Hydrogeological Investigation of the Lower Floridan Aquifer in Polk County

Crooked Lake Site

January 9, 2018 – Presentation to District’s Environmental Advisory Committee
Agenda

• Project Location
• Project Overview
• Crooked Lake Status
• Communications
• Status of Related Investigations
Project Video: WaterMatters.org/LFA
Central Florida Water Initiative (CFWI)

A collaborative regional water supply planning effort to protect, develop, conserve and restore central Florida’s water resources
Project Overview

• Three-year testing program in two phases

• Phase 1
  – Initial drilling and testing
  – Installation of multiple monitor wells

• Phase 2
  – Drilling and testing of test/production wells
  – Aquifer performance tests:
    • Aquifer characteristics
    • Water quality
Crooked Lake Well Site
A project to explore the Lower Floridan aquifer in Polk County is under way at this site. For more information, call the Southwest Florida Water Management District at:

1-800-423-1476, ext. 4212

Funded by the Southwest Florida Water Management District

Versa-Drill coring rig
Crooked Lake LFA Site Update

• Project started January 2017
• Upper Floridan aquifer (UFA) and surficial aquifer (SA) wells completed
• LFA coring completed
  – Coring
  – Packer tests
  – Water quality testing
  – Geophysical logging
• USGS Optical Borehole Imaging and age dating
Removal of core sample

10 foot cores
**Limestone**

**Dolomite with infill of gypsum and organics**
Limestone with laminations/gypsum

Limestone with infill of gypsum and anhydrite
Porous dolomite

Crystalline dolomite and anhydrite

SA and UFA monitor wells
Storage of brackish water

Disposal of blended water
P280 SWFWMD Hydrogeologic Investigation of the Lower Floridan Aquifer
Specific Conductance Depth Profile During Drilling Well CL-EC

SE Polk Production Zone
Next Steps at Crooked Lake

• Complete LFA monitor well (below Middle Confining Unit I) with Huss Drilling

• Select contractor for construction of LFA dual zone monitor well (below Middle Confining Unit II)
  – January 2018: Piggyback agreement
  – April 2018: Start construction
Communications

• Video released on District’s Facebook and Twitter on July 21, 2017

• LFA webpage launched July 25, 2017
  – WaterMatters.org/LFA

• Future workshops/Input
QUESTIONS and COMMENTS

3,000 foot core sample