



The South Florida Water Management District (SFWMD) is a regional governmental agency that oversees the water resources in 16 counties – from Orlando to the Florida Keys.

OUR MISSION

To **SAFEGUARD** and **RESTORE** South Florida's water resources and ecosystems, **PROTECT** our communities from flooding, and **MEET** the region's water needs while **CONNECTING** with the public and stakeholders

Ron DeSantis, Governor

SFWMD Governing Board

Chauncey Goss, Chairman

Scott Wagner, Vice Chairman

Ron Bergeron Sr.

Ben Butler

Charlie E. Martinez

Cheryl Meads

Charlette Roman

Jay Steinle

Drew Bartlett, SFWMD Executive Director

3301 Gun Club Road
West Palm Beach, FL 33406
561-686-8800
sfwmd.gov

Improving Accuracy of Water Level Data

SFWMD Upgrading from NGVD 29 to NAVD 88



Background

Managing water levels in South Florida is critical to the South Florida Water Management District's (SFWMD) mission. Safeguarding and restoring South Florida's water resources and ecosystems, protecting communities from flooding, and meeting the region's water needs depends on knowing exactly how much water must be moved from one elevation to another.

To enhance data accuracy, SFWMD is upgrading the measuring standard used to record water levels throughout its 16-county region. The vertical datum, or starting point, used to record water levels at all SFWMD reporting sites will be upgraded from the National Geodetic Vertical Datum of 1929 (NGVD 29) to the North American Vertical Datum of 1988 (NAVD 88).

What does the upgrade mean for the public and stakeholders?

The numbers that SFWMD associates with the elevation in lakes, canals and other bodies of water will change. Depending on the location within the SFWMD's boundaries, measurements of water levels in NAVD 88 will be approximately 0.6 feet to 1.6 feet lower than they are in NGVD 29. For example, the difference between the two measuring standards in Lake Okeechobee is 1.25 feet, so a water level of 12.5 feet NGVD 29 is 11.25 feet NAVD 88.

This variation affects only the numerical value for the elevation point. The volume of water and water depth remains the same.

Why is the measuring standard being upgraded?

Technological advancements incorporated into the newer NAVD 88 standard have created the ability for greater accuracy when measuring water levels. The NAVD 88 upgrade allows for more precision when determining how much water must be moved from one elevation to another.

The NAVD 88 standard was affirmed in 1993 as the official vertical datum in the National Spatial Reference System for the United States. A federal mandate requires government agencies using or producing vertical height information to make the transition to NAVD 88.