



South Florida Water Management District

GOVERNING BOARD LUNCH & LEARN METEOROLOGY'S ROLE IN WATER MANAGEMENT MINUTES

October 28, 2020

11:30 AM

via Communications Media Technology

www.SFWMD.gov

This moderated Lunch & Learn will provide the public and Governing Board with an overview of how meteorology is used in the management of water.

The workshop session is informative in nature, and no decisions will be made by the Governing Board.

1. Overview of Lunch & Learn Format

Chairman Goss began the workshop at approximately 11:30 AM.

2. Meteorological Support to District Operations - Eric Swartz, Lead Meteorologist

Mr. Swartz provided a presentation on how the District uses meteorology in the management of water. Items discussed included a background on meteorology support; meteorological forecasting tools; and, South Florida rainfall patterns.

3. Board Discussion

In response to Ms. Thurlow-Lippisch's question regarding the start of dry season and the correlation between wet season and hurricane season ending on November 30th, Mr. Swartz stated wet season was not tied to hurricane season, and dry season typically began in October. Ms. Thurlow-Lippisch then asked Mr. Swartz to simplify the difference between EL Niño and La Niña as represented on slide 24 to which Mr. Swartz stated EL Niño events could increase rainfall during portions of the dry season while La Niña events could decrease rainfall during that

time frame but the strength of the EL Niño and La Niña events was a big factor in this effect.

Responding to Mr. Steinle's questions on forecast margin of error, extreme rain cycles, and the planning process, Mr. Swartz elaborated on new computer forecast modeling technologies and how they had improved over time and now include satellite data and aircraft data.

In response to Ms. Roman's question on slide 24 regarding monitoring evaporation rates, Mr. Swartz explained the tools in place to monitor evaporation rates throughout the District as well as factors that affected evaporation rates which include wind, sun intensity, seasonal changes, and humidity. Ms. Roman then asked if impacts to evaporation rates occurred due to global warming to which Mr. Swartz stated the largest potential impact on evaporation rates due to global warming would be felt during the late dry season from March through May by compounding dryness and/or drought.

Chairman Goss and Mr. Swartz discussed meteorological forecasting tools such as the European model and statistical models, and the current effort to find cost-effective sources of improved tools.

In response to Ms. Thurlow-Lippisch's questions on slide 24 regarding District rainfall and evaporation predictions, Mr. Swartz elaborated on processes involving staff recommendations pertaining to short-term forecasting such as a one or two-week outlook, and predictions which included seasonal outlooks from the National Oceanic and Atmospheric Administration. Mr. Mitnik further explained District meteorologists attend weekly discussions with staff to provide an overview of weather conditions and sometimes multiple times a week during more intense weather conditions. The Lake Okeechobee Regulation Schedule (LORS) was formulated as part of the decision-making process to consider the overall performance of Lake Okeechobee during climatic conditions and tributary conditions and relied heavily on District meteorologists' real-time decision-making processes throughout the system.

4. Public Comment

Gary Ritter, Florida Farm Bureau Foundation

5. Adjourn

The workshop concluded at approximately 12:50 PM.



Gina Kamak
Deputy District Clerk
South Florida Water Management District