

SOUTH FLORIDA EXTENSION AGENT PERCEPTIONS ON CLIMATE FORECASTS FOR WATER MANAGEMENT

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Poster Abstract

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El Niño Southern Oscillation (ENSO) phase is an important determinant of year-to-year climatic variability. Generally, the fall and winter in south Florida during El Niño years are more rainy and cooler than in neutral years. The fall and winter in La Niña years are generally warmer and drier than in neutral years. Research shows that the effects of these anomalies are strongest in the southern part of peninsular Florida. During El Niño years, hurricanes also typically make fewer landfalls in the southeast USA. Because ENSO effects on climate are greatest in the southern part of the state we hypothesized that seasonal climate forecasts might have the greatest potential applications in this region, especially as an aid in decision making to minimize risks in water management. The purpose of this study was to ascertain the perceptions of Florida extension agents who work within the South Florida Water Management District (SFWMD) on the water issues in their counties and on the potential usefulness of seasonal climate forecasts for water management. We held conversational interviews with 30 agents, representing 38% of all Extension agents in the study area. Agents believe that the best use would be in planning reservoir budgeting and policy decision, which is in the domain of the water management district. Potential uses at the extension agents' scale include educating farmers to pump water from agricultural fields to canals ahead of forecast rainy seasons or advising on holding water for irrigation or for cattle to drink if a dry season is forecast. Extension agents will use climate forecasts to educate. Many participants perceived urban sprawl as having stronger effects on water issues than agriculture. Forecasts have potential for a wide range of water management decisions both urban and rural. Water quality problems mentioned were excessive nitrogen, phosphorous, pesticides, and salt intrusion.

Key Words: climate forecasts, El Niño, ENSO, extension agents, perceptions