

## **Groundwater Project Summary for Regulatory Team Review:**

### **South Lake Wellfield**

#### **Project Description:**

The South Lake Wellfield project is a collaborative effort between the members of the South Lake Regional Water Initiative (SLRWI) which includes Lake County government, the communities of Clermont, Mascotte, Groveland, Minneola and Montverde and Lake Utility Services, Inc (LUSI).

The project involves the development of a Lower Floridan aquifer (LFA) wellfield or series of wellfields located in south Lake County south of the City of Clermont. A total of four production wells are planned to deliver a total of 12.73 million gallons per day (mgd), which is the estimated deficit of demand for the SLRWI Area in 2035. The project includes the construction of a new wellfield(s), a brackish groundwater treatment facility, a concentrate disposal well, a water storage tank, a transmission pump station and transmission mains to facilitate water wheeling among the SLRWI partners

#### **Planning Level Review for Permittability:**

This project appears to be reasonably permissible from a planning level perspective. The project partners listed above have already entered into an interlocal agreement setting forth the structure for cooperatively bringing this water supply project forward.

The SLRWI members are in the process of conducting a study to help finalize quantities of water required by each entity, perform further groundwater modeling including lowering existing wells to the Lower Floridan to compliment the South Lake Wellfield project, and recommend water wheeling alternatives between SLRWI members. Results of the study, expected by mid to late 2015, are expected to identify the best strategy and combination of projects to reduce MFL impacts while yielding sufficient water to satisfy future area demands.

Project refinements may occur prior to the application process. The actual number and placement of wells will be determined by the outcome of exploratory testing of the Lower Floridan and the modeling effort. The size and depth of wells will also depend on the findings of the exploratory testing.

Modeling of this wellfield project by the CFWI Hydrologic Assessment team (HAT) indicates potential impacts to four water bodies with adopted minimum flows and levels (MFLs). North and South Lake Apshawa has 0.3 feet of impact in the Upper Floridan aquifer below the lakes, and Starbuck and Wekiwa springs have 0.1 and 0.2 cubic feet per second (cfs) impact, respectively. The model also predicts non-MFL impacts in one area of Seminole County. Although the model does show impacts, producing water from the Lower Floridan

should minimize the potential for impacts when compared to traditional Upper Floridan sources.

At a minimum, the following water bodies would need to be considered during project design and permitting: Boggy Marsh, Cherry Lake, Lake Emma, Lake Louisa, Lake Lucy, Lake Minneola, North Lake Apshawa, Pine Island Lake, South Lake Apshawa, Rock Springs, Starbuck Springs, Wekiwa Springs.

The planning level review indicates concern regarding satisfying conditions for issuance for the project's duration, as may be requested, including potential interference with existing legal users and water resource impacts. The project's demand is a related matter.

### **Identification of Consumptive Use Permit Program Inconsistencies Between the Water Management Districts Which May Impact the Project:**

Each District has slightly different numeric wetland impact criteria that may affect the permitability of Projects differently, depending on the permitting agency. There may be other permitting inconsistencies between the Districts. However, there is an existing Memorandum of Understanding (MOU) between the three Districts that details how the review of water use applications that involve inter-district transfers of water and applications near District borders are handled. This is designed to alleviate inconsistencies in permitting criteria.

### **Identification of Chapter 373, F.S. Impediments Associated with the Project**

There is a potential concern of the Project regarding the interference of existing legal users of water and potential impacts to MFL water bodies. This would need to be evaluated in further detail during the application process.

### **Identification of Unusual, Non-Chapter 376, F.S. Considerations:**

None identified.