



Aquifer Recharge Project for the Protection of Blue Spring

Project Overview

Working in cooperation with the St. Johns River Water Management District (SJRWMD), Volusia County and the cities of DeLand, Deltona and Orange City are evaluating the feasibility of creating a wetland treatment and recharge facility to augment regional groundwater supplies. The proposed project involves transforming an existing 60-acre borrow pit, located east of Blue Spring State Park, into an aquifer recharge site. This project will replenish the Floridian Aquifer faster than current natural rates.

Background

Volusia Blue Spring, the largest first-magnitude spring on the St. Johns River, discharges an average of 102 million gallons of water each day. The springshed covers 130 square miles and encompasses portions of five cities (DeLand, Orange City, DeBary, Deltona and Lake Helen) and unincorporated Volusia County. The springshed is the groundwater source for the public water suppliers serving more than 180,000 residents and businesses.

Blue Spring is a designated Outstanding Florida Spring and winter refuge for West Indian manatees. The current borrow pit has been identified as a potential recharge site by the SJRWMD and water suppliers.

Recently the SJRWMD and local government partners completed a preliminary planning level design study to evaluate the borrow pit site. The report determined potential recharge values between 2 and 4 million gallons per day, which would benefit the aquifer while not adversely impacting water quality at the spring. The results of the initial study further indicate the project is technically, economically and environmentally feasible.

Previous Project Initiatives

In an effort to meet the district's minimum flow regime requirements for Blue Spring, the local water suppliers group have been working for several years on a prevention and recovery strategy that calls for groundwater withdrawals to be maintained at or below sustainable limits within the Blue Spring watershed. The initiatives include:

- Joint water supply planning and modeling
- Regional reclaimed water interconnections to increase alternative water supply and use
- Aquifer performance testing (Deep Creek and Leffler properties)
- Individual county/city utility projects to increase efficiency, conservation awareness and alternative water

