ADAPTING ASSESSMENT TOOLS AND WATER QUALITY CRITERIA FOR A CHANGING CLIMATE

Beck R. Frydenborg
Frydenborg EcoLogic, LLC, Tallahassee, FL USA

Climate change is predicted to have several significant effects on Florida’s waters, and stakeholders and policymakers must prepare accordingly. Changes in rainfall, temperature, streamflow, lake and wetland levels, and groundwater recharge will influence aquatic community structure and function, nutrient dynamics, pollutant transport, and attainment of minimum flows and levels. Current environmental assessment tools and restoration strategies have mainly been developed to account for human activities in local watersheds. Such strategies may become unsuccessful if climate change is not properly considered.

This presentation examines the potential influence of climate change on water quality/quantity management frameworks, and how these regulatory systems must adapt to continue to be effective. These include exploring how:

- Watershed restoration programs (Total Maximum Daily Loads);
- Minimum Flows and Levels; and
- Biological assessments (e.g., Stream Condition Index, Lake vegetation Index) may need to be revised to account for long term changes in hydrology and pollutant loadings.

PRESENTER BIO: Beck Frydenborg is the Senior Scientist at Frydenborg Ecologic, LLC. During her six years with the company, she has been part of more than 60 water quality and assessment projects throughout Florida.