

Groundwater Project Summary for Regulatory Team Review:

Polk County Distributed Wellfield Project

Project Description:

The project includes a total of 16 new Lower Floridan aquifer (LFA) wells distributed throughout Polk County at or near the project partner's existing water treatment facilities. This project will provide an additional 9.84 million gallons per day (mgd) of additional groundwater for the region. Because the LFA is expected to be brackish in this area, water withdrawn from the proposed wells will be blended with fresh Upper Floridan aquifer (UFA) water to meet the required drinking water standards so specialized treatment would not be necessary.

This distributed Lower Floridan project has been identified as an alternative to a portion of the projected public supply from the permitted Polk County Southeast Wellfield project. The Project would spread the LFA withdrawals across a larger area than just the Southeast Wellfield Project, potentially reducing resource impacts. If this project proceeds forward and is permitted for the full 9.84 mgd, the remaining 20.16 mgd out of the 30 mgd of future demands of this region will still need to come from the Southeast Wellfield.

Planning Level Review for Permittability:

There are concerns on the permissibility of this project as currently proposed, based on a number of factors. All of the proposed wells are located in the Southern Water Use Caution Area (SWUCA), where 7 out of 15 water bodies are not meeting the minimal levels adopted by SWFWMD. Based on the groundwater modeling conducted by the CFWI Hydrologic Assessment Team (HAT), the withdrawals from this project may produce up to 0.3 feet of additional lowering of water levels in the UFA beneath lakes not meeting minimum levels. A review of projected water level drawdowns in the surficial aquifer indicates the potential for the project to also result in the lowering of non-MFL water bodies. The project is also anticipated to cause further lowering of the Lake Wales Ridge wells level that is projected to be below the threshold value as a result of 2015 pumping. Another concern is an additional 3.4 mgd of UFA water above the current permitted allocation would need to be withdrawn in order for the LFA water blending to successfully eliminate the need for specialized treatment.

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.

In order for this Project to satisfy the permitting criteria, refined groundwater modeling may be necessary to hone in on the impacts to MFL water bodies identified in the zone of influence. In addition, refinements to the wellfield operating program, modification of the

actual withdrawal rates, and a detailed environmental monitoring program may be necessary during the permit application process to minimize resource impacts and satisfy the conditions for issuance of a permit.

Identification of Consumptive Use Permit Program Inconsistencies Between the Water Management Districts Which My 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:

The feasibility of this project may be dependent upon funding, and the steps necessary to secure that funding. Polk County and SWFWMD are in the process of finalizing an agreement referred to as the Central Florida Development Agreement, which is the foundation for the funding of alternative water supply projects within Polk County and addresses the formation of a regional water supply entity between Polk County Utilities and their municipal project partners.

In addition, the Polk County Southeast Wellfield project has already been permitted to supply up to 30 mgd of base-load public supply to many of the same municipal partners identified for the Distributed Wellfield Project. The feasibility of this Project and the actual quantity of groundwater withdrawals will be dependent on execution of the above development agreement and also Project Participation Agreements for this Project as well as for the Southeast Wellfield Project.