

Ecological Impacts of Drought in the Everglades

Everglades Department, Watershed Management Division
South Florida Water Management District

Introduction

The current drought in South Florida, either in combination with water supply operations or alone, may result in water levels in the Everglades being drawn down below preferred levels for the biological components of the ecosystem. This document estimates the current ecological conditions in the Everglades and examines predicted ecological impacts that might occur. Earlier versions (April and May 2001) of these documents can be found at the south Florida Water Shortage Alert web site (<http://www.sfwmd.gov/curre/watshort/index2.html>) under “Environment” and within the Drought Ecological Impact reports. The April, 2001 report contains background information on how the ecological risk assessment models were developed and utilized based on an initial set date of April 1st, 2001. Ecological analysis for the Water Conservation Areas 1 and 2A deviations can also be found in that earlier version. This current document contains information for June, 2001 ecological conditions and predictions based on an initial set date of June 1st, 2001.

Muck Fire Hazard Index

This index consists of estimated water levels at a series of hydrologic monitoring points, measured relative to threshold values established for each monitoring point. For the muck fire index within the everglades, soil surface is the threshold value. These monitoring points were selected to provide coverage of the Everglades based on a set of gages that are in current use (Table 1, Figure 1).