

QUANTIFYING THE ANCILLARY BENEFITS OF CONSTRUCTED TREATMENT WETLANDS

Scott Knight¹, Baris Yildirim-Alicea^{1,2}

¹Wetland Solutions, Inc., Gainesville, FL, USA

²University of Florida, Gainesville, FL, USA

Constructed treatment wetlands are a widely applied technology in the state of Florida and around the world to manage a variety of water quality issues associated with municipal wastewaters, industrial wastewaters, agricultural runoff, and stormwater. While the water quality benefits of wetlands have been widely studied and documented, wetlands also provide a range of ancillary benefits that have been less widely evaluated. A major ancillary benefit of treatment wetlands is the wildlife habitat that is provided by the ecosystems to wetland dependent species. Birds are one of the most obvious and easily observed wildlife groups that use wetlands. Birds are also of particular interest to a range of recreational user groups and receive significant public attention.

This presentation will focus on bird utilization at the Sweetwater Wetlands Park in Gainesville, Florida based on analysis of a large, citizen-science dataset of bird observations. These data are combined with visitor counts to quantify the effort associated with birding and changes in bird utilization following treatment wetland development.

PRESENTER BIO: Dr. Knight is a vice president at WSI and a water resources engineer with more than 10 years of experience working on constructed treatment wetlands.