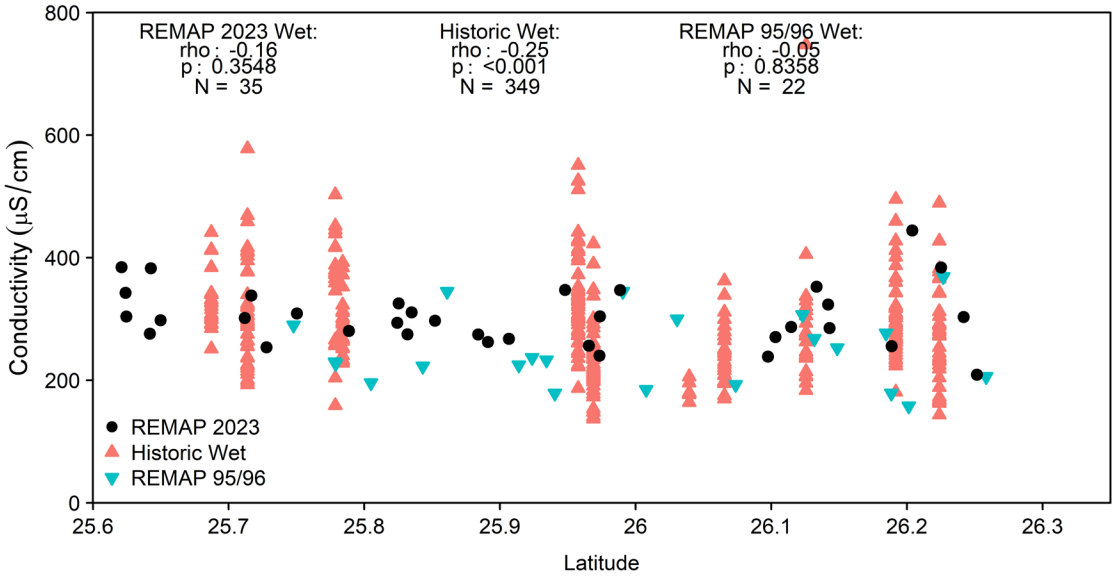

Figure 4-3: Wet season surface water specific conductance (µS/cm) latitude gradient plot, comparing historic data, REMAP 1995-1996 data and REMAP 2023 data

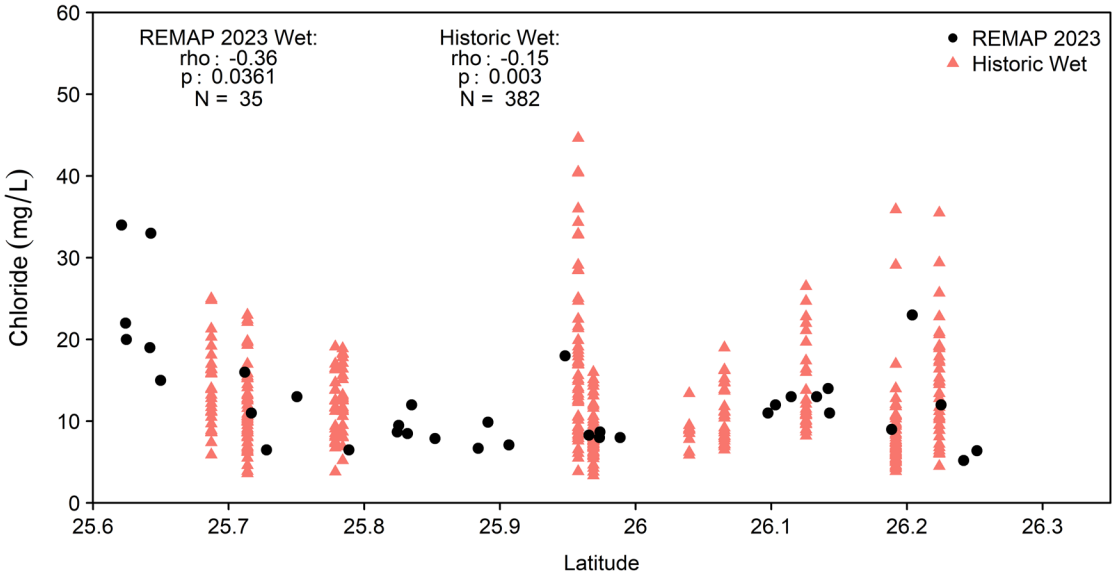

Figure 4-4: Wet season surface water chloride latitude gradient plot, comparing historic data and REMAP 2023 data

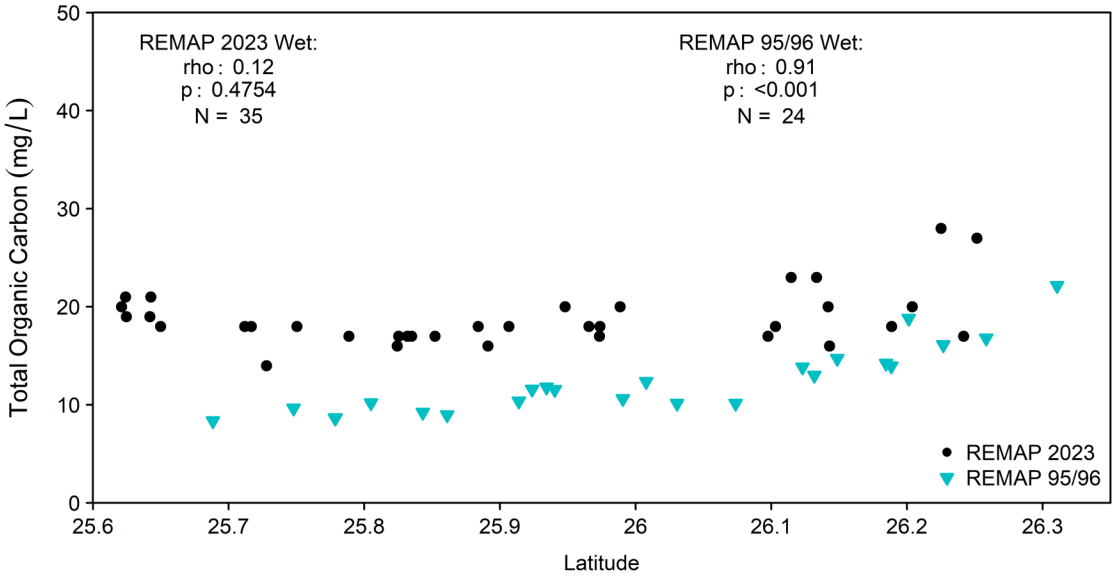

Figure 4-5: Surface water total organic carbon (mg/L) latitude gradient plot, comparing REMAP 1995-1996 wet season data and REMAP 2023 data

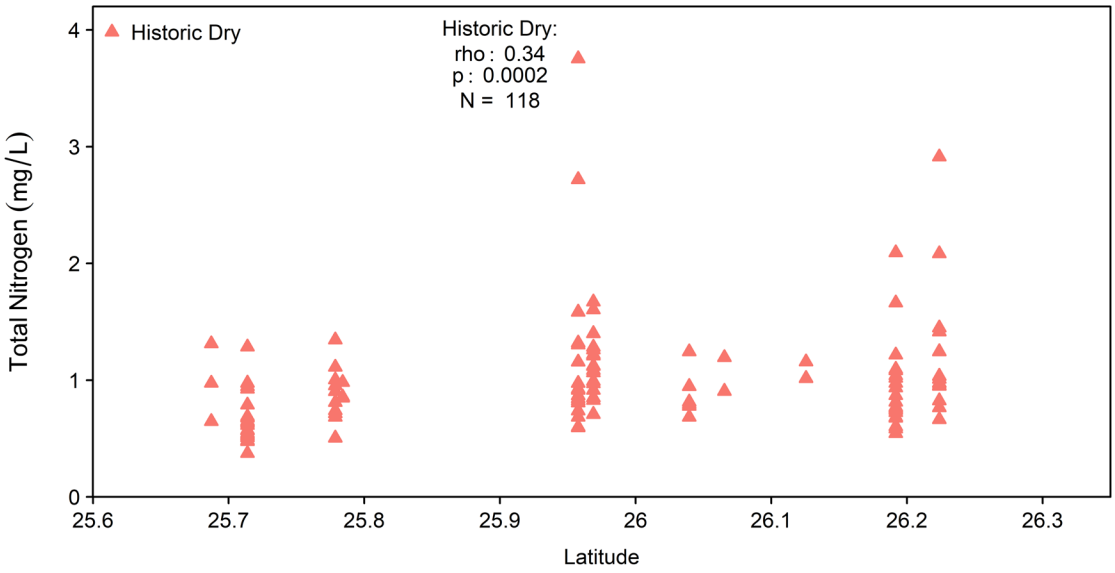

Figure 4-6: Historic dry season surface water total nitrogen latitude gradient plot

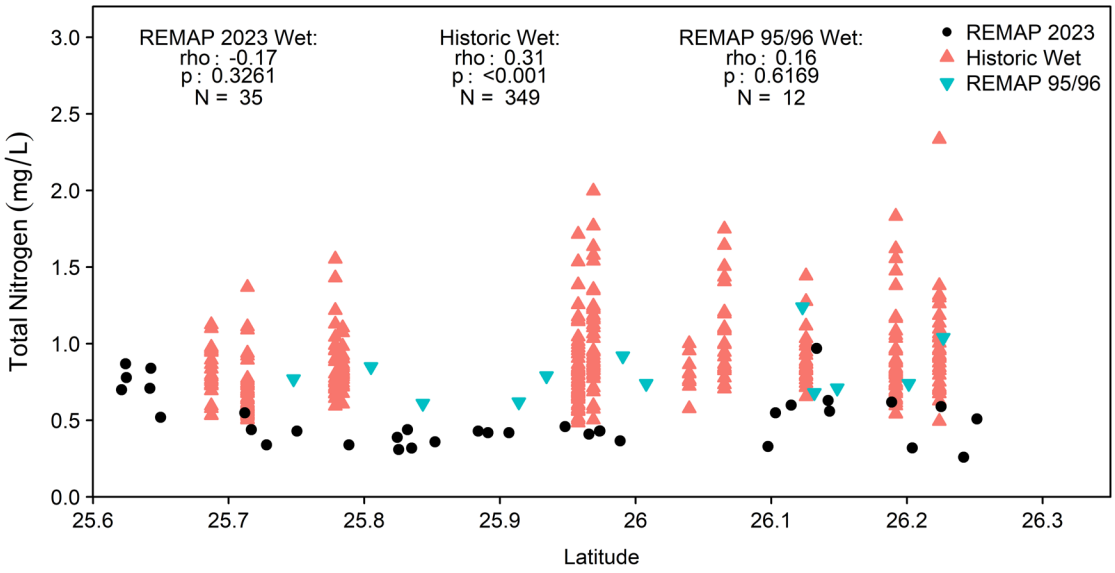

Figure 4-7: Surface water total nitrogen (mg/L) latitude gradient plot, comparing historic data, REMAP 1995-1996 wet season data and REMAP 2023 data

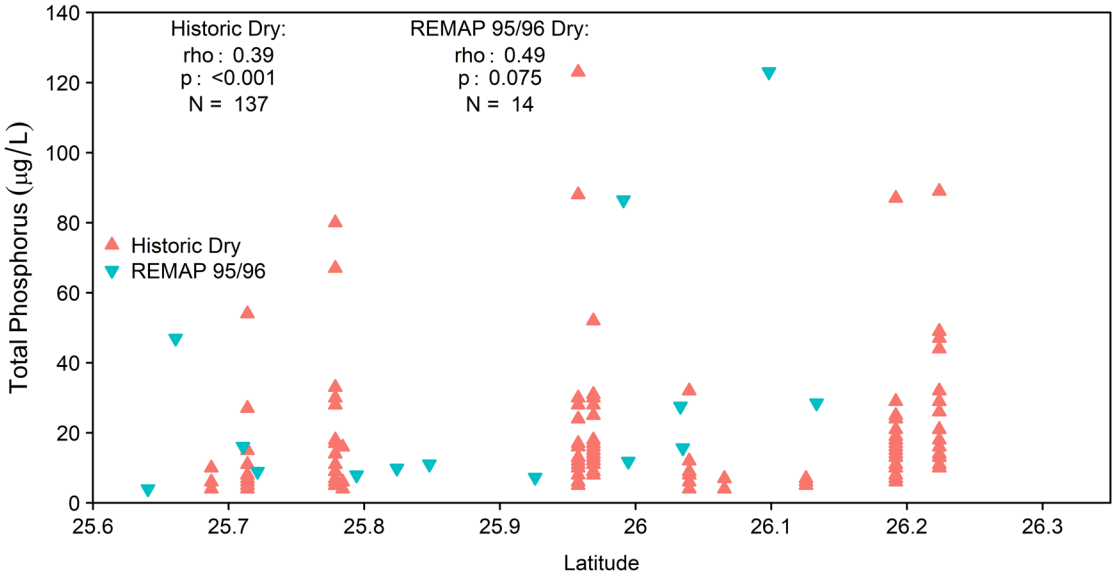

Figure 4-8: Surface water total phosphorus (µg/L) latitude gradient plot, comparing historic data and REMAP 1995-1996 dry season data

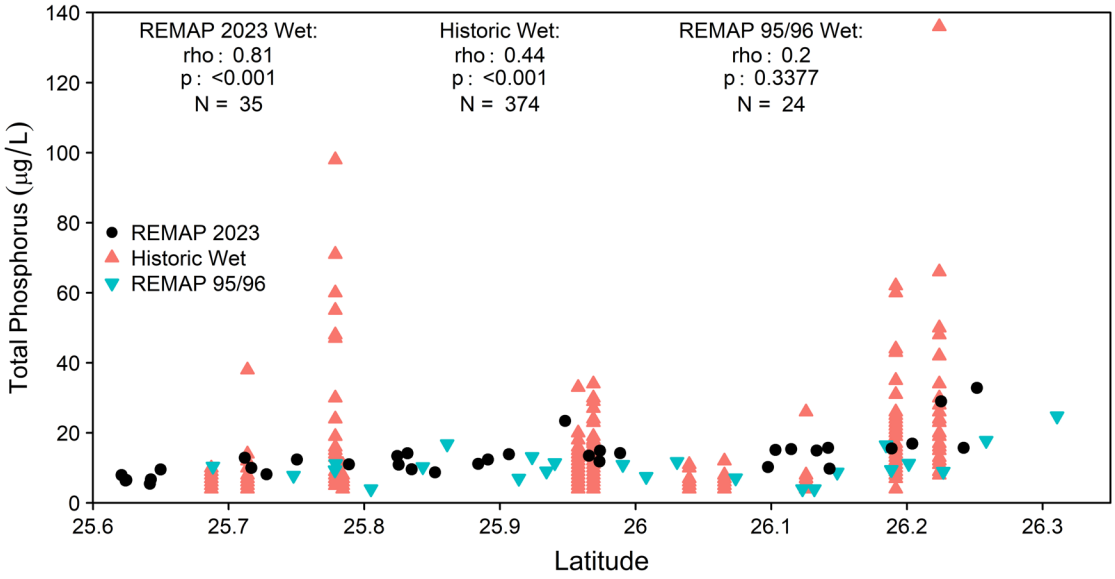

Figure 4-9: Surface water total phosphorus latitude gradient plot, comparing historic data, REMAP 1995-1996 wet season data and REMAP 2023 data

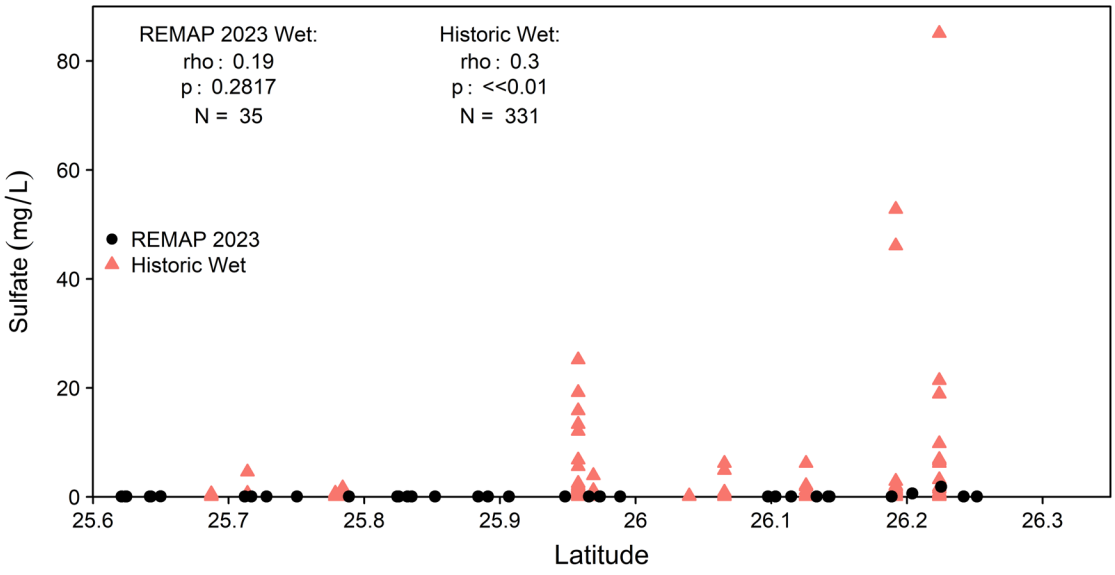

Figure 4-10: Surface water sulfate latitude gradient plot, comparing historic data and REMAP 2023 data

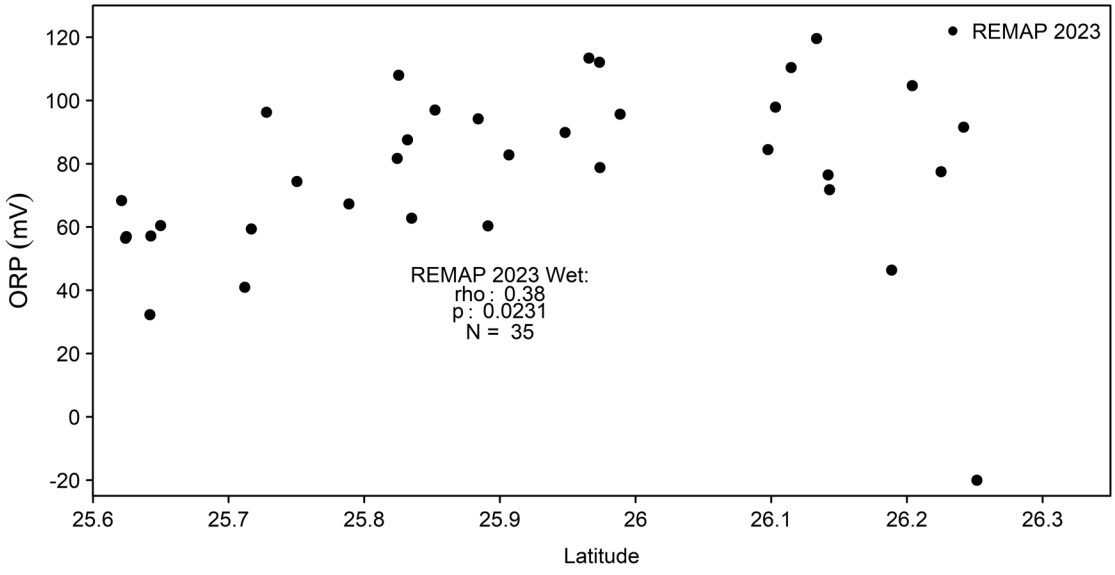

Figure 4-11: Surface water oxidation reduction potential (mV) latitude gradient plot

Soil Analytes

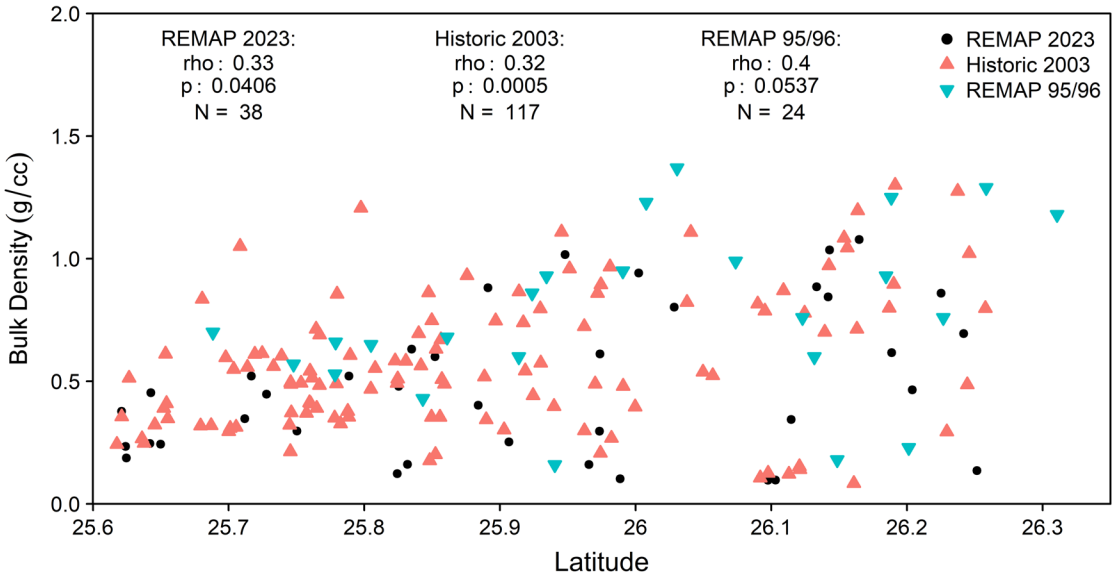

Figure 4-12: Soil bulk density latitude gradient plot, comparing historic data, REMAP 1995-1996 wet season data and REMAP 2023 data

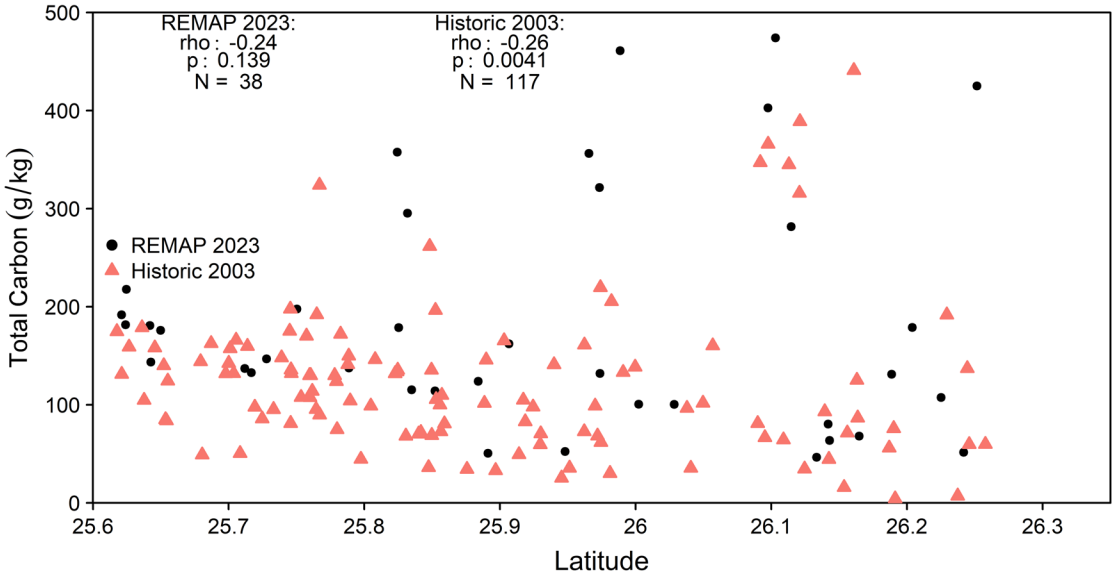

Figure 4-13: Soil total carbon (g/kg) latitude gradient plot, comparing historic data and REMAP 2023 data

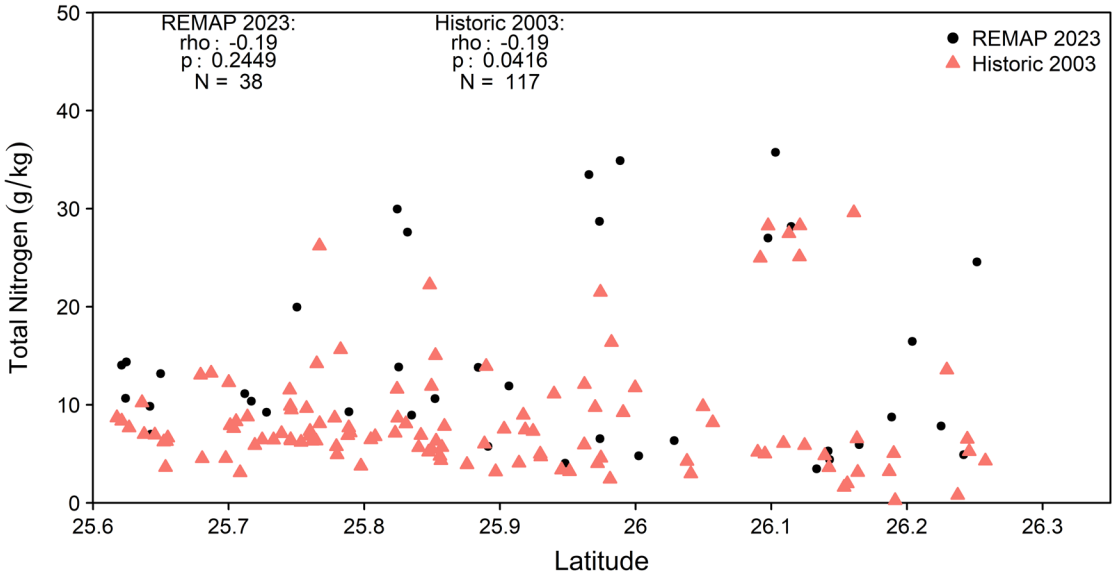

Figure 4-14: Soil total nitrogen (g/kg) latitude gradient plot, comparing historic data and REMAP 2023 data

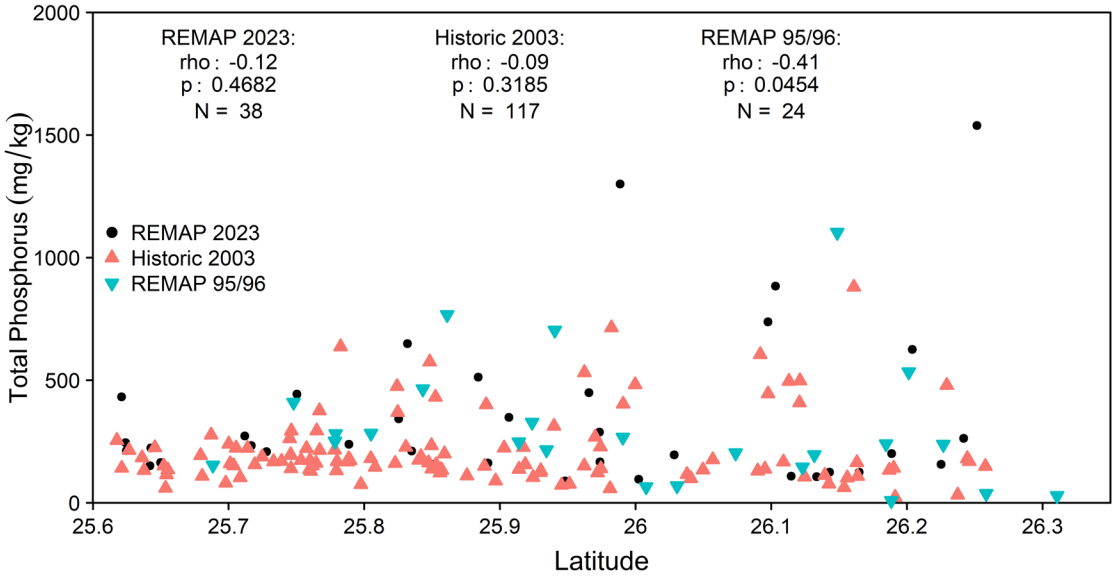

Figure 4-15: Soil total phosphorus (mg/kg) latitude gradient plot, comparing historic data, REMAP 1995-1996 wet season data and REMAP 2023 data

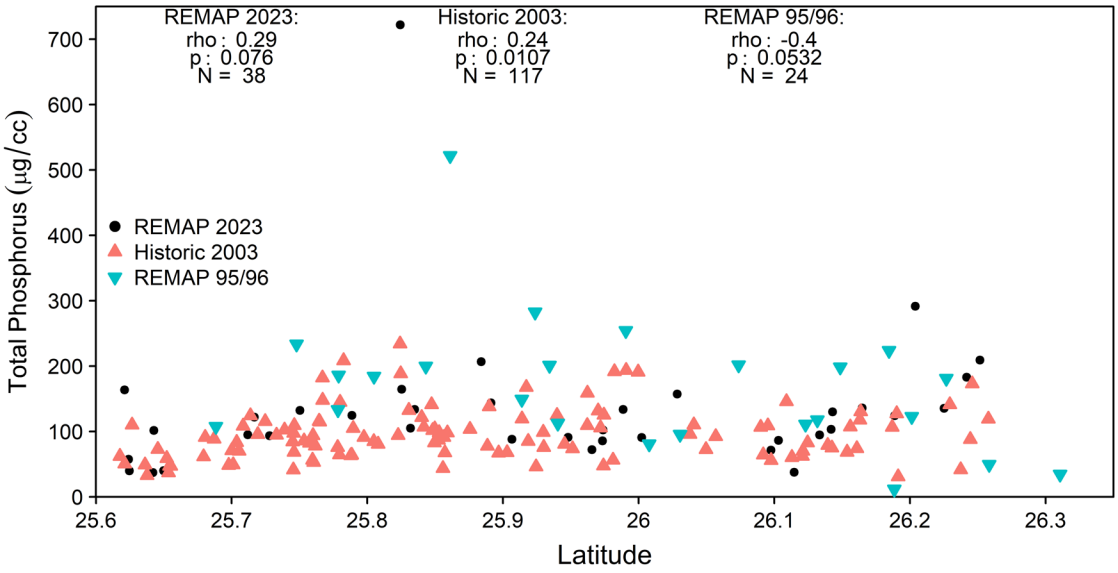

Figure 4-16: Soil total phosphorus (µg/cc) latitude gradient plot, comparing historic data, REMAP 1995-1996 wet season data and REMAP 2023 data

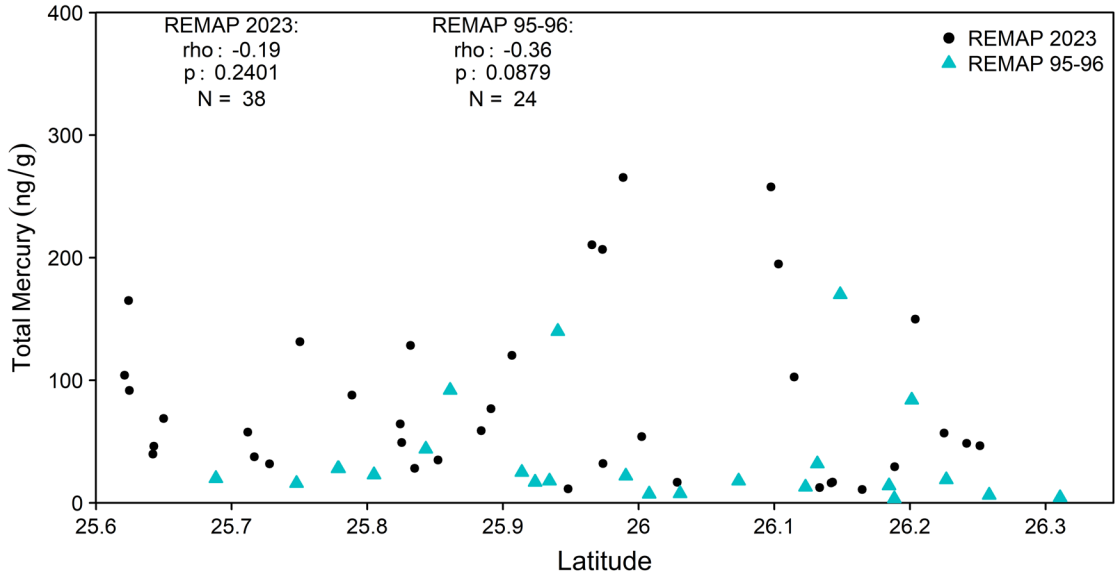

Figure 4-17: Soil total mercury (ng/g) latitude gradient plot, comparing REMAP 1995-1996 wet season data and REMAP 2023 data

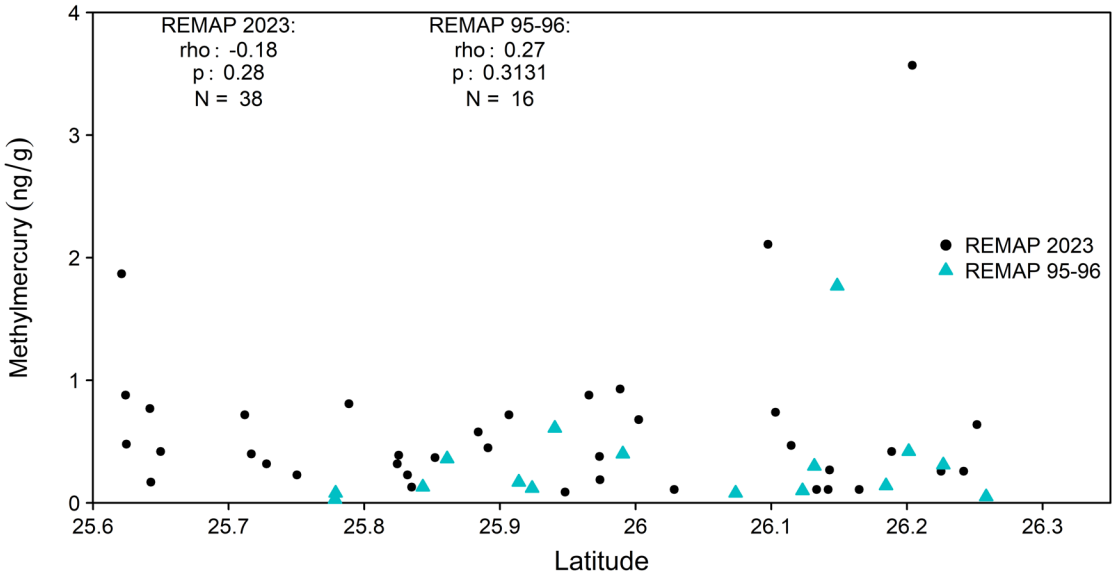

Figure 4-18: Soil methylmercury (ng/g) latitude gradient plot, comparing REMAP 1995-1996 wet season data and REMAP 2023 data

Benthic Periphyton Analytes

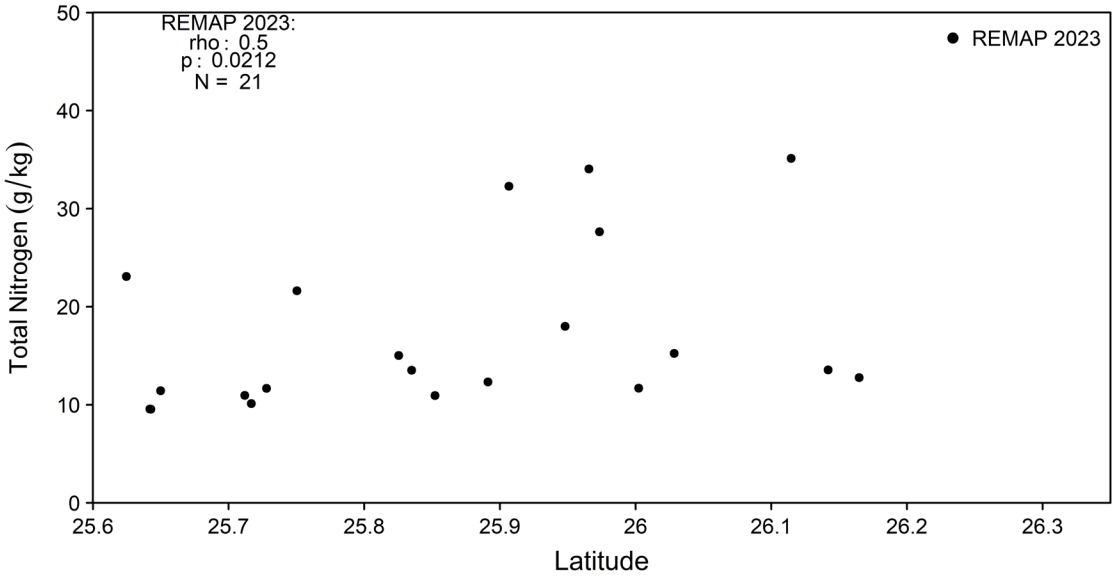

Figure 4-19: REMAP 2023 benthic periphyton total nitrogen (g/kg) latitude gradient plot

Non-Statistically Significant Latitude Gradient Plots

Surface Water Analytes

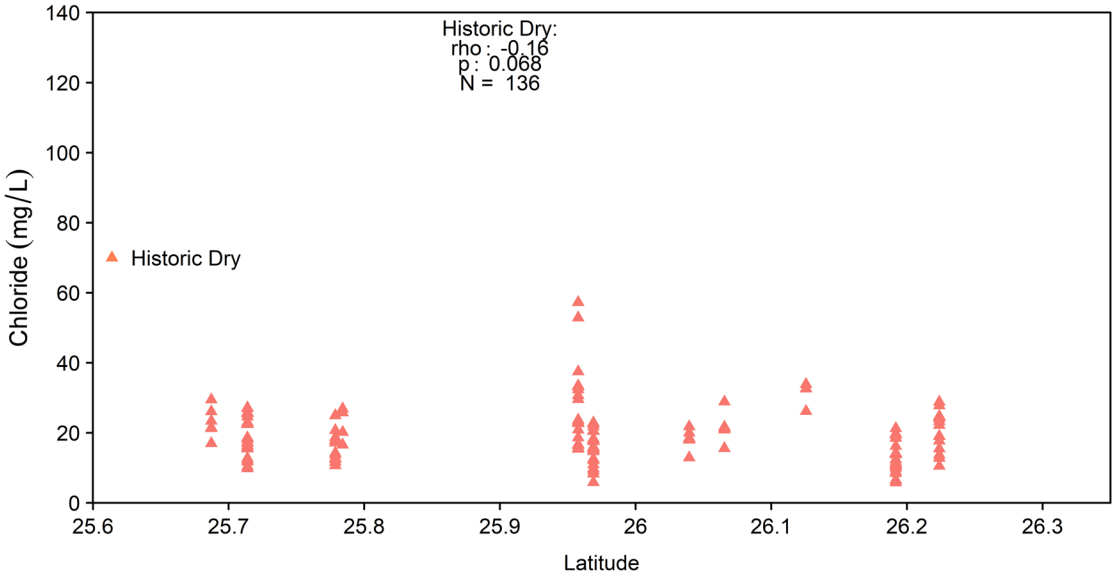

Figure 4-20: Historic dry season surface water chloride (mg/L) latitude gradient plot

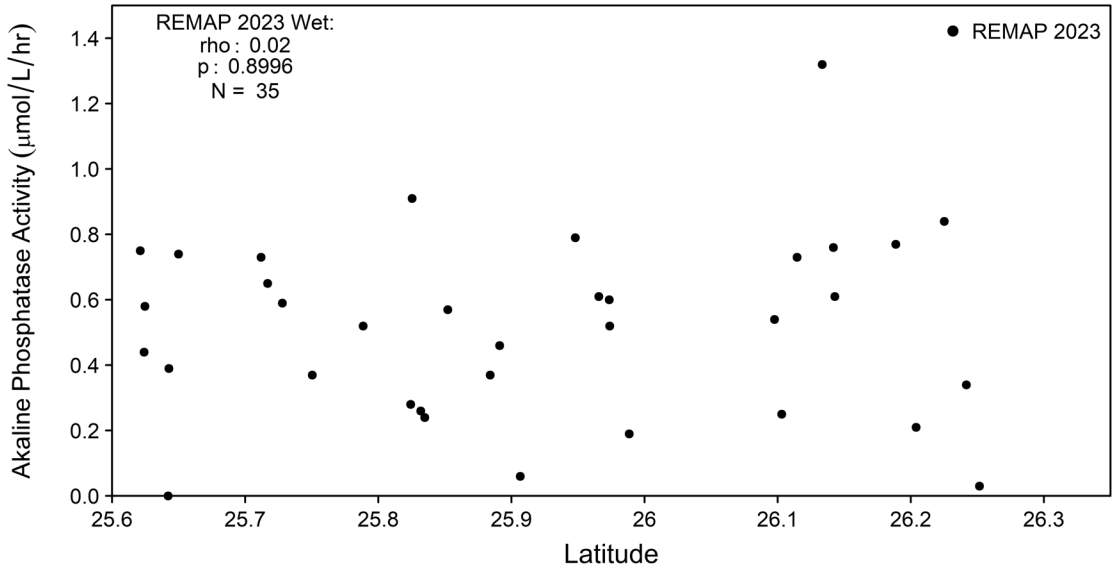

Figure 4-21: REMAP 2023 surface water alkaline phosphatase activity (µMol/L/hour)

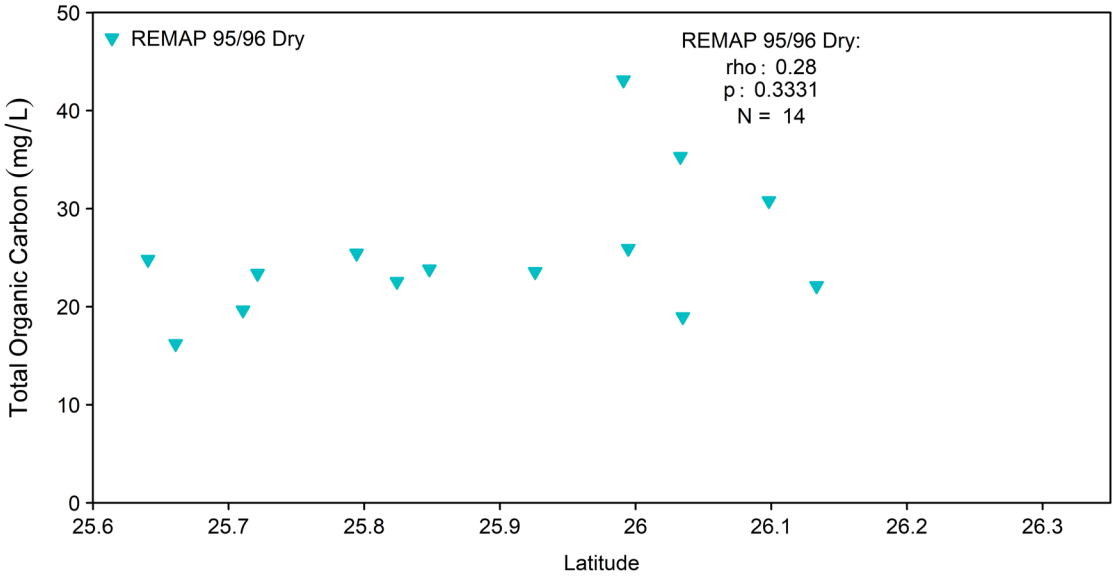

Figure 4-22: REMAP 1995-1996 dry season surface water total organic carbon (mg/L) latitude gradient plot

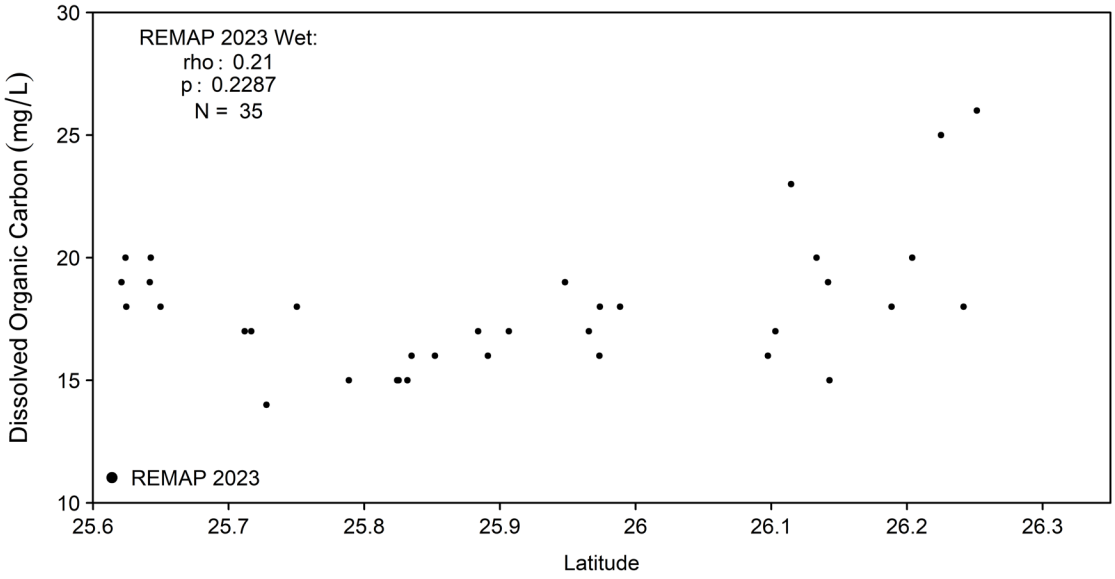

Figure 4-23: REMAP 2023 surface water dissolved organic carbon (mg/L) latitude gradient plot

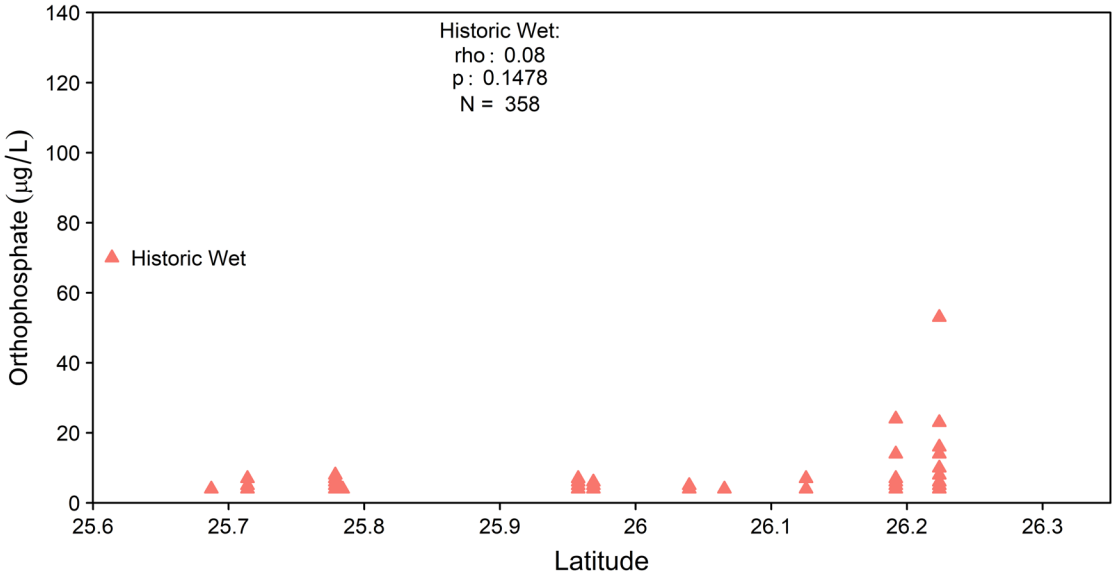

Figure 4-24: Historic surface water orthophosphate (µg/L) latitude gradient plot

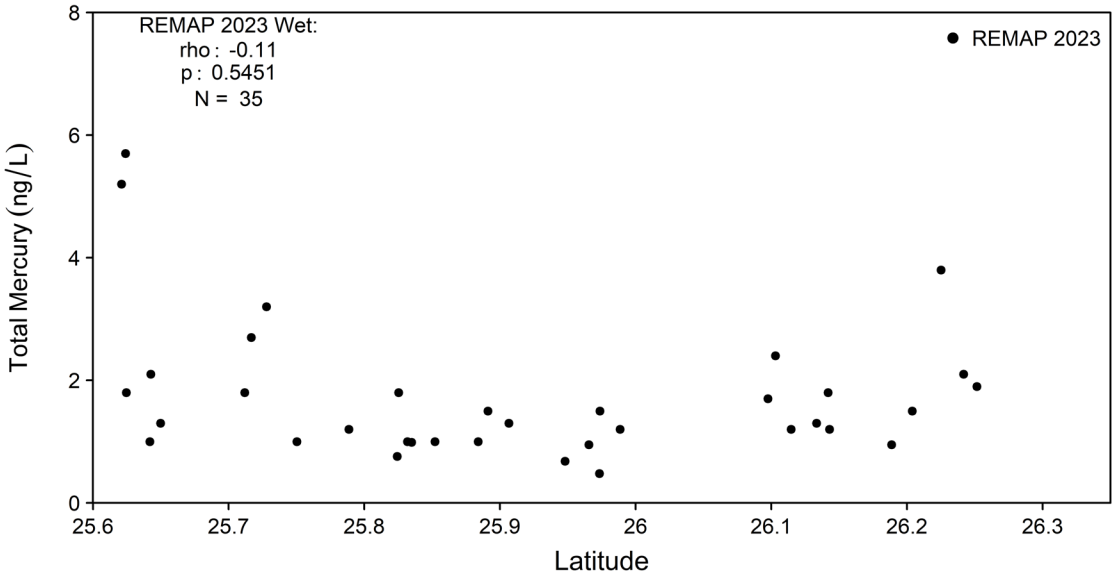

Figure 4-25: REMAP 2023 surface water total mercury (ng/L) latitude gradient plot

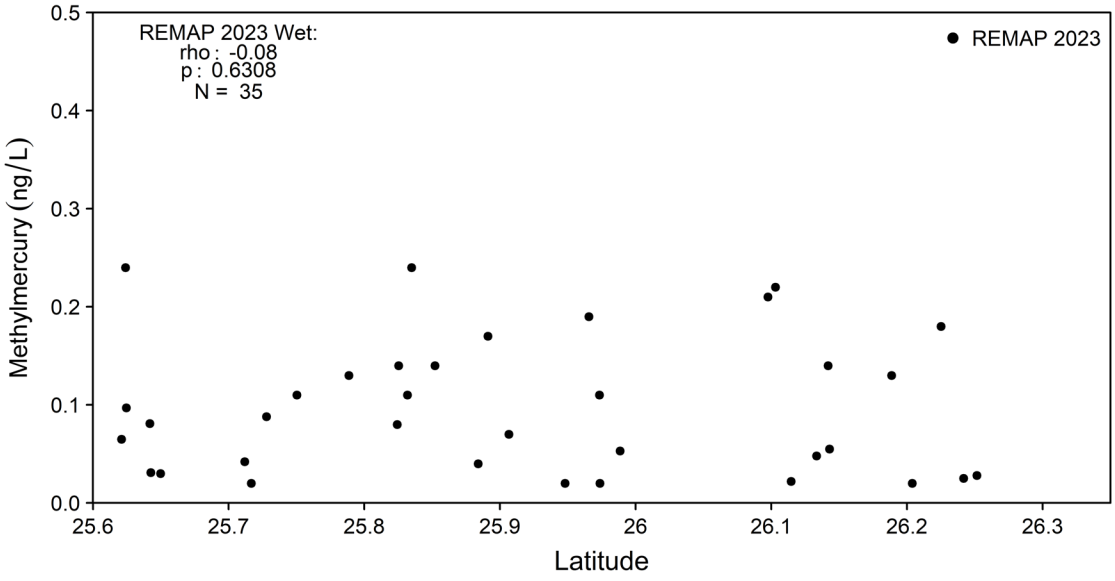

Figure 4-26: REMAP 2023 surface water methyl mercury (ng/L) latitude gradient plot

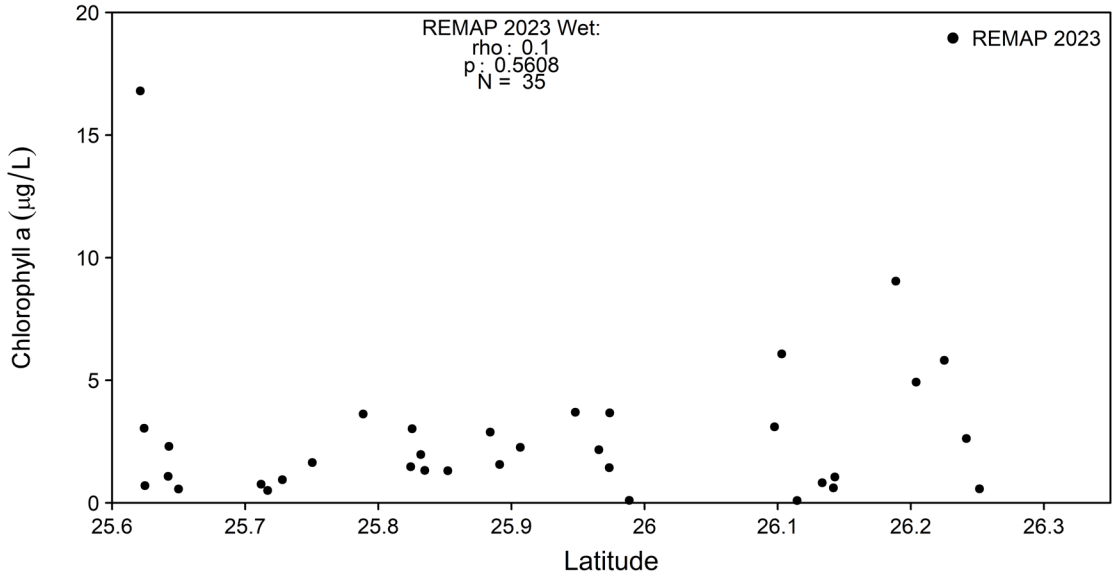

Figure 4-27: REMAP 2023 surface water chlorophyll-*a* latitude gradient plot

Soil Analytes

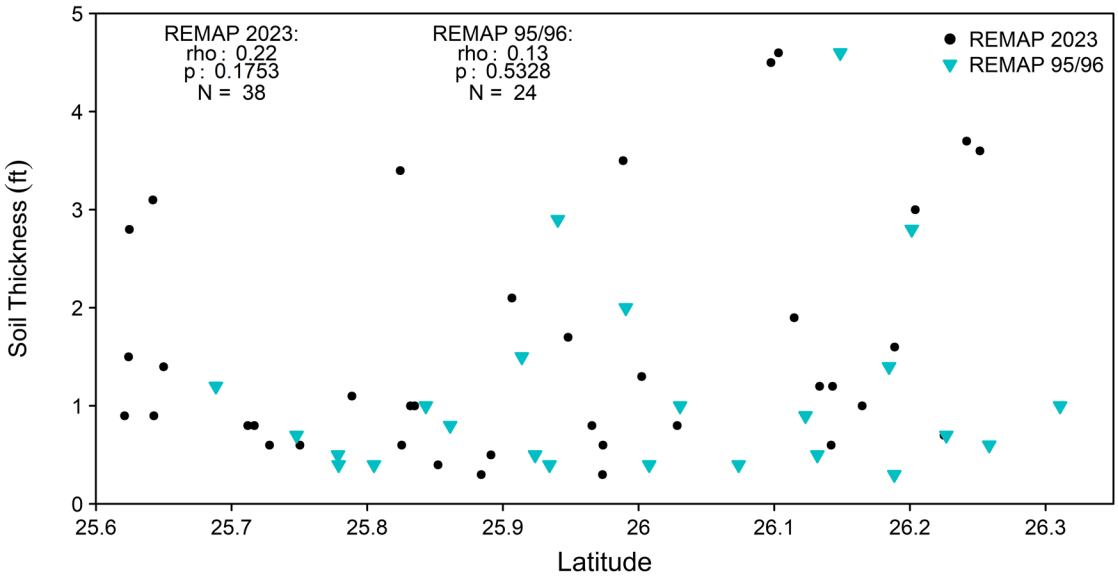

Figure 4-28: Wet season soil thickness (ft) latitude gradient plot, comparing REMAP 1995-1996 data and REMAP 2023 data

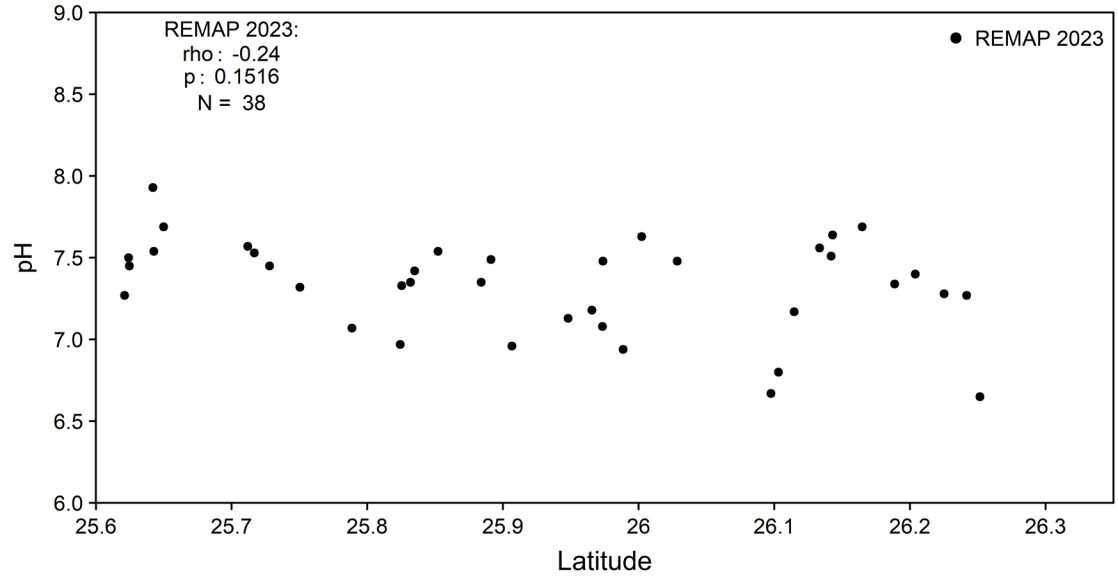

Figure 4-29: REMAP 2023 soil pH latitude gradient plot

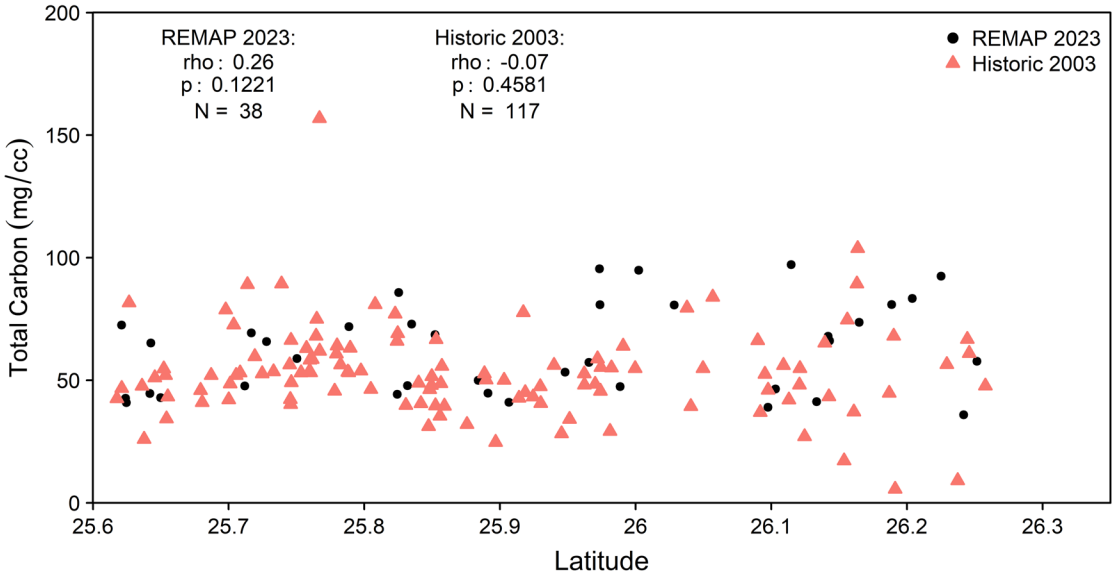

Figure 4-30: Soil total carbon (mg/cc) latitude gradient plot, comparing historic 2003 data and REMAP 2023 data

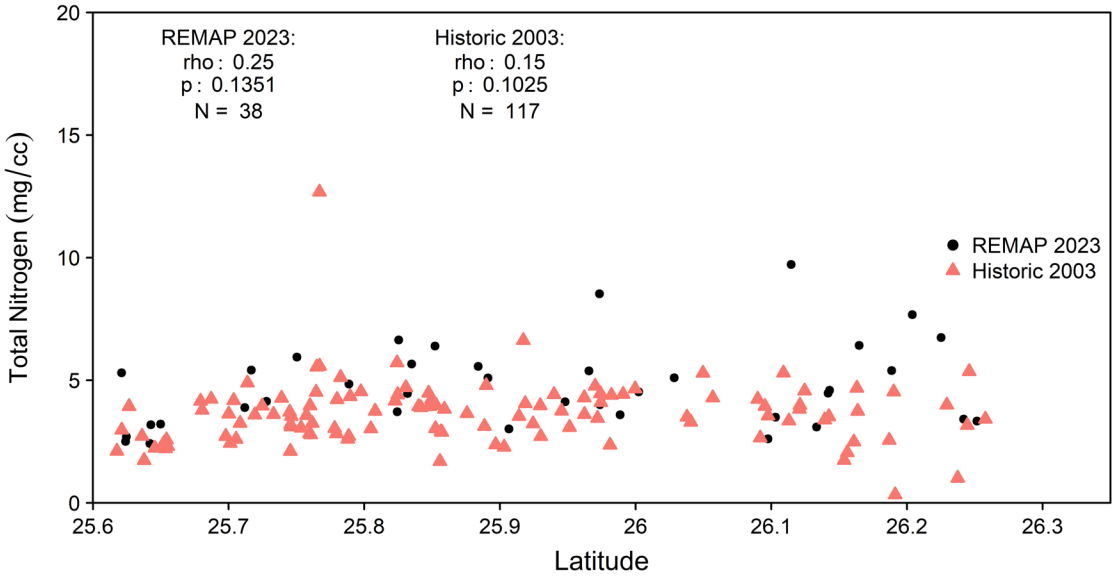

Figure 4-31: Soil total nitrogen (mg/cc) latitude gradient plot, comparing historic 2003 data and REMAP 2023 data

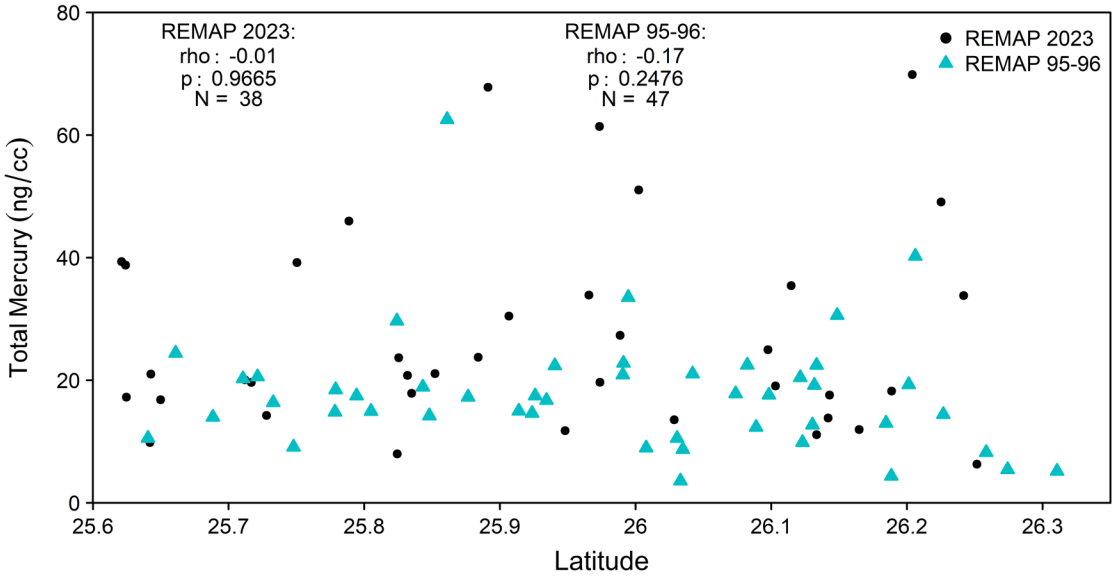

Figure 4-32: Soil total mercury (ng/cc) latitude gradient plot, comparing REMAP 95-96 and REMAP 2023 data

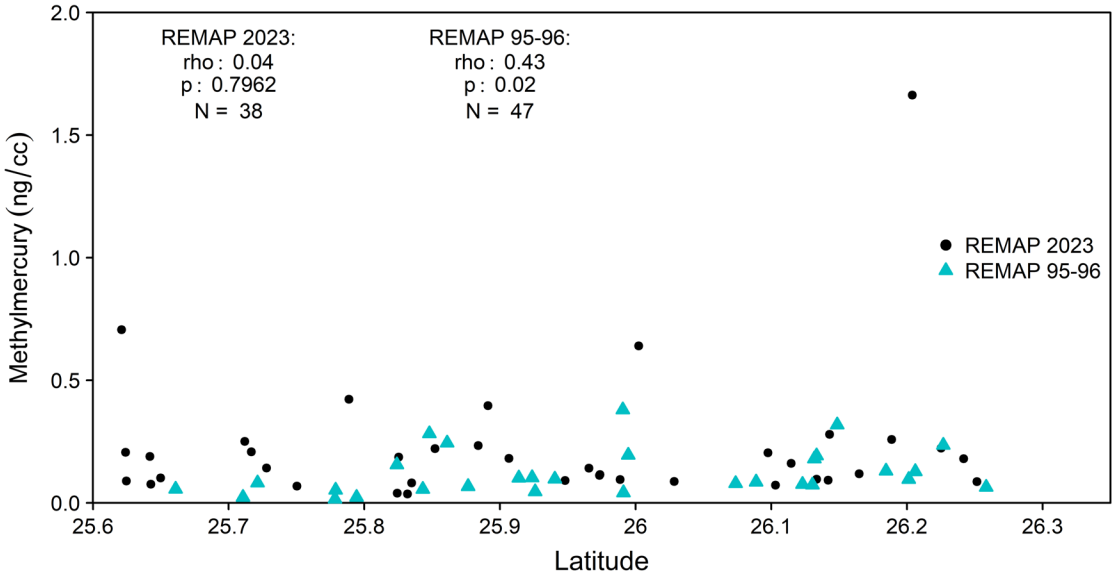

Figure 4-33: Soil methymercury (ng/cc) latitude gradient plot, comparing REMAP 95-96 and REMAP 2023 data

Fish Analytes

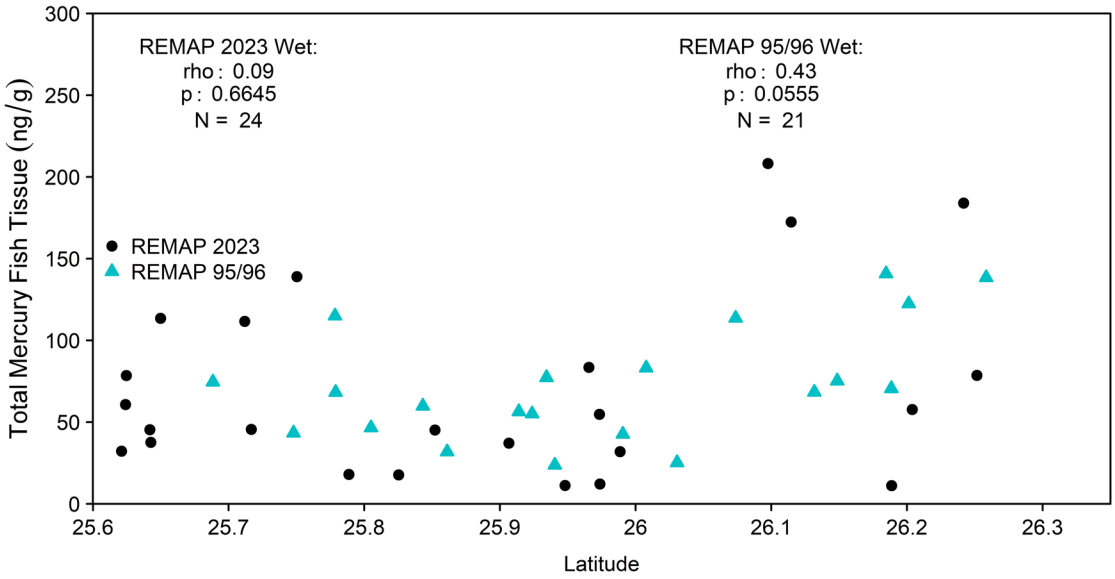

Figure 4-34: Mosquitofish total mercury (ng/g) latitude gradient plot, comparing REMAP 95-96 and REMAP 2023 data

Water Column Periphyton Analytes

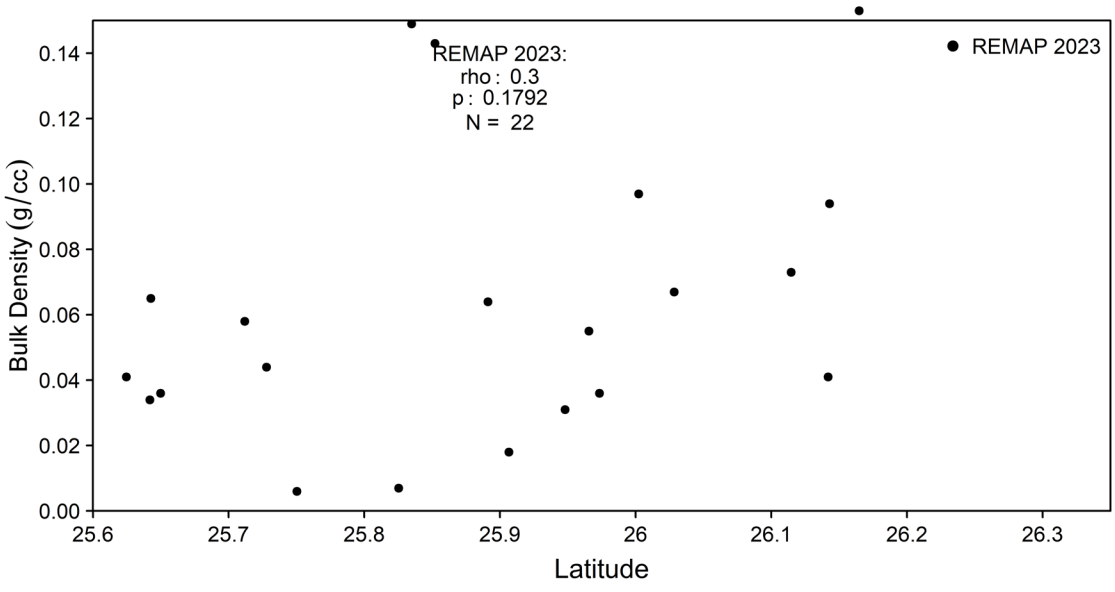

Figure 4-35: REMAP 2023 water column periphyton bulk density (g/cc) latitude gradient plot

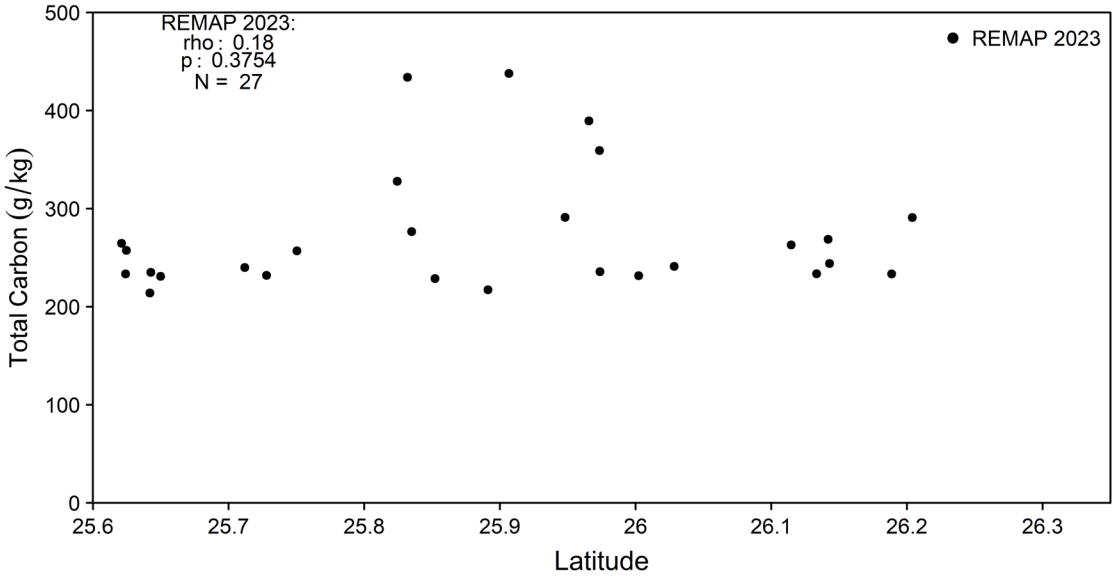

Figure 4-36: REMAP 2023 water column periphyton total carbon (g/kg) latitude gradient plot

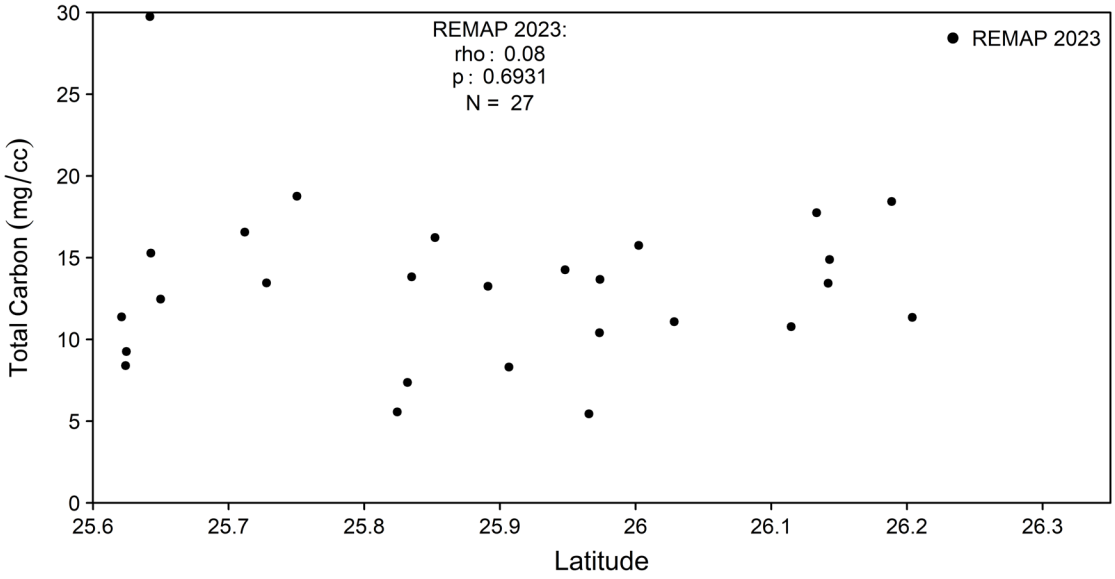

Figure 4-37: REMAP 2023 water column periphyton total carbon (mg/cc) latitude gradient plot

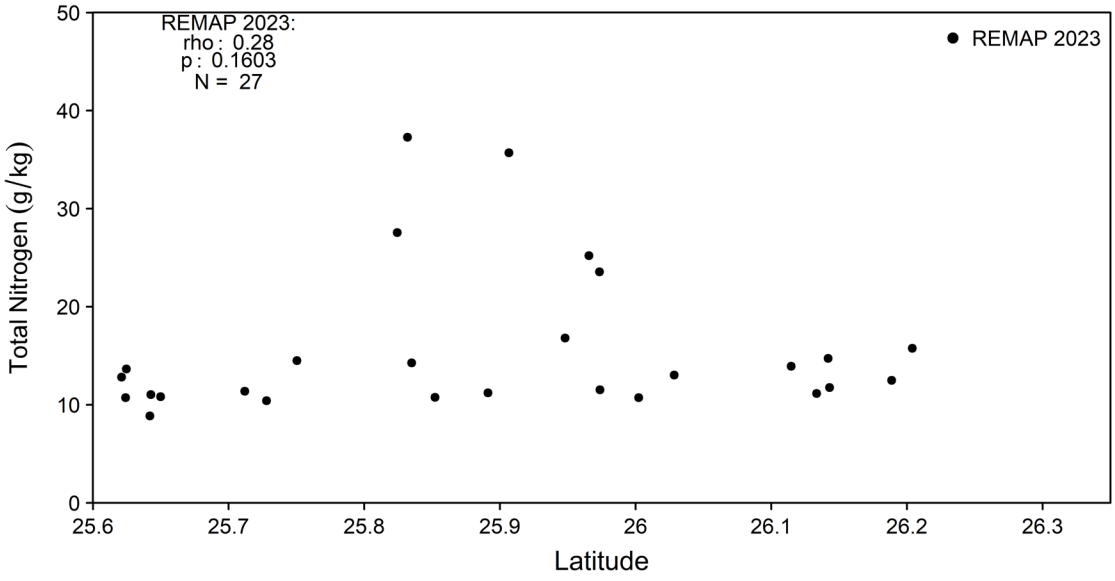

Figure 4-38: REMAP 2023 water column periphyton total nitrogen (g/kg) latitude gradient plot

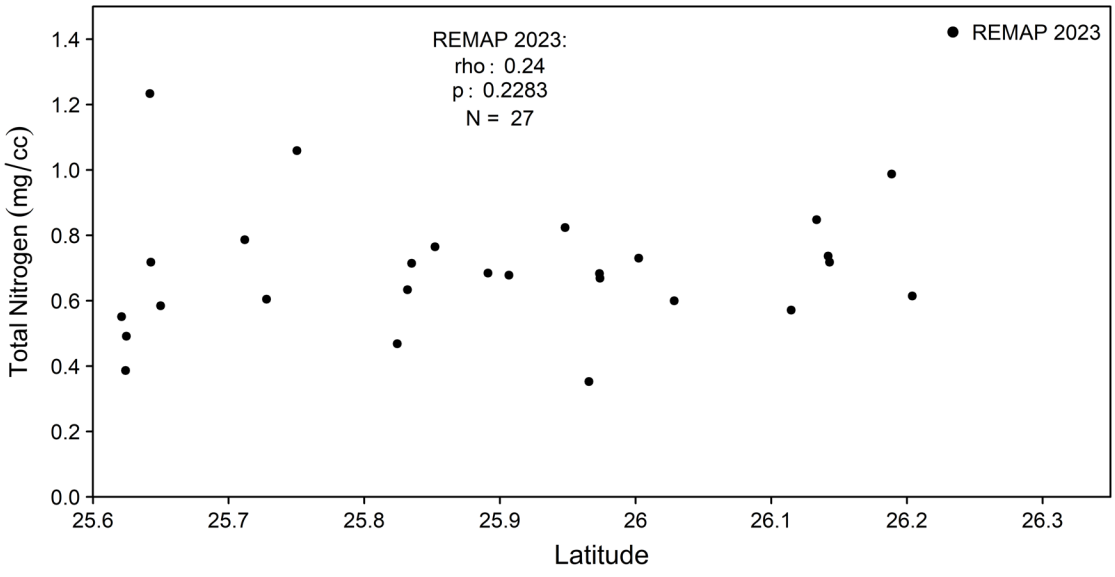

Figure 4-39: REMAP 2023 water column periphyton total nitrogen (mg/cc) latitude gradient plot

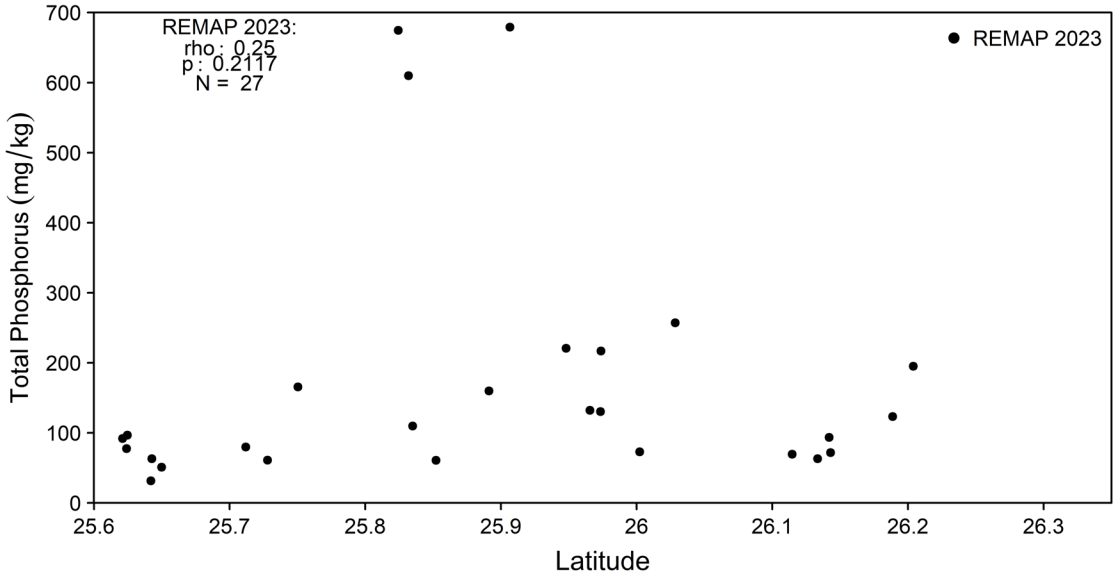

Figure 4-40: REMAP 2023 water column periphyton total phosphorus (mg/kg) latitude gradient plot

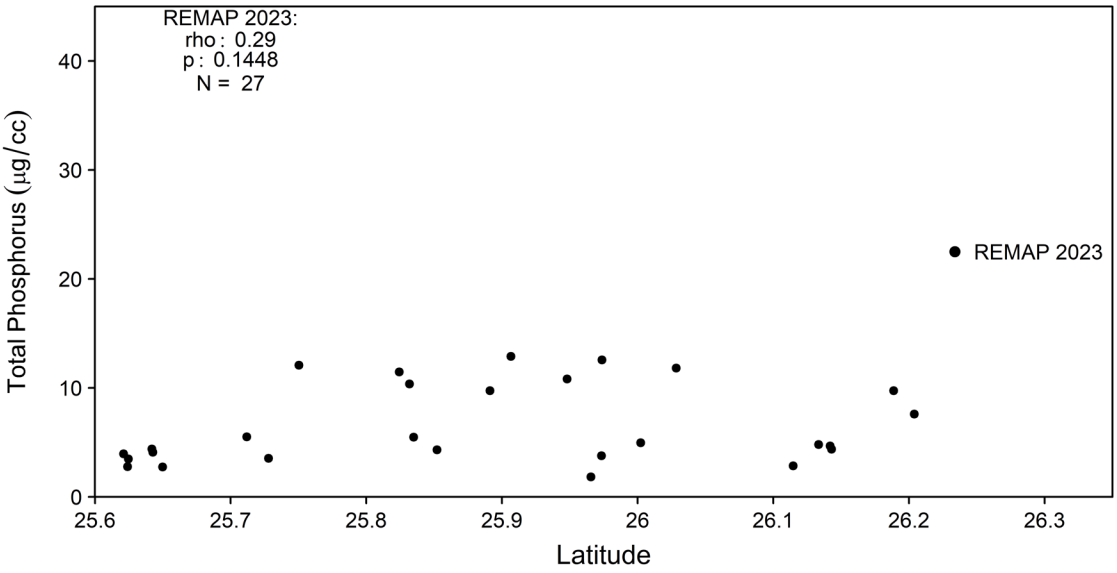

Figure 4-41: REMAP 2023 water column periphyton total phosphorus (µg/cc) latitude gradient plot

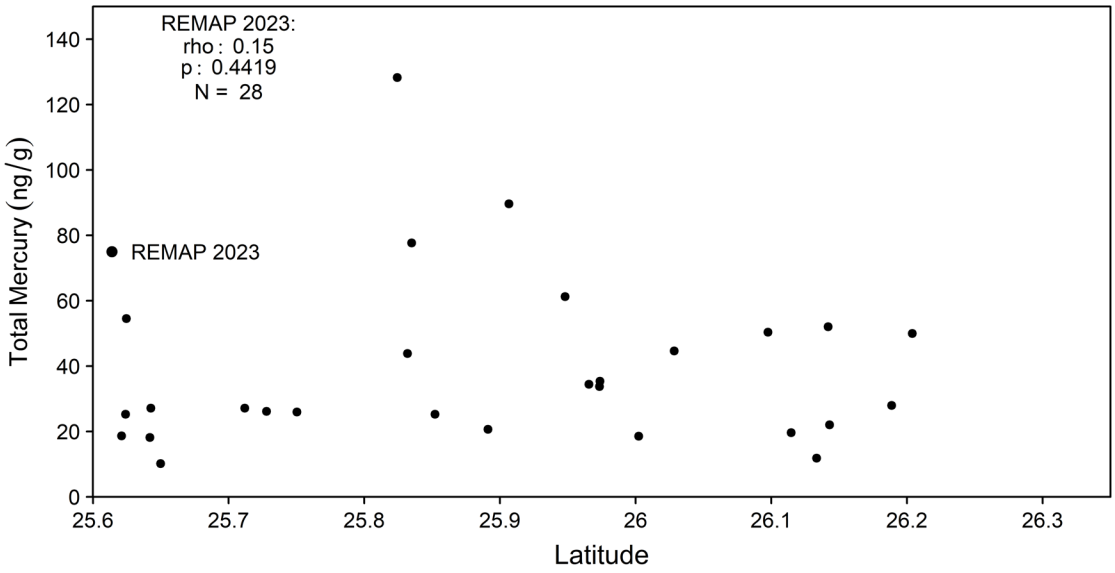

Figure 4-42: REMAP 2023 water column periphyton total mercury (ng/g) latitude gradient plot

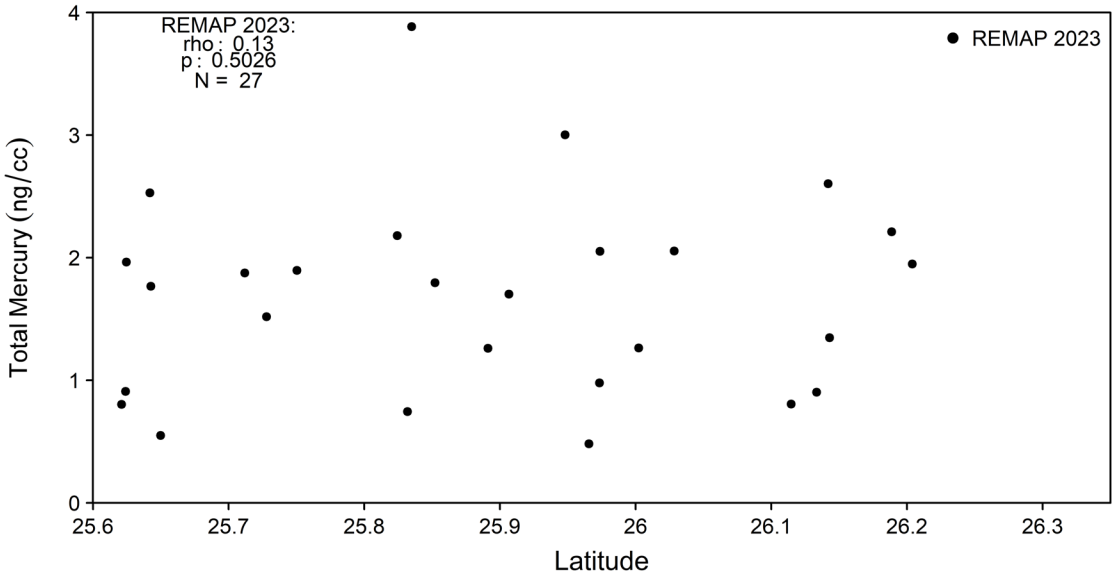

Figure 4-43: REMAP 2023 water column periphyton total mercury (ng/cc) latitude gradient plot

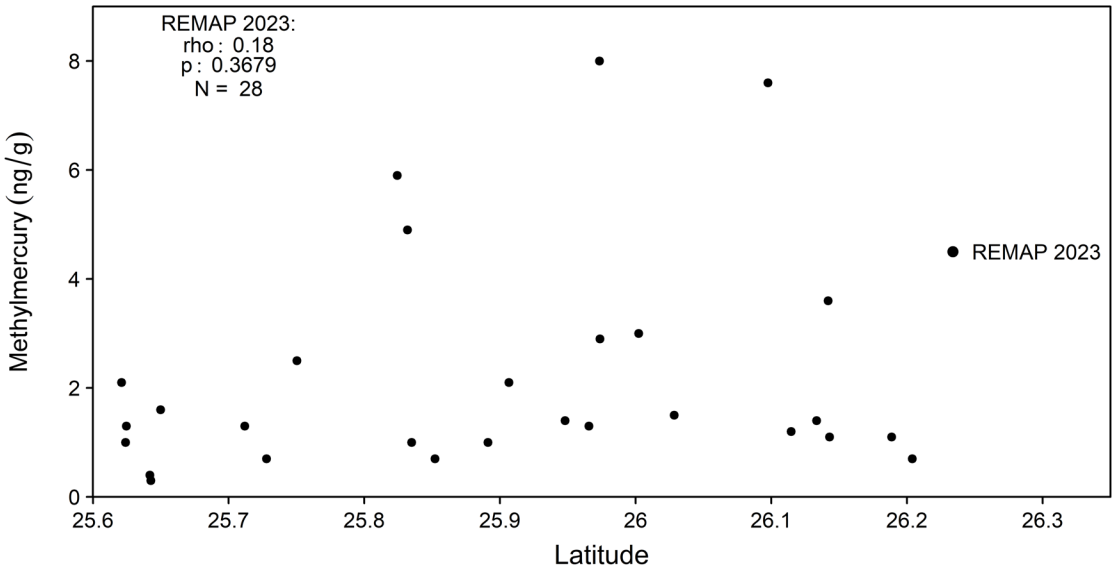

Figure 4-44: REMAP 2023 water column periphyton methylmercury (ng/g) latitude gradient plot

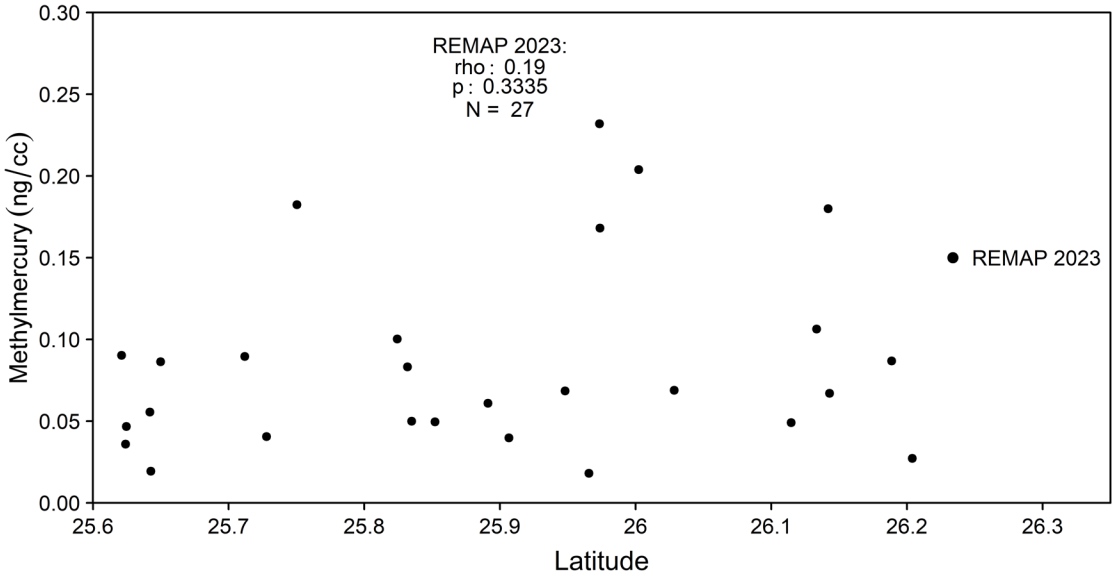

Figure 4-45: REMAP 2023 water column periphyton methylmercury (ng/cc) latitude gradient plot

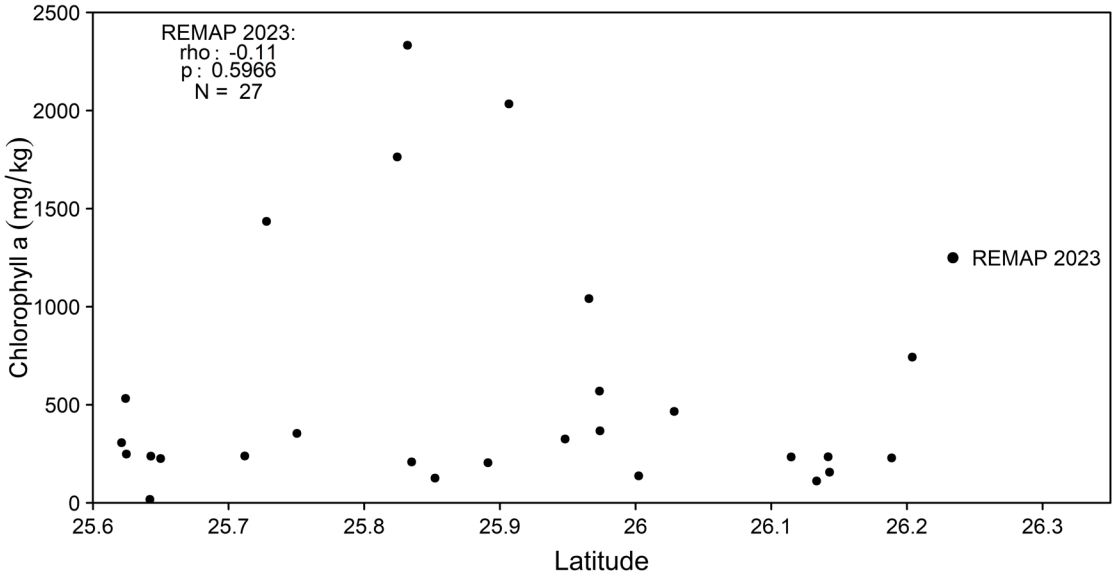

Figure 4-46: REMAP 2023 water column periphyton chlorophyll-*a* (mg/kg) latitude gradient plot

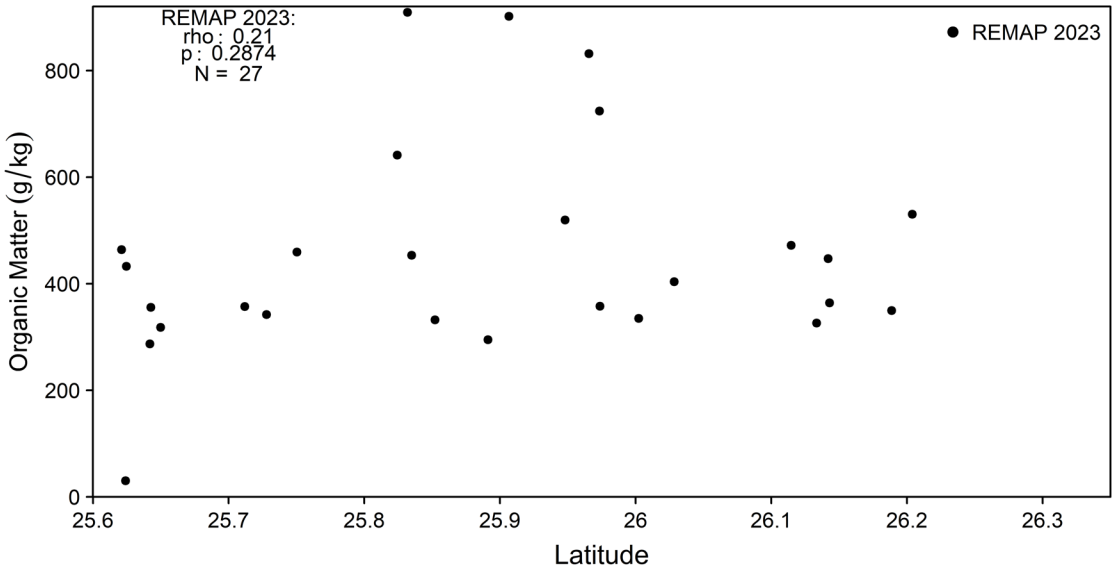

Figure 4-47: REMAP 2023 water column periphyton organic matter (g/kg) latitude plot

Benthic Periphyton Analytes

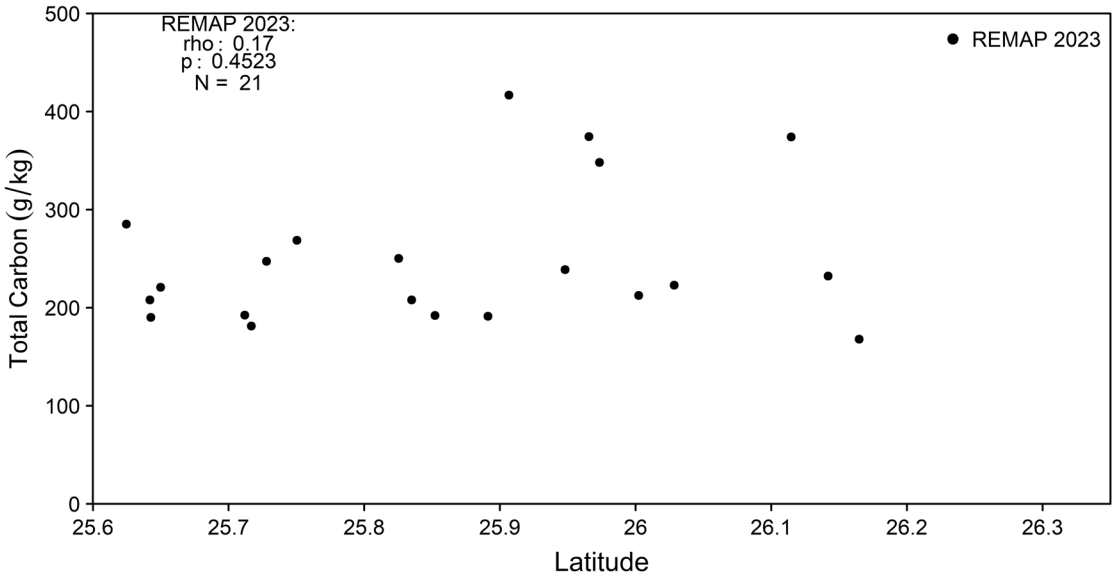

Figure 4-48: REMAP 2023 benthic periphyton total carbon (g/kg) latitude gradient plot

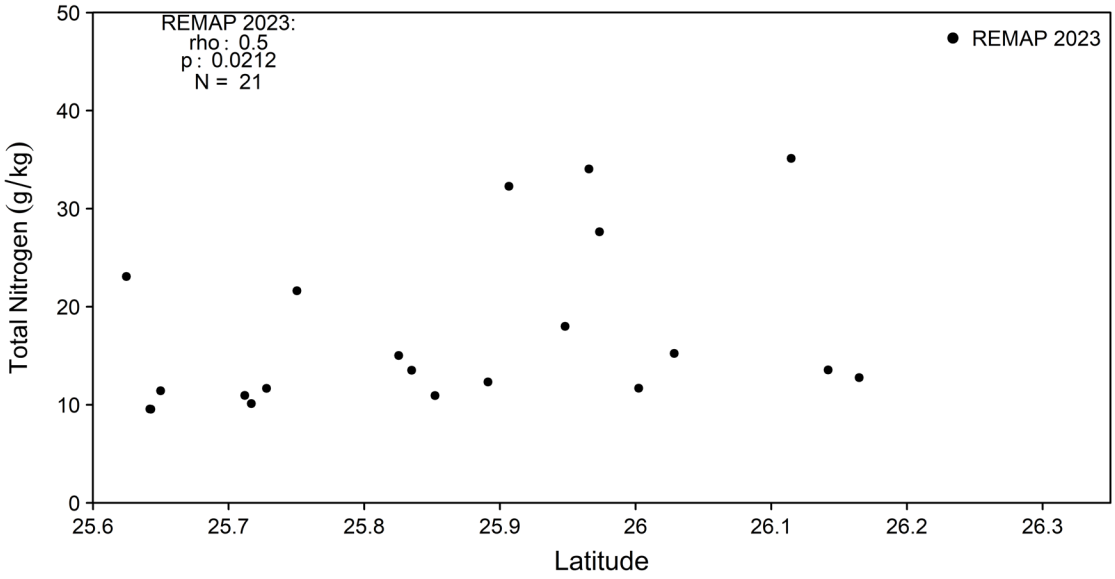

Figure 4-49: REMAP 2023 benthic periphyton total nitrogen (g/kg) latitude gradient plot

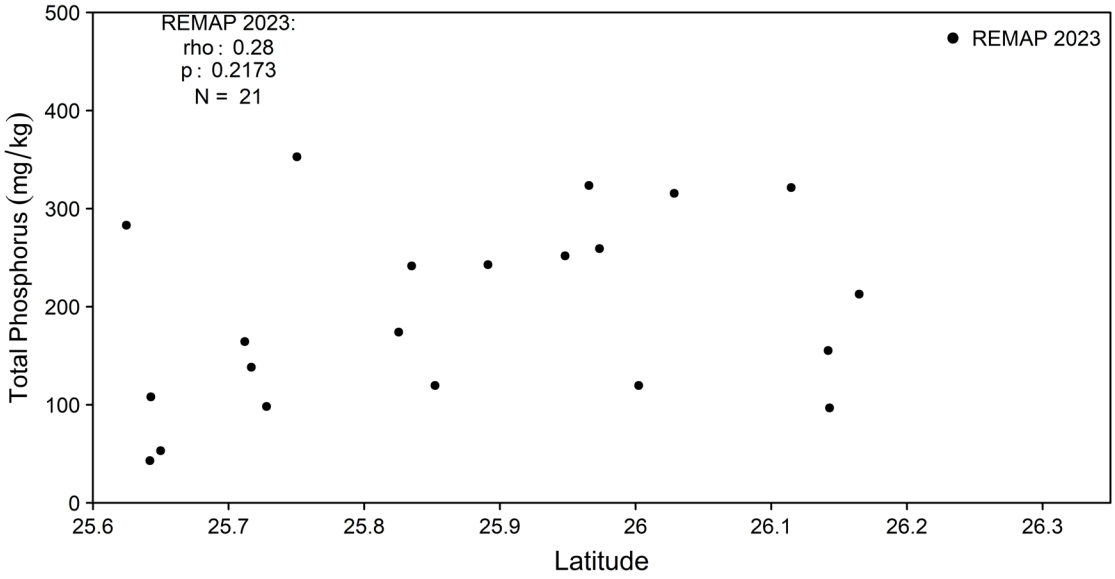

Figure 4-50: REMAP 2023 benthic periphyton total phosphorus (mg/kg) latitude gradient plot

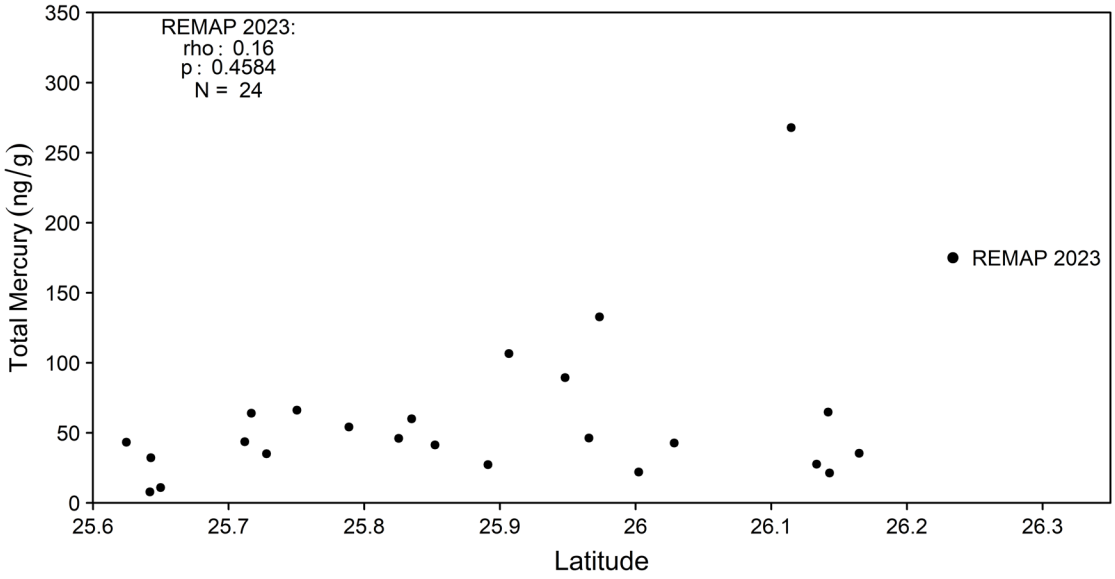

Figure 4-51: 2023 REMAP benthic periphyton total mercury (ng/g) latitude gradient plot

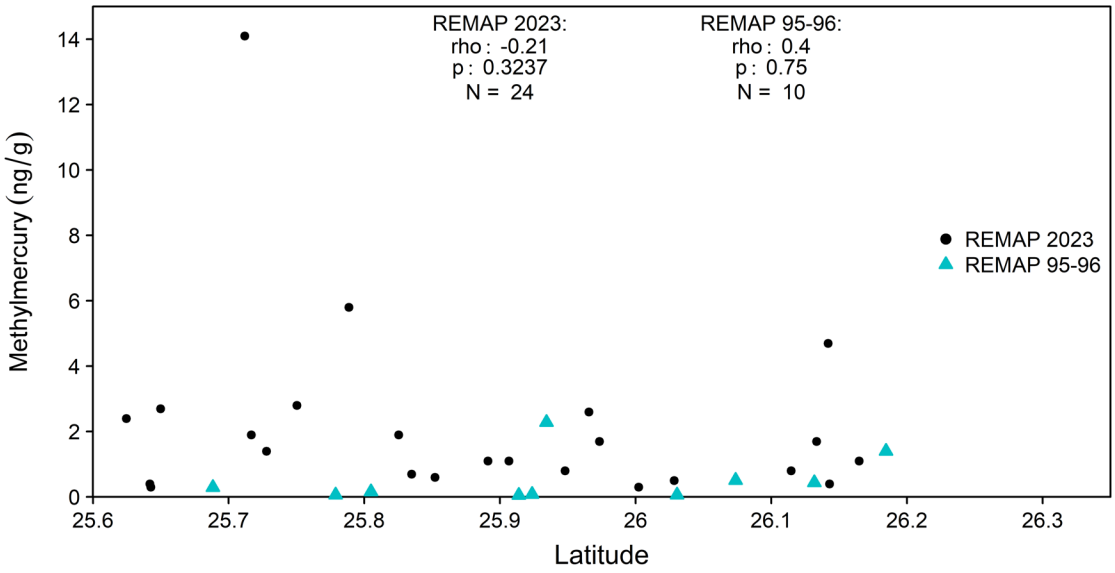

Figure 4-52: REMAP 2023 benthic periphyton methylmercury (ng/g) latitude gradient plot

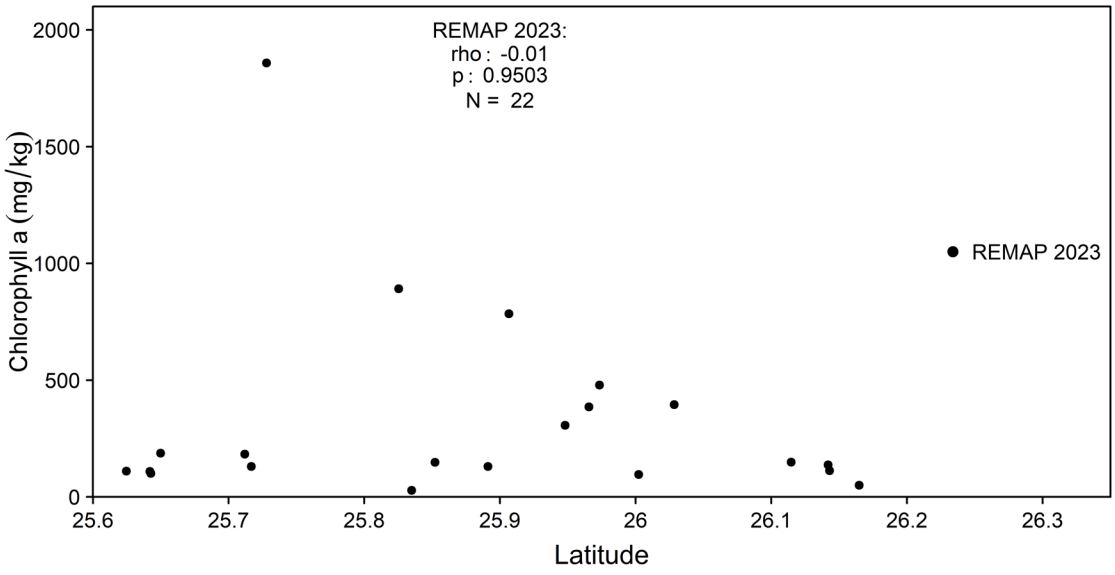

Figure 4-53: REMAP 2023 benthic periphyton chlorophyll-*a* (mg/kg) latitude gradient plot

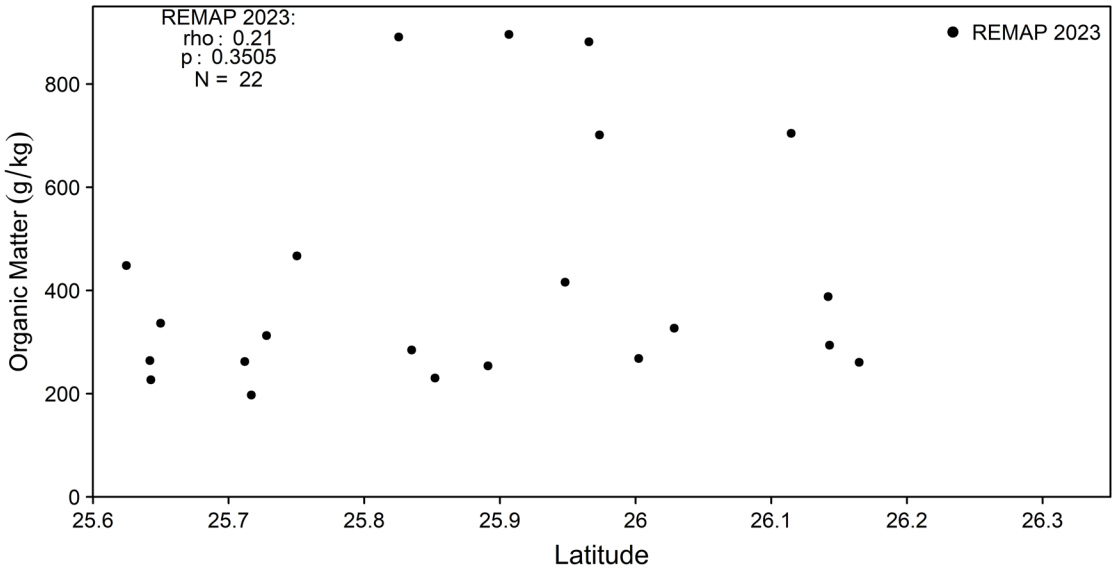

Figure 4-54: REMAP 2023 benthic periphyton organic matter (g/kg) latitude gradient plot

Sawgrass Analytes

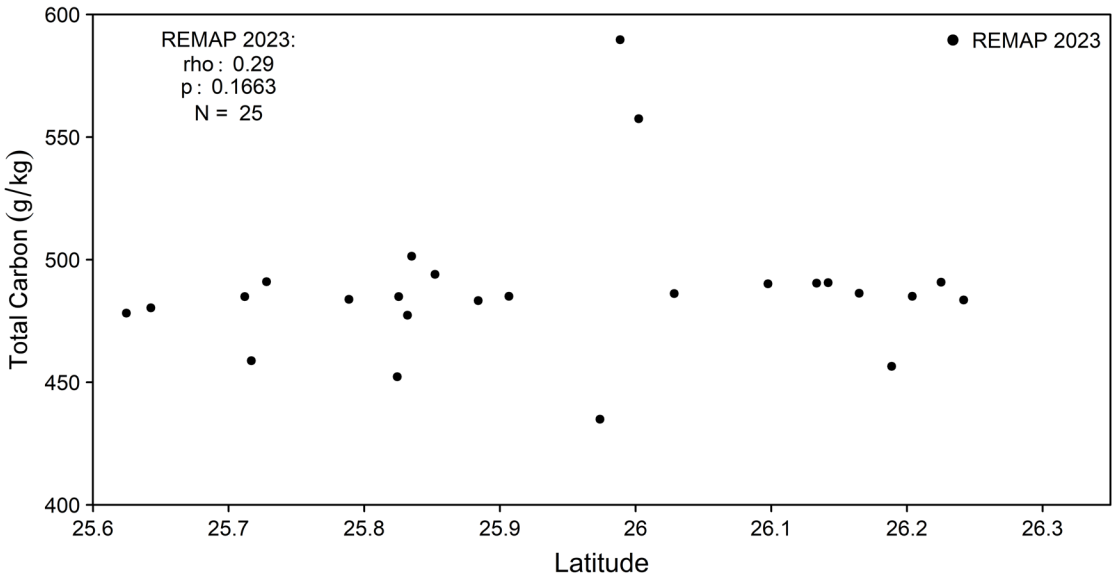

Figure 4-55: REMAP 2023 sawgrass total carbon (g/kg) latitude gradient plot

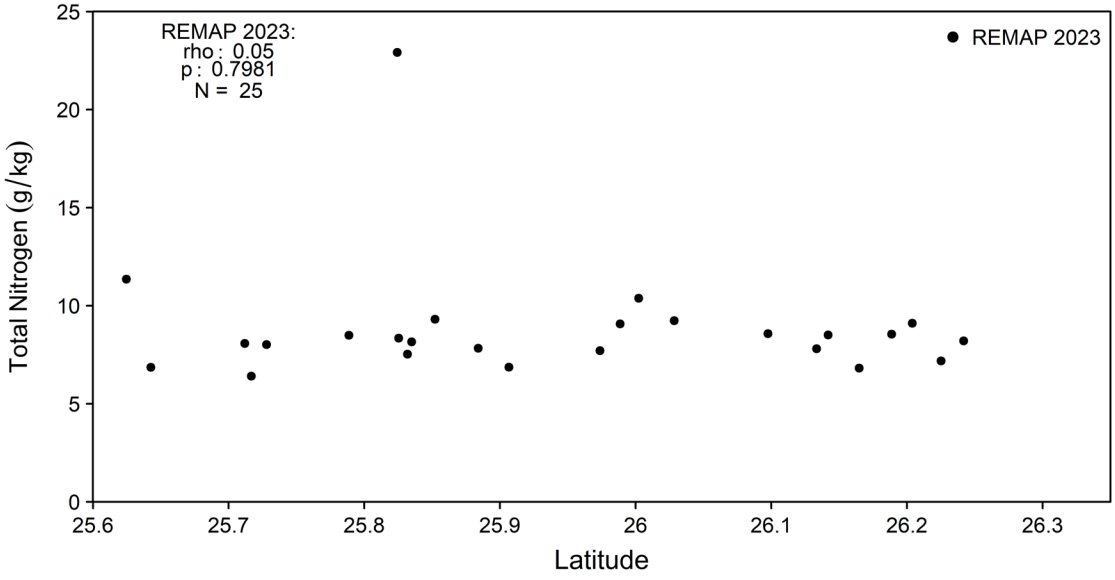

Figure 4-56: REMAP 2023 sawgrass total nitrogen (g/kg) latitude gradient plot

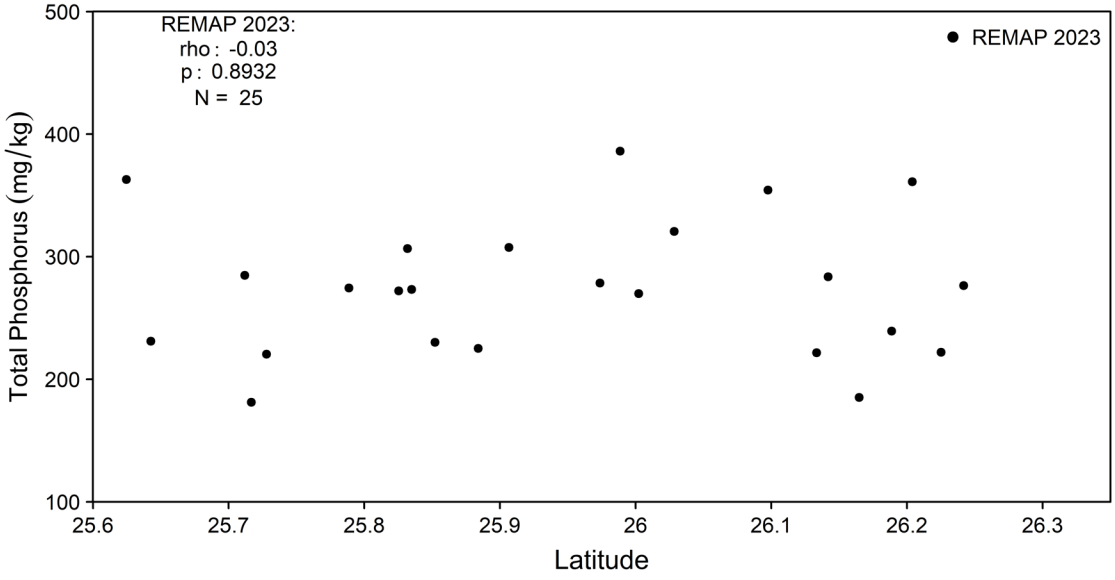

Figure 4-57: REMAP 2023 sawgrass total phosphorus latitude gradient plot