

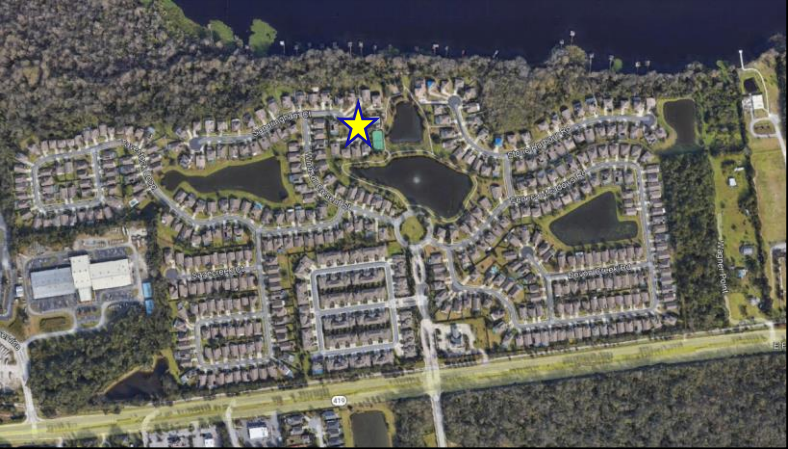
Preliminary Assessment on the Feasibility of Plugging an Artesian Well

Parkstone Development – City of Winter Springs

Background

- Parkstone residential development has an artesian (naturally flowing) source of groundwater.
- Artesian flow continuously discharges into Lake Jesup at reported 0.5 million gallons per day for over 20 years.
- Infrastructure was installed at time of Parkstone development to capture the artesian flow and discharge it to Lake Jesup.
- Parkstone HOA desires to have this well plugged to avoid further costs associated with repair and maintenance.



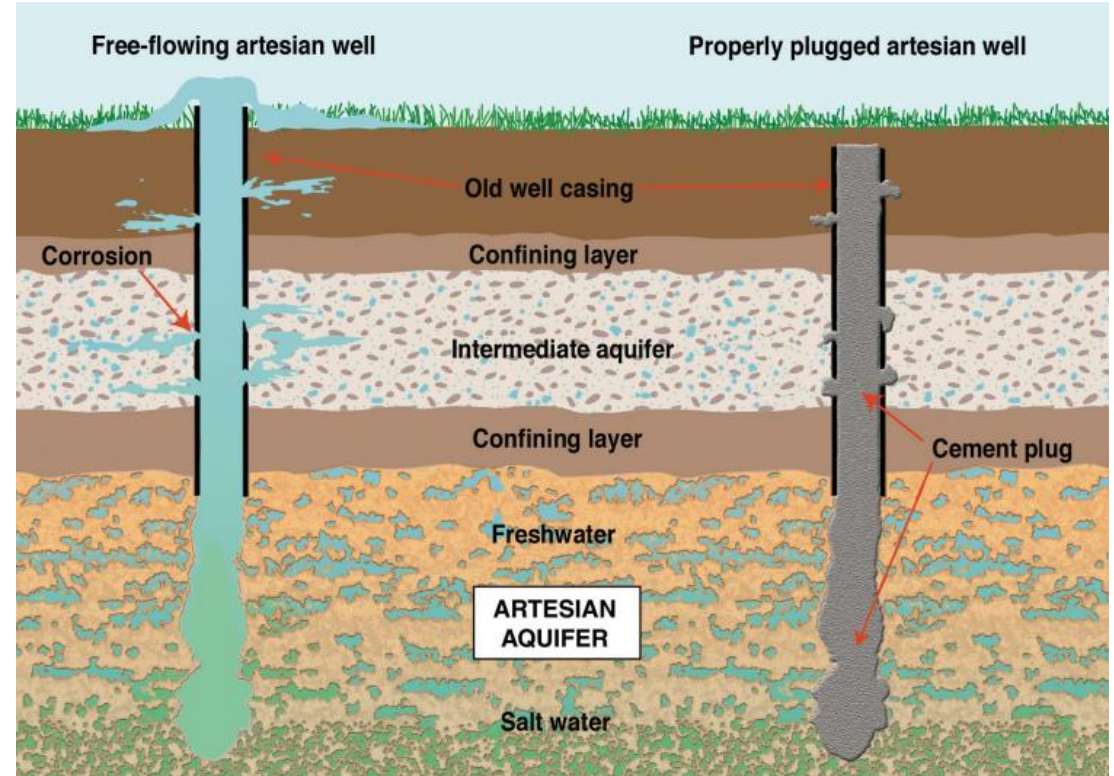


ARTESIAN FLOW
CONTAINMENT
STRUCTURE

DISCHARGE PIPE
TO LAKE JESUP

Current Interest in Plugging the Artesian Well at Parkstone

- On April 5, 2022 St. Johns River Water Management District (SJRWMD) indicated it is willing to grant impact offset/credits to Seminole County if it can plug the well.
- Seminole County requested for Jacobs to complete an assessment of the feasibility of plugging the well.



Source: SJRWMD Abandoned Artesian Well Plugging Program Fact Sheet

Assessment Prepared by Jacobs

- In November 2022 SCESD and Jacobs visited site along with a representative of the HOA.
- The well and flow containment structure are buried underground and not visible for inspection.
- After the visit Jacobs reviewed publicly available documentation including permits and historical information.
- Jacobs prepared a memorandum summarizing the site visit, the records review, and listing the risks and concerns facing the County if it attempted to plug the well.

Jacobs' Records Review and Findings

- The City of Winter Springs holds an existing CUP for augmentation of raw water for their reclaimed water system (CUP 105763). A pipe was planned from the well to the City's treatment plant but was never installed.
- Multiple permit documents acknowledge the presence of the artesian well at Sandringham Ct.
- Permit documentation states there have been multiple attempts to plug the artesian well on Sandringham Ct. during the construction of the Parkstone Development.

augmentation treatment site. It is located at the east end of Sandringham Court. The well was uncovered during excavation work for the development's drainage system in 2000. An uncontrollable flow situation developed at that time and the District was called in to assess the situation. The developer and the District attempted to plug or cap this well, but, unfortunately, these efforts failed. The attempts to plug the well failed because the well casing could not be found and the actual source of the flow could not be isolated. Since there was no discernable casing it was not possible to cap the well. After several attempts to stop the flow, the decision was made to build a structure around the flow area and route the flow to Lake Jesup. The water quality of this well is

Jacobs' Recommendations to the County

- Jacobs recommends that the County not move forward with this project due to:
 - Historical record of unsuccessful attempts to plug well by other entities.
 - Major disruption to the Parkstone community during exploratory and construction work.
 - Potential for artesian groundwater flow to emerge at another location in Parkstone.
 - Unknown terms and conditions required by multiple parties having jurisdiction over the work – Parkstone HOA, City of Winter Springs, SJRWMD.
- If the County elects to proceed with this project, the terms and conditions required by the county should be developed and agreed upon by the Parkstone HOA, the City of Winter Springs, and the SJRWMD prior to proceeding with further investigations.