TECHNICAL MEMORANDUM



Baseline Groundwater Sampling and Analysis Plan with Existing Well Inventory

то:	Kristen Sealey, PE, Gainesville Regional Utilities
FROM:	Wharton Smith Design Build Team (DB Team): Alan Foley, PE, and John Horvath, PE; Jones Edmunds Michelle Hays, MS, PG; Liquid Solutions Group
DATE:	October 30, 2023
SUBJECT:	GRU Southwest Nature Park Jones Edmunds Project No. 23620-008-01

1 INTRODUCTION

Gainesville Regional Utilities (GRU) is creating a groundwater recharge wetland that will beneficially recharge approximately 3 million gallons per day (MGD) of reclaimed water (RCW) from the GRU Kanapaha Water Reclamation Facility (KWRF) to support recovery of flows at springs along the Lower Santa Fe River. Future phases of the project will increase the recharge capacity of the site to 5 MGD. The wetland system will be created on a 75-acre site that is currently well-drained upland. This Groundwater Sampling and Analysis Plan will characterize existing water quality conditions at and near the site. This Plan will be used to support project permitting.

2 OBJECTIVES

The Plan has the following objectives:

- A. Establish background water quality and aquifer levels at the site.
- B. Develop a monitoring program that demonstrates compliance with GRU's and Florida's objectives to protect public health, safety, and water resources.
- C. Collect data needed to develop monitoring well construction and sampling procedures compliant with Florida Department of Environmental Protection (FDEP) and Alachua County Environmental Protection Department (ACEPD) rules and permit requirements.

3 BASELINE SAMPLING PLAN

The intent of the baseline sampling is to establish the existing water quality in the receiving aquifer. Information collected from the baseline sampling will be used to develop the Ground Water Monitoring Plan in accordance with FDEP Rule 62-520.600, Florida

Administrative Code (FAC). Piezometers installed as part of the *Sinkhole Susceptibility Study and Near Surface Geotechnical Exploration* (GSE, 2020) will be used to collect initial baseline water quality samples. Additionally, in accordance with the requirements of the *Alachua County Special Exception* (Resolution Z-20-10), GRU will coordinate with homeowners to perform initial sampling of the potable supply wells within a 500-foot radius of the property boundaries as part of this baseline sampling.

3.1 SITE LOCATION

The project site is in southwest Alachua County in Section 14, Township 10 South, Range 18 East. The site is within the Basin Management Action Plan (BMAP) for the Santa Fe River and is approximately 17 miles southeast of the Santa Fe River. The BMAP was established to address dissolved oxygen (DO) and nutrient impairment of the lower Santa Fe River from River Rise westward to the Suwannee River.

3.2 SITE HYDROGEOLOGY

GSE completed a sinkhole susceptibility study of the site in July 2020. GSE completed 20 standard penetration test borings at the site. The borings generally encountered sands, sand with clay/silt, and silty sand in the upper 1.5 to 58.5 feet. The sandy layer was underlain by clayey to very clayey sand and interbedded clay-rich soils that overlie limestone. The upper limestone surface was encountered at depths ranging from ground surface up to 93 feet below land surface (bls).

Ground surface at the site ranges between 74 to 88 feet National Geodetic Vertical Datum (NGVD). The Floridan aquifer potentiometric surface is approximately 40 to 50 feet NGVD and is generally unconfined in the area. The depth-to-water at the site was measured between 30 to 40 feet bls. Shallower perched groundwater levels were measured at some of the boring locations; however, perched conditions are localized, and a continuous surficial aquifer does not exist at the site.

3.3 PIEZOMETER CONSTRUCTION

Figure 1 shows the property boundary and six existing piezometers (P-1 through P-6) installed at the site. The piezometers were installed by a licensed water well contractor (Groundwater Protection dba Drillpro, LLC) under the supervision of GSE Engineering & Consulting, Inc. Drillpro constructed the wells so that (if desired) they could be used for groundwater sampling purposes. The piezometers were installed using the direct penetration technology (DPT) method on July 1, 2, and 8, 2020.

Five (P-1, P-2, P-3, P-4 & P-6) of the piezometers were completed to 40 feet and one (P-5) to 48 feet bls. Piezometer piping consisted of 1-inch diameter PVC casing. The bottom 10 feet was screened (0.1-inch slots) and the remaining piping solid. The annular space between the DPT boring and piping was backfilled with 20/30 gradation sand to approximately 2 feet above the screened interval. The remaining annulus was filled with cement grout to the ground surface. The piezometer was protected at the surface with a 4-inch square aluminum above ground casing and concrete pad. Table 1 provides the piezometer construction details.

Piezometer/ Boring	North (ft)	Easting (ft)	Top of Casing Elevation (ft)	Casing Depth (ft)	Casing Diameter (inches)	Total Depth (ft)
PZ-1/B-3	231,916.46	2,610,785.20	87.10	30	1	40
PZ-2/B-6	231,935.72	2,612,131.25	83.56	30	1	40
PZ-3/B-9	231,628.90	2,610,255.05	83.56	30	1	40
PZ-4/B-13	231,495.87	2,611,630.82	80.72	30	1	40
PZ-5/B-18	231,113.68	2,611,027.29	91.29	38	1	48
PZ-6/B-20	231,218.34	2,612,334.93	80.46	30	1	40

Table 1Piezometer Construction Details

Notes: Coordinates are Florida State Plan North Zone, NAD 83 (2011).

Vertical datum is the North American Vertical Datum of 1988 (VAVD 88).

On July 22, 2020, GSE collected groundwater depth measurements from the piezometers using an electronic water level indicator. The water level measurements were then used to estimate the groundwater elevations. Table 2 shows the piezometer locations, top of casing elevations, depth to groundwater, and calculated groundwater elevations.

Table 2	Piezometer Water Level Measurements					
Piezometer	Depth to Water (ft)	Groundwater Elevation (ft)				
PZ-1/B-3	40.090	47.01				
PZ-2/B-6	36.135	47.43				
PZ-3/B-9	36.585	46.98				
PZ-4/B-13	33.315	47.41				
PZ-5/B-18	43.820	47.47				
PZ-6/B-20	32.575	47.89				

3.4 PIEZOMETER SAMPLING

3.4.1 PIEZOMETER DEVELOPMENT

Jones Edmunds developed the piezometers on July 14 and 17, 2023, to remove sediment and reduce turbidity. We used a 1-inch stainless steel bladder pump with a per-and polyfluoroalkyl substances (PFAS)-free disposable bladder and tubing. The wells were pumped for a maximum duration of 2 hours or until turbidity reached 5 Nephelometric Turbidity Units (NTU). Field parameters were recorded from each piezometer during development to evaluate potential water quality differences. Table 3 summarizes the final turbidity of the piezometers.

Table 5	Development Summary		
Piezometer	Initial Depth to Water (ft btoc)	Pumping Depth to Water (ft btoc)	Final Turbidity (NTU)
PZ-1/B-3	40.82	40.95	4.99
PZ-2/B-6	36.80	36.93	33.2
PZ-3/B-9	37.50	38.48	4.78
PZ-4/B-13	34.02	34.11	4.81
PZ-5/B-18	44.70	*	*
PZ-6/B-20	33.38	33.48	160

Table 3 Development Summary

*Notes: ft btoc = feet below top of casing.

*Sediment clogged tubbing, could not complete development.

The final turbidity in piezometers PZ-1, PZ-3, and PZ-4 was less than 5 NTU. The development of these piezometers should be sufficient to allow sample collection without the need for filtration. Piezometers PZ-2 and PZ-6 had turbidity greater than 20 NTU, but produced sufficient water for sampling. These piezometers will require filtration for analysis of metals or further development. No water could be pumped from PZ-5 because sediment clogged the tubing and the piezometer could not be developed with the 1-inch bladder pump.

3.4.2 GROUNDWATER SAMPLE ANALYSIS

After development, the wells will be allowed to stabilize for a minimum of 72 hours before sample collection. All piezometers, with the exception of PZ-5, have sufficient water column for sample collection. Turbidity was less than 5 NTU in piezometers PZ-1, PZ-3, and PZ-4; therefore, these wells are better candidates for collection of unfiltered samples for analysis of metals.

Table 4 shows field parameters and the minimum reuse and land application system requirements in Chapter 62-600.670, FAC. The permit is expected to require background and quarterly analyses of these parameters. Table 5 presents additional parameters expected to be required in future monitoring of the site. These include nutrients that will be monitored for compliance with the Santa Fe River BMAP and the EPA Primary and Secondary Drinking Water Standards, which are expected to be required in the initial background samples and at permit renewals. PFAS is also included because the US Environmental Protection Agency (EPA) has proposed Maximum Contaminant Levels (MCLs) for six PFAS compounds.

To determine background conditions during the design phase, samples from PZ-3 will be analyzed for the parameters listed in Table 4 and samples from PZ-4 will be analyzed for the parameters in Table 4 and Table 5. A minimum of one equipment blank per day will be collected using PFAS certified water obtained from the laboratory. The samples will be submitted to a third party NELAP certified laboratory for analysis.

The need for additional samples from the piezometers will be determined following the receipt and analysis of results.

Table 4 Proposed Routine Quarterly Sa	inple Parameters	
Parameter	Frequency	Source
Depth-to-ground Water*	Quarterly	Field Parameter
Specific Conductivity*	Quarterly	Field Parameter
Dissolved Oxygen*	Quarterly	Field Parameter
pH*	Quarterly	Field Parameter
Turbidity*	Quarterly	Field Parameter
ORP*	Quarterly	Field Parameter
Total Nitrate Nitrogen (as N)	Quarterly	62-600.670
Total Dissolved Solids	Quarterly	62-600.670
Total Recoverable Arsenic	Quarterly	62-600.670
Total Recoverable Cadmium	Quarterly	62-600.670
Chloride	Quarterly	62-600.670
Total Recoverable Chromium	Quarterly	62-600.670
Total Recoverable Lead	Quarterly	62-600.670
Total Coliform	Quarterly	Zoning Exception
Fecal Coliform	Quarterly	62-600.670
Total Sulfate	Quarterly	62-600.670

Table 4 Proposed Routine Quarterly Sample Parameters

*Indicates field parameter.

Table 5 Proposed Additional Parameters

Parameter	Frequency	Source
Nutrients		
Nitrate + Nitrite Nitrogen	Quarterly	Zoning Exception
Total Kjeldahl Nitrogen (as N)	Quarterly	BMAP
Ammonia (as N)	Quarterly	BMAP
Total Phosphorus (as P)	Quarterly	BMAP
PFAS		
Method 1633 Parameter List ¹	Initial	EPA Proposed DWS
Groundwater Standards (62-520.420) ²	Initial	
Primary Drinking Water Standards	Initial	62-520.420
Secondary Drinking Water Standards	Initial	62-520.420

¹The full list of Method 1633 parameters is in Attachment A. ²Excluding asbestos, acrylamide, Dioxin, butachlor, epichlorohydrin, and polychlorinated biphenyl (PCBs).

3.4.3 GROUNDWATER SAMPLE COLLECTION METHODS

The sampling will be conducted in accordance with the FDEP Standard Operating Procedures (SOPs) in DEP-SOP-001/01, FS 2200. Special sample procedures will be followed for collection of samples for analysis of PFAS. These special sample procedures are based on guidance from FDEP's draft supplemental SOP for PFAS sample collection and the California State Water Quality control board. Equipment that are known to contain PFAS-coated parts (e.g., Teflon) and low-density polyethylene will be avoided. We propose to collect the

samples using a 1-inch stainless steel bladder pump with a new disposable bladder and HDPE sample tubing at each location.

3.5 DOMESTIC SELF-SUPPLY SAMPLING

A well inventory was completed to identify potable wells within 500 feet of the property boundary (Attachment B). Information was collected from the following databases:

- Suwannee River Water Management District (SRWMD) Water Use Permit database.
- SRWMD Well Completion Report (WCR) database.
- Florida Department of Health (FDOH) Well Surveillance database.
- Florida Department of Environmental Protection (FDEP) Public Water Supply (PWS) Well database.
- Private Wells from Generalized Well Information System (GWIS).

Figure 2 shows wells in the vicinity of the site. There are 98 domestic supply wells, four irrigation wells, one abandoned well, and two public supply wells in the SRWMD WCR database that plot within 500 feet of the property. Entries in the WCR database do not typically include precise location information and are only searchable by the Section, Township, and Range. Ninety-five of the domestic wells, two irrigation wells, the abandoned well, and the two public supply wells are plotted at Map ID 2, which is the center of Section 14 of Township 10 South, Range 18 East.

The number of domestic wells is approximately the number of homes in the Parker Place subdivision that borders the north side of the property. Since GRU does not supply potable water to these homes, it is assumed that each of these properties is served by a private well. The public wells include one well at the North Central Baptist Church, approximately 800 feet northeast of the property, and one well at Diamond Sports Park, to the south. There were no other wells identified in the other databases searched that are within 500 feet of the property. The SRWMD Water Use Permit database shows the Diamond Sports Park wells to be more than 500 feet from the property. Attachment 1 provides the available well construction information from the SRWMD WCR and FDEP Public Water Supply databases for the wells shown in Figure 2.

3.5.1 SAMPLE SITES AND PARAMETERS

As shown in Figure 2, 24 parcels are within 500 feet of the north property boundary. Of these parcels, 21 have an existing residential building and are assumed to have private wells. GRU will coordinate with the owners of the 21 private wells and request sampling. GRU will also request to sample the well at the Diamond Sports Park. The wells will be sampled for the parameters in Table 4 and the nutrients listed in Table 5.

To extend sampling beyond the 500-foot buffer, GRU plans to coordinate with homeowners to sample additional wells in the shaded areas further north of the property boundary (Figure 2). These wells will be analyzed for the parameters in Table 4 and nutrients in Table 5. Three of private well locations and the Diamond Sports Park well are proposed to be analyzed for the full list of parameters in Table 5. One of these private wells will be located within the 500-foot buffer, directly north of the project site, and the other two will be within the east and northeast clusters.

3.5.2 SAMPLE METHODS

The samples from the private wells will be collected from the well spigot nearest the well to avoid interference with the private household plumbing systems. We plan to purge the spigot for a minimum of 10 minutes based on communications with Alachua County Environmental Protection Department staff. Specific information is not available to determine the well construction at each property; however, the well casings are typically 4-inches in diameter and 40 to 160 feet deep. GRU will work with the Alachua County Department of Health for guidance in sampling the wells.





For Informational Purposes Only Document Path: Q:\07125_GRU\082-ParkerRoadWetland\APRX\ParkerRoadSite\ParkerRoadSite.aprx



Figure 2 Domestic Self-Supply Sample Plan

Path: C:\Users\LiquidSolutions\Documents\ArcGIS\Projects\GRU\GRU_SWNP

Attachment A

Sample Method 1633 Parameter List

Method 1633 Parameters

Parameter	Frequency	Source
Perfluorooctanoic acid (PFOA)	Initial	EPA Proposed DWS
Perfluorooctanoic acid (PFOS)	Initial	EPA Proposed DWS
Perfluorobutanoic acid (PFBA)	Initial	EPA Method 1633
Perfluoropentanoic acid (PFPeA)	Initial/Permit Renewal	EPA Method 1633
Perfluorohexanoic acid (PFHxA)	Initial	EPA Method 1633
Perfluoroheptanoic acid (PFHpA)	Initial	EPA Method 1633
Perfluorononanoic acid (PFNA)	Initial	EPA Proposed DWS
Perfluorodecanoic acid (PFDA)	Initial	EPA Method 1633
Perfluoroundecanoic acid (PFUnA)	Initial	EPA Method 1633
Perfluorododecanoic acid (PFDoA)	Initial	EPA Method 1633
Perfluorotridecanoic acid (PFTrDA)	Initial	EPA Method 1633
Perfluorotetradecanoic acid (PFTeDA)	Initial	EPA Method 1633
Perfluorobutanesulfonic acid (PFBS)	Initial	EPA National DWS
Perfluoropentanesulfonic acid (PFPeS)	Initial	EPA Method 1633
Perfluorohexanesulfonic acid (PFHxS)	Initial	EPA Proposed DWS
Perfluoroheptanesulfonic acid (PFHpS)	Initial	EPA Method 1633
Perfluorononanesulfonic acid (PFNS)	Initial	EPA Method 1633
Perfluorodecanesulfonic acid (PFDS)	Initial	EPA Method 1633
Perfluorododecanesulfonic acid (PFDoS)	Initial	EPA Method 1633
Hexafluoropropylene oxide dimer acid (HFPO-DA (GenX Chemicals)	Initial	EPA Proposed DWS
Perfluorooctane Sulfonamide (PFOSA)	Initial	EPA Method 1633
N-ethylperfluorooctanesulfonamide (NEtFOSA)	Initial	EPA Method 1633
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	Initial	EPA Method 1633
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	Initial	EPA Method 1633
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	Initial	EPA Method 1633
N-Methylperfluorooctane sulfonamidoacetic acid (NMeFOSAA)	Initial	EPA Method 1633
4:2 Fluorotelomersulfonic acid (4:2 FTS)	Initial	EPA Method 1633
6:2 Fluorotelomersulfonic acid (6:2 FTS)	Initial	EPA Method 1633
8:2 Fluorotelomersulfonic acid (8:2 FTS)	Initial	EPA Method 1633
Perfluoro-3-methoxypropanoic acid (PFMPA)	Initial	EPA Method 1633
Perfluoro-3-methoxybutanoic acid (PFMBA)	Initial	EPA Method 1633
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	Initial	EPA Method 1633
4,8-dioxa-3H-perfluorononanoate (ADONA)	Initial	EPA Method 1633
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	Initial	EPA Method 1633

Parameter	Frequency	Source
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid 1 (9CI-PF3ONS)	Initial	EPA Method 1633
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid 2 (11Cl-PF3OUdS)	Initial	EPA Method 1633
3-Perfluoropropyl propanoic acid (3:3 FTCA)	Initial	EPA Method 1633
5:3 Perfluorooctanoic acid (5:3FTCA)	Initial	EPA Method 1633
3-Perfluoroheptyl propanoic acid (7:3 FTCA)	Initial	EPA Method 1633

Attachment B Well Inventory Data

Map ID	Permit No.	Station ID	Owner Name	Well Use	Casing Diameter (inches)	Casing Depth (feet)	Well Depth (feet)	Static Water Level	Latitude	Longitude
1	3-001-19244-1	19586	Elmo Dowling	Irrigation - Agricultural	8	80	150	40	29.62333	-82.48167
2	3-001-11576-1	11918	Brian Kinsell	Domestic	4	5	100	0	29.62370	-82.48090
2	3-001-15742-1	16084	C J Kinsell	Domestic	4	71	100	43	29.62370	-82.48090
2	3-001-159839-1	94854	Brian Fletcher	Domestic	4	70	80	42	29.62370	-82.48090
2	3-001-170721-1	105736	James W Dear	Domestic	4	84	90	45	29.62370	-82.48090
2	3-001-1/9/9-1	18321	June Hinson Ellis Rodd	Domestic	4	42	80	35	29.62370	-82.48090
2	3-001-21935-1	36639	Bobert Waters	Domestic	4	63	93 80	43	29.62370	-82.48090
2	3-001-36434-1	36776	Robert Waters	Domestic	4	57	80	44	29.62370	-82.48090
2	3-001-37207-1	37549	Robert Waters	Domestic	4	93	117	40	29.62370	-82.48090
2	3-001-38405-1	38747	Robert Waters	Domestic	4	63	80	50	29.62370	-82.48090
2	3-001-38406-1	38748	Robert Waters	Domestic	4	63	75	50	29.62370	-82.48090
2	3-001-38544-1	38886	G W Robinson Builder	Domestic	4	56	65	50	29.62370	-82.48090
2	3-001-39583-1	39925	Bryan A Hinson	Domestic	4	100	120	45	29.62370	-82.48090
2	3-001-39728-1	40070	Robert Waters	Domestic	4	63	76	46	29.62370	-82.48090
2	3-001-39729-1	40071	Robert Waters	Domestic	4	63	76	45	29.62370	-82.48090
2	3-001-39731-1	40073	Lash Development	Domestic	4	63	80	45	29.62370	-82.48090
2	3-001-41547-1	41889	Robert Waters	Domestic	4	63	80	40	29.62370	-82.48090
2	3-001-43085-1	43427	Robert Waters	Domestic	4	56	70	42	29.62370	-82.48090
2	3-001-43749-1	44031	Roberts Waters	Domestic	4	53	70	43	29.02370	-82.48090
2	3-001-44229-1	44571	Benny F Beckham	Domestic	4	70	80	43	29 62370	-82.48090
2	3-001-44853-1	45195	Roberts Waters	Domestic	4	70	90	44	29.62370	-82,48090
2	3-001-45175-1	45517	Robert Waters	Domestic	4	84	90	42	29.62370	-82.48090
2	3-001-45505-1	45847	Robert Waters Custom	Domestic	4	84	90	42	29.62370	-82.48090
2	3-001-45760-1	46102	Robert Waters	Domestic	4	84	96	45	29.62370	-82.48090
2	3-001-47126-1	47468	Tommy Waters	Domestic	4	68	80	41	29.62370	-82.48090
2	3-001-47127-1	47469	Tommy Waters	Domestic	4	67	80	41	29.62370	-82.48090
2	3-001-47886-1	48228	Clayton Jamie	Domestic	4	70	80	40	29.62370	-82.48090
2	3-001-48407-1	48749	Tommy Waters	Domestic	4	70	80	41	29.62370	-82.48090
2	3-001-48548-1	48890	Tommy Waters Const	Domestic	4	70	80	44	29.62370	-82.48090
2	3-001-48/18-1	49060	Homes By Whitaker Inc	Domestic	4	/1	95	50	29.62370	-82.48090
2	3-001-49172-1	49514	G W Robinson Builders	Domestic	4	70	00 95	45 50	29.62370	-82.48090
2	3-001-49429-1	49771	Tommy Waters Construct	Domestic	4	70	80	44	29 62370	-82.48090
2	3-001-49497-1	49839	Thomas Hunt	Domestic	4	73	80	41	29.62370	-82.48090
2	3-001-49644-1	49986	G W Robinson Builders	Domestic	4	0	0	0	29.62370	-82.48090
2	3-001-49835-1	50177	Tommy Waters	Domestic	4	70	80	42	29.62370	-82.48090
2	3-001-49836-1	50178	Tommy Waters	Domestic	4	70	80	43	29.62370	-82.48090
2	3-001-49949-1	50291	Jamie Clayton	Domestic	4	72	80	41	29.62370	-82.48090
2	3-001-49950-1	50292	Jamie Clayton	Domestic	4	70	80	42	29.62370	-82.48090
2	3-001-50828-1	51170	J Smoak	Domestic	4	63	71	41	29.62370	-82.48090
2	3-001-51040-1	51382	Tommy Waters	Domestic	4	70	80	42	29.62370	-82.48090
2	3-001-51041-1	51383	Tommy Waters	Domestic	4	70	80	43	29.62370	-82.48090
2	3-001-51042-1	51384	Tommy waters	Domestic	4	70	80	44	29.62370	-82.48090
2	3-001-51043-1	51385	James Clayton	Domestic	4	70	100	44 60	29.62370	-82.48090
2	3-001-51479-1	51820	House Crafters (Lewis)	Domestic	4	80	100	60	29.62370	-82.48090
2	3-001-51960-1	52302	James Clayton	Domestic	4	70	85	44	29.62370	-82.48090
2	3-001-52065-1	52407	Tommy Hunt	Domestic	4	70	90	50	29.62370	-82.48090
2	3-001-52205-1	52547	Tommy Waters	Domestic	4	70	80	51	29.62370	-82.48090
2	3-001-52206-1	52548	Tommy Waters	Domestic	4	70	87	33	29.62370	-82.48090
2	3-001-52884-1	53226	Brent Taylor	Domestic	4	78	0	42	29.62370	-82.48090
2	3-001-53055-1	53397	Thomas Hunt	Domestic	4	70	80	41	29.62370	-82.48090
2	3-001-53386-1	53728	E G Gonzales	Domestic	4	100	100	67	29.62370	-82.48090
2	3-001-53856-1	54198	Daniel L Siegle	Domestic	4	57	82	0	29.62370	-82.48090
2	3-001-54354-1	54696	Alan Standridge	Domestic	4	80	100	55	29.62370	-82.48090
2	3-001-56603-1	56945	Iommy Waters	Domestic	4	69 70	80	44	29.62370	-82.48090
2	3-001-50004-1	57006	Howard Eloming	Domestic	4	70	00	44	29.02370	-02.48090
2	3-001-56840-1	57182	Dan Allen	Domestic	4	70	80	40	29.02370	-82 48090
2	3-001-56934-1	57276	E G Conzalez Construction	Domestic	4	80	100	45	29.62370	-82,48090
2	3-001-57159-1	57501	Stacy A Lemay	Domestic	4	69	90	48	29.62370	-82.48090
2	3-001-57456-1	57798	Long (House Craft Homes)	Domestic	4	85	100	55	29.62370	-82.48090
2	3-001-58570-1	58912	Don Emerson Jr	Domestic	4	63	85	42	29.62370	-82.48090
2	3-001-58810-1	59152	Dr Shanal Nadkarni	Domestic	4	80	100	55	29.62370	-82.48090
2	3-001-59155-1	59497	Leo Thomas	Domestic	4	70	75	42	29.62370	-82.48090
2	3-001-59384-1	59726	Tommy Waters (Jones)	Domestic	4	70	70	35	29.62370	-82.48090
2	3-001-60104-1	60446	Winsons Development Corp	Domestic	4	73	81	43	29.62370	-82.48090
2	3-001-60112-1	60454	Benjamin French	Domestic	4	70	80	40	29.62370	-82.48090

Map ID	Permit No.	Station ID	Owner Name	Well Use	Casing Diameter (inches)	Casing Depth (feet)	Well Depth (feet)	Static Water Level	Latitude	Longitude
2	3-001-60398-1	60740	Howard Fleming	Domestic	4	70	80	42	29.62370	-82.48090
2	3-001-60461-1	60803	Russell Renner (T Waters)	Domestic	4	76	88	37	29.62370	-82.48090
2	3-001-60490-1	60832	Howard Fleming	Domestic	4	65	72	42	29.62370	-82.48090
2	3-001-60676-1	61018	Howard Fleming	Domestic	4	70	80	42	29.62370	-82.48090
2	3-001-61102-1	61444	Dan Alleva	Domestic	4	80	100	40	29.62370	-82.48090
2	3-001-62283-1	62625	Howard Fleming	Domestic	4	82	97	48	29.62370	-82.48090
2	3-001-62496-1	62838	Howard Fleming	Domestic	4	108	118	53	29.62370	-82.48090
2	3-001-62706-1	63048	Desi Hightower	Domestic	4	84	106	44	29.62370	-82.48090
2	3-001-63308-1	63650	Howard Fleming	Domestic	4	105	126	45	29.62370	-82.48090
2	3-001-63502-1	63844	Howard Fleming	Domestic	4	85	97	47	29.62370	-82.48090
2	3-001-63503-1	63845	Howard Fleming	Domestic	4	84	97	44	29.62370	-82.48090
2	3-001-63504-1	63846	Howard Fleming	Domestic	4	85	97	44	29.62370	-82.48090
2	3-001-63869-1	64211	Chris Muzzy	Domestic	4	90	97	41	29.62370	-82.48090
2	3-001-64267-1	64609	Elmo Dowling	Domestic	4	83	108	31	29.62370	-82.48090
2	3-001-64480-1	64822	Dan Alleva	Domestic	4	77	90	36	29.62370	-82.48090
2	3-001-64706-1	65048	Dan Aleva	Domestic	4	70	82	36	29.62370	-82.48090
2	3-001-66090-1	66432	William Richards	Domestic	4	69	76	40	29.62370	-82.48090
2	3-001-66454-1	66796	Juan R Polanco	Domestic	4	63	80	37	29.62370	-82.48090
2	3-001-69568-1	69910	Housecraft Homes	Domestic	4	84	90	40	29.62370	-82.48090
2	3-001-70921-1	71263	Ted Dormeyer	Domestic	4	84	95	40	29.62370	-82.48090
2	3-001-71670-1	72012	Joyner Construction	Domestic	4	84	100	44	29.62370	-82.48090
2	3-001-71764-1	72106	Marty Mcfall	Domestic	4	83	100	45	29.62370	-82.48090
2	3-001-71767-1	72109	Barbara Santorum	Domestic	4	162	180	55	29.62370	-82.48090
2	3-001-73545-1	73887	Louis Canchola	Domestic	4	121	125	60	29.62370	-82.48090
2	3-001-76562-1	76904	Daniel & Susan Conway	Domestic	4	72	105	48	29.62370	-82.48090
2	3-001-8978-1	9320	Juanita Parker	Domestic	4	70	92	42	29.62370	-82.48090
2	3-001-10833-1	11175	Elmo Dowling	Irrigation - Agricultural	8	0	0	0	29.62370	-82.48090
2	3-001-34774-1	35116	Robert Waters	Irrigation - Agricultural	4	42	80	50	29.62370	-82.48090
2	3-001-54913-1	55255	Parker Place Inc	Other	2	42	42	0	29.62370	-82.48090
2	3-001-1739-1	2081	North Central Bapt Ch	Public Supply	4	100	103	0	29.62370	-82.48090
2	3-001-39866-1	40208	Diamond Sports Inc	Public Supply	4	51	73	44	29.62370	-82.48090
3	3-001-234536-1	136101	Lebrun Jean Marc & Emily E Web	Domestic	4	80	100	30	29.62425	-82.47898
4	3-001-32457-1	32799	Juanita Parker	Domestic	4	63	78	35	29.62361	-82.47750
5	3-001-45309-1	45651	Robert Waters Cust Homes	Domestic	4	84	90	42	29.62361	-82.47778
6	3-001-39865-1	40207	Diamond Sports Inc	Irrigation - Agricultural	6	62	128	37	29.62444	-82.47611
8	3-001-215169-1	118331	Girouard, Stacy Paul & Kristin	Domestic	4	90	110	64	29.62703	-82.48389
9	3-001-41401-1	41743	Robert Waters	Domestic	4	65	80	40	29.62639	-82.48083
10	3-001-200154-1	161	Kinsell, C J Jr & Doris	Domestic	4	0	140	65	29.63003	-82.47453
11	3-001-230127-1	131621	Latham, William I Iii & Christ	Domestic	4	0	100	55	29.62772	-82.47798
12	3-001-241118-1	146172	Tyler Thompson	Domestic	4	84	100	37	29.62824	-82.47656
13	3-001-241281-1	146427	Shade Elizabeth	Domestic	0	72	95	41	29.62804	-82.47336
14	3-001-245804-1	151209	Patel Pankajkumar	Domestic	4	0	90	35	29.62865	-82.47363
15	3-001-62235-1	62577	Susan Whitehurst	Domestic	4	84	97	38	29.62778	-82.47667
16	3-001-226872-1	122043	Longleaf Lllp	Irrigation - Agricultural	10	84	120	20	29.62002	-82.48661
17	3-001-175466-1	110481	Lewis Lee	Livestock	4	85	93	40	29.61611	-82.48500

Well Information from FDEP Public Water Supply Database

Map ID	Public Water Supply ID	Status	PWS Name	Address	PWS Type	FLUWID	Well Depth (ft)	Design GPD	Aquifer	Latitude	Longitude
18	2014161	Active	Diamond Sports Activity Center	4000 SW 122nd Street	Noncommunity	AAC2381	73	28,000	Floridan	29.60000	-82.46667

Well Information from SRWMD Water Use Permit Database

Map ID	Site ID	Station ID	Well Name	Casing Diameter (inches)	Notes
18	119357	119357	160 Well	12	
19	122043	122043	Well No. 1	6	Well No. 1 provides the irrigation for all 10 athletic fields, the parking lot and entrance landscape and some adjoining landscape areas.
20	220003	220003	Well No. 2	4	Well No. 2 supplies the concession stand, public restrooms and public drinking fountains.