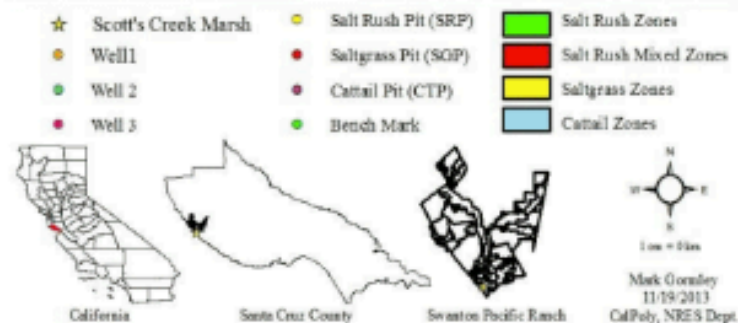


More Questions from the Creek

Ruthann Richards

Cheng Lab

Scott's Creek Marsh






Pre-Lagoon
Phase

Lagoon
Phase







	Oxidized Form	Reduced Form
Oxygen	O ₂	H ₂ O
Nitrogen	NO ₃ ⁻	N ₂ O, N ₂ , NH ₄ ⁺
Manganese	Mn ⁴⁺	Mn ²⁺
Iron	Fe ³⁺	Fe ²⁺
Sulfur	SO ₄ ²⁻	S ²⁻
Carbon	CO ₂	CH ₄

Research Question: Does Scott's Creek Marsh trend towards methanogenesis?

Hypothesis: The different zones show that Scott's Creek Marsh trends towards methanogenesis.

My Limitations

- * This project is based on data mined from the research of Mark Gormley who is researching the mechanisms of carbon sequestration in Salt Marshes
- * Due to the different focuses he doesn't have all the information that I would want
- * But he does have over 20 parameters to analyze including microbial biomass N, full soil pit descriptions, and Microbial CO₂ respiration

Variables

- * Microbial CO₂ respiration
- * Nitrate Measurements
- * IRIS tubes
- * Soil Pit Descriptions
- * pH measurements
- * Salt concentrations



Salt Grass Zone



Salt Rush Zone



Cattail Zone



Salt Grass Zone



Salt Rush Zone



Cattail Zone