

Developing Numeric Non-Degradation Water Quality Standards for Biscayne National Park

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ABSTRACT

In 1978 Biscayne Bay was designated as an Outstanding Florida Water (OFW). This designation included Biscayne National Monument, which was re-dedicated in 1982 as Biscayne National Park (BISC). Existing anti-degradation standards associated with the OFW designation are principally narrative rather than numeric and are therefore generally not enforceable. The enforceability of the OFW designation is extremely important to the preservation of BISC. Currently several high profile projects, scheduled to begin in the next two years, have shown that to adequately protect the Park these anti-degradation standards must be defined and codified into numeric standards. These issues include a wastewater re-use component of the Comprehensive Everglades Restoration Plan and a US Army Corps of Engineers dredging project on the Miami River. Both projects potentially pose a serious threat to the water quality and biota of the Park and greater Biscayne Bay. Most of the compounds of concern with respect to these projects do not have standards set for them under the OFW designation. Working with Miami-Dade County, Florida International University and the State of Florida, BISC can help develop and set numeric standards for water and sediment that will be codified by the State and the County under the OFW designation. Standard development will be done by reviewing and compiling data. Data discrepancies and differences in analytical methodologies will be assessed and any differences will be reconciled. A specific statistical method for analysis will be agreed upon between the County, State and Park and then applied to the data. Parameters to be evaluated fall in to the following categories: nutrients, water clarity, physical parameters, sanitary parameters, metals, organic compounds, and emerging pollutants of concern.