Wetland Management Effects on Carbon Sequestration and Greenhouse Gases

April 25, 2018 10:30am-12:00pm Session #12 Egret Room

Speakers: Janet Ho, UCF Dave Sumner, USGS Brian Benscoter, FAU Angelique Bochnak, ECT, Inc. Barclay Shoemaker, USGS

Moderator: Kimberli J. Ponzio

Case Study Locations

Lake Apopka North Shore

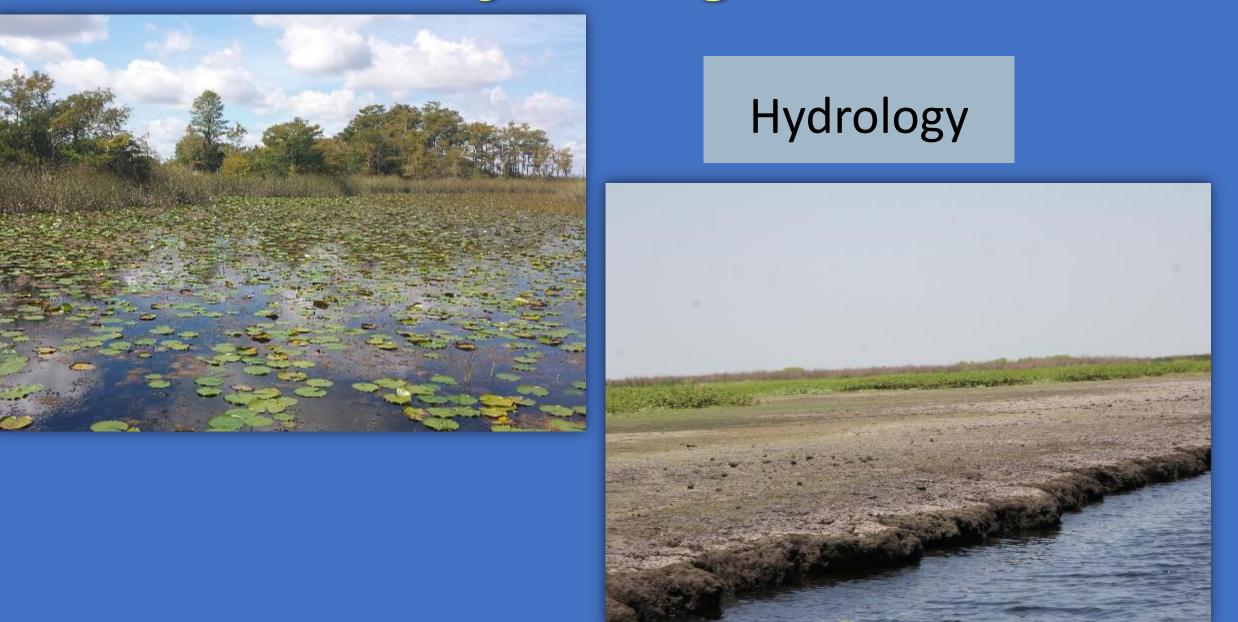
Moccasin Island

Fort Drum MCA

Greater Everglades



Primary Driving Forces

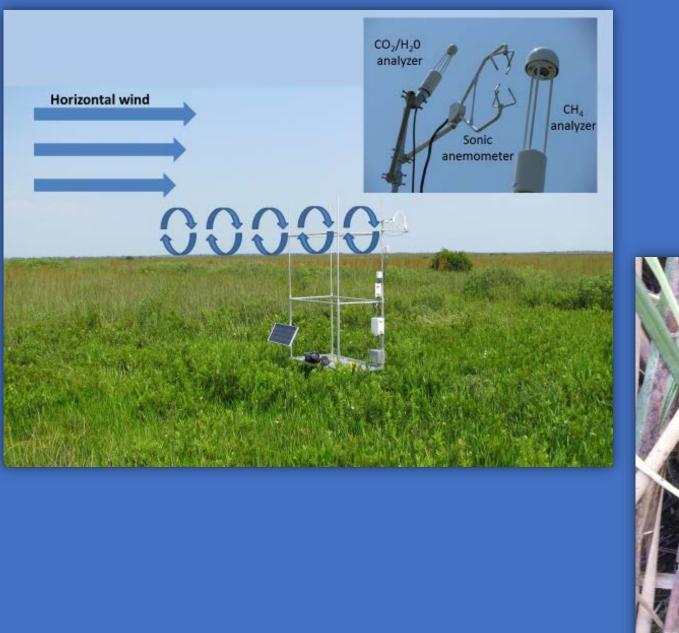


Primary Driving Forces









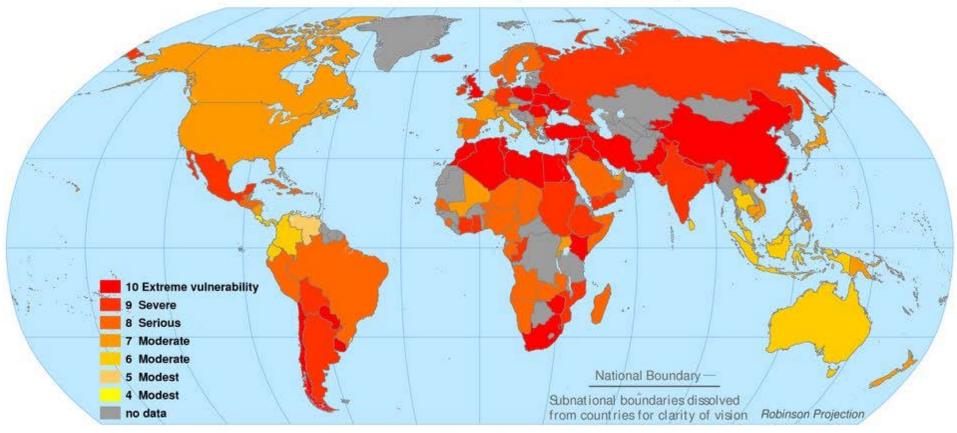
Multiple Scales



Natural Seasonality and Climate Change

Global Distribution of Vulnerability to Climate Change

Combined National Indices of Exposure and Sensitivity



Scenario A2 in Year 2100 with Climate Sensitivity Equal to 5.5 Degrees C Annual Mean Temperature with Aggregate Impacts Calibration and Enhanced Adaptive Capacity

http://ciesin.columbia.edu/data/climate/



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What you will get out of this symposium?

 Predict effects of changes in hydrology and fire on carbon and water dynamics
Manage towards goals of carbon sequestration and ecosystem resiliency

Speaker Line-up

Janet Ho, UCF - Characterizing biogeochemical shifts in two shrub encroached marshes under different historical disturbance regimes in the St. Johns River, FL

Dave Sumner, USGS - Role of hydroperiod and fire in carbon dynamics of a subtropical peat marsh

Brian Benscoter, FAU - Shifting fire regimes and the future of peatland carbon storage

Angelique Bochnak, ECT, Inc. – Vegetation response and elevation change in a perturbed hydrologic regime: The subsidy stress gradient in a peat-based floodplain marsh

Barclay Shoemaker, USGS - Carbon cycling and potential soil accumulation within coastal forested wetlands

Questions and Answers



Thank You! kponzio@sjrwmd.com

Thanks to the SJRWMD, presenters, and audience!