Rejuvenating DeLeon Springs, Florida

Lenny Siegel, January, 2013

Some people believe that DeLeon Springs, Florida, is the Fountain of Youth that Spanish explorer Juan Ponce de Leon supposedly sought in the 16th Century, but today it's the surrounding unincorporated community that is in need of rejuvenation. At first glance, a plume of underground petroleum contamination appears to be preventing redevelopment. However, the challenge faced by the DeLeon Springs Community Association, Inc. is complicated by issues associated with the widening of U.S. Highway 17, which serves as the community's main thoroughfare, and the lack of modern water and sewer utility services.

Located about 20 miles inland from Daytona Beach, the community of DeLeon Springs is home to about 2,600 people, slightly less than half of which are white and most of the rest of which are Hispanic. In 2010 the median household income was \$43,000, and the poverty rate was 29%. Merchants and residents are concerned that the U.S. 17 commercial strip is stagnant, but they have organized to revitalize the community.



One of the sources of the Deleon Spring petroleum plume

Properly developed, DeLeon Springs could benefit from the spring from which it takes its name. The 611-acre DeLeon Springs State Park is a major tourist destination, with an estimated annual economic impact of \$12.3 million, attracting approximately 275,000 visitors each year to boat, hike, bird, and eat at the Old Spanish Sugar Mill restaurant, famous for its pancakes cooked on griddles uniquely imbedded in the dining tables.

But over 25 years ago a petroleum plume was discovered under U.S. Highway 17 in the northern part of town. Emanating in part from an operating gasoline station, the release also appears to have been caused decades ago when the Department of Transportation crushed another gas station's underground fuel tanks while widening the highway. Contamination forced the closure of numerous private wells, and community members fear that it will eventually make its way to the spring, about a half mile west of the slowly-migrating plume.



U.S Highway 17 at the spill site

The State of Florida has made sporadic efforts to clean the site since 1988, but somewhere above 600 gallons of free petroleum product remain underground. In December 2005 the Florida Department of Environmental Protection (FDEP) adopted a Remedial Action Plan requiring soil excavation and groundwater treatment, but completion has been held up because the worst contamination lies under the busy four-lane highway. The FDEP conducted an excavation on the east side of Highway 17 in 2011 and one on the west side in 2012. It planned to remove the bulk of contamination under Highway 17 by closing the two northbound and then the two southbound lanes in the summer of 2013, while the nearby elementary school was closed for the summer. However, a lawsuit brought against the FDEP by the site contractor who conducted the past two cleanups has forced the agency to withdraw its schedule, and the community is concerned that the delay may lead to recontamination of the original cleanup areas, particularly on the west side, since the plume has migrated 400 feet westward over the years.

Site cleanup will end up costing several million dollars, but the community still needs clean water to protect its residents and enable revitalization of the commercial district. In 2011, the nearby City of DeLand, Volusia County's designated service provider to the area, estimated that extending municipal water lines to downtown DeLeon Springs would cost nearly \$740,000. The state Inland Protection Trust Fund, which is

paying for soil and groundwater remediation, will not pay for alternate water because, at the time of the initial spill, potable water lines were so far from the area it was deemed to be cost prohibitive. Instead, the then Department of Environmental Regulation drilled 10 deep wells for citizens with the worst contamination and delivered bottled water to others for over a decade. Monitoring wells in the area continue to record petroleum constituents in the drinking water, but usually below the Health Advisory Levels, preventing the FDEP from funding the water utility improvements.

Even if cleanup is completed and funding is found to pay for extending water lines, DeLeon Springs' commercial properties will not be ready for redevelopment.

Most important, there is no wastewater treatment system in the area. Septic systems are outdated, aging, and cost prohibitive to replace to current standards. Leaking sewage from failing drainfields is of great environmental concern for this spring-shed basin community.

Additionally, the widening of the highway reduced the size of many properties, making them unable to conform to current requirements for parking, landscaping, underground water tanks for firefighting, floor-area ratio, and the distance between drinking-water wells and septic systems. Municipal water would solve the contaminated drinking water problem, but it would still not solve the setback issue because parcels are too small to fit the required infrastructure. The Community Association believes the solution lies in tying DeLeon Springs to the City of DeLand's sewage treatment system. That would cost over \$1.2 million.



DeLeon Springs, DeLeon Springs State Park

The DeLeon Springs Community Association's Utilities Task Force has been working with the federal Rural Development Program, an arm of the U.S. Department of Agriculture, to find a mix of grants and loans to pay for the joint extension of water and sewer lines. If the State Park and McInnis Elementary School, on the next block north of the spill site, participate, they may have the required critical mass to qualify for federal help.

But DeLeon Springs is not incorporated and therefore doesn't have its own government. The Community Association has made formal requests to the Volusia County Council and the Volusia County Manager's office to form a Brownfield District and a Utilities District for their area, "so contamination and utilities issues can be addressed and the community can recover from the devastating effects of these underground fuel contamination plumes."

The environmental enhancements and economic growth likely to result from infrastructure improvement seems to justify the establishment of such districts and the \$2 million-plus investment, but in an era of limited government funding, rejuvenation remains a challenge for the merchants and residents of this "forgotten" community.