# ENGINEERING EVALUATION FOR THE CHARLES A. BLACK WELLFIELDS AND WATER TREATMENT FACILITIES WRWSA WORK ORDER NO. 21-01



#### **FINAL**

#### **Prepared For:**

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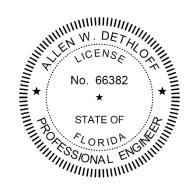


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This report is intended for review by the Withlacoochee Regional Water Supply Authority (WRWSA), Citrus County (County), and other parties as considered necessary by the WRWSA, County and CHA Consulting, Inc.

This document has been electronically signed and sealed by **Allen W. Dethloff, PE**, on **September 8, 2021** using a digital signature. Printed copies of this document are not considered signed and sealed and the authentication code must be verified on any electronic copies.



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#### ACCRONYMS AND ABBREVIATIONS

AADD Annual Average Daily Demand

AADF Annual Average Daily Flow

CAB Charles A. Black

F.A.C. Florida Administrative Code

FDEP Florida Department of Environmental Protection

gpd Gallons Per Day

gpm Gallons Per Minute
GST Ground Storage Tank

Hp Horsepower

HSP High Service Pump

kW Kilowatt

MDD Maximum Daily Demand

MDF Maximum Daily Flow

MG Million Gallons

MGD Million Gallons Per Day

MOR Monthly Operating Report

No. Number

psi Pounds Per Square Inch

R&R Renewal and Replacement

SWFWMD Southwest Florida Water Management District

WRWSA Withlacoochee Regional Water Supply Authority

WTF Water Treatment Facility

WUP Water Use Permit



#### 1.0 INTRODUCTION

#### 1.1 General

In January 2021, the Withlacoochee Regional Water Supply Authority (WRWSA) contracted CHA Consulting, Inc (CHA) to prepare an update to the *Engineering Evaluation Report for the Charles A. Black Wellfields and Water Treatment Facilities* dated September 2016. The content of the evaluation includes the following:

- Description of the existing facilities.
- Flow records and compliance with Southwest Florida Water Management District (SWFWMD) and Florida Department of Environmental Protection (FDEP) permit requirements.
- Condition assessment of the existing visible above ground assets at the Charles A. Black (CAB) wellfields and water treatment facilities (WTF).
- Major equipment Renewal and Replacement (R&R) schedules and associated costs based on existing conditions, R&R annual reports, available maintenance records, and typical useful life.
- Projected R&R fund balance and recommendations for a revised annual R&R fund contribution and minimum and maximum fund balances.

WRWSA entered into a new Water Supply Contract with Citrus County on October 11, 2016 that governs the operation, maintenance, alteration, replacement, and expansion of the WRWSA CAB water supply. The Agreement is included in **Appendix A**.

As part of the evaluation, data were collected and site visits were performed. Data collection involved the gathering of information provided by WRWSA and Citrus County including permits, agreements and amendments, monthly operating reports, engineering evaluation reports, R&R annual reports, available maintenance records, historical R&R costs, and institutional knowledge from County and WRWSA staff. The CHA Team (comprised of staff from CHA and EMI, Inc, CHA's electrical and instrumentation subconsultant) visited the CAB WTFs and wellfields with WRWSA and Citrus County staff on March 5, 2021. The site visits were conducted to visually evaluate the condition and operational performance of the above ground existing equipment in the CAB and wellfield facilities. WRWSA and County personnel assisted with access to the facilities and provided key information related to the equipment at the subject facilities. Photographs from the site visits are included in **Appendix B**.



#### 2.0 GENERAL OVERVIEW OF SYSTEM AND FACILITIES

The CAB water supply system consists of seven groundwater production wells and two water treatment facilities: CAB-1 and CAB-2. Five wells supply water to the CAB-1 WTF and two wells supply water to the CAB-2 WTF. **Figure 2-1** shows the locations of the wells and WTFs.

#### 2.1 CAB-1 Facility

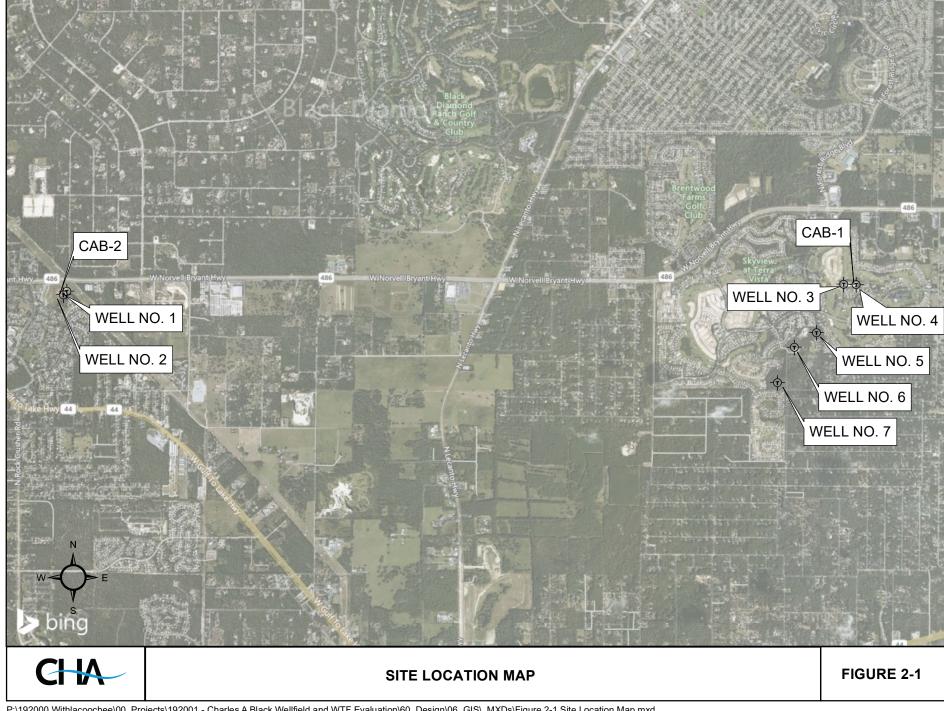
The CAB-1 WTF is located at 1999 N. Blue Jay Terrace, Hernando, FL 34442. The facility is owned by the WRWSA and consists of five groundwater supply wells (Wells No. 3 through 7) that provide raw water to the CAB-1 WTF. Well Nos. 3 and 4 are at the CAB-1 WTF, and Well Nos. 5, 6, and 7 are off-site within the service area. The WTF consists of:

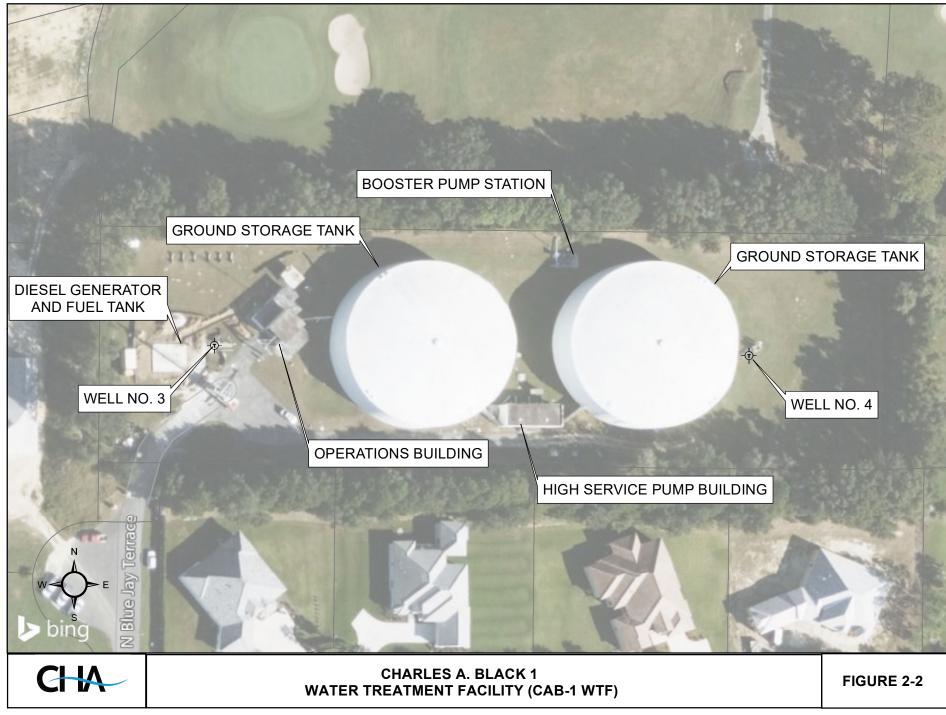
- Two (2) 4-million-gallon (MG) pre-stressed concrete ground storage tanks (GSTs).
- One (1) liquid sodium hypochlorite feed system that consists of two (2) 1,000-gallon storage tanks and a pump skid with three (3) 1/3-horsepower (Hp) chemical feed pumps.
- Four (4) 75-Hp high service pumps (HSPs) for the low-pressure system.
- Two (2) booster pumps for the high-pressure system to provide water service to a portion of the service area. The booster pumps also have the capability to serve the low-pressure system. These assets belong to Citrus County and are not under WRWSA purview.
- One (1) 400-kilowatt (kW)/500kVA diesel emergency generator with an automatic transfer switch and a 2,054-gallon steel diesel fuel storage tank.
- Well No. 7 has a 400-kW/500kVA diesel emergency generator with an automatic transfer switch housed in a concrete block masonry building. A 1,000-gallon steel diesel fuel storage tank is located outside of the building in a secondary containment structure.

**Figure 2-2** shows the site plan of the CAB-1 WTF. Water enters the CAB-1 facility through underground piping from the wellfield. The groundwater supply is disinfected with sodium hypochlorite and delivered to the ground storage tanks. The water is then pumped out to the distribution system via the HSPs and booster pumps.

The CAB-1 WTF has an operations building that consists of the main office and operations center, sodium hypochlorite storage and feed system, and various motors and other controls. The sodium hypochlorite storage tanks are within a roofed three-walled enclosure. This enclosure is adjacent to the office on one side and the sodium hypochlorite feed room on the other, which is fully enclosed with a door. A 400-kW/500kVA emergency generator with a 2,054-gallon diesel fuel storage tanks was recently installed on the west side of the CAB-1 site. The operations building appears to be constructed of concrete block with a stucco finish. The main HSPs and controls for the low-pressure system are housed in a separate building, which is also constructed of concrete block with a stucco finish.







#### 2.2 CAB-2 Facility

The CAB-2 WTF (also known as Meadowcrest WTF) is located at 1950 N Water Plant Point, Crystal River, FL 34429. The CAB-2 WTF is also owned by the WRWSA and consists of:

- Two (2) on-site groundwater supply wells (Well Nos. 1 and 2) to provide raw water to the WTF.
- One (1) 1-MG pre-stressed concrete GST.
- One (1) liquid sodium hypochlorite feed system with two (2) 150-gallon storage tanks and a pump skid with two 1/3-Hp chemical feed pumps.
- One (1) 40-Hp and two (2) 75 Hp HSPs.
- One (1) 400-kW/500kVA diesel emergency generator with an automatic transfer switch and a 2,054-gallon steel diesel fuel storage tank. The generator supplies emergency power to both well pumps, the HSPs, and the disinfection system.

**Figure 2-3** shows the site plan of the CAB-2 WTF. Water from Well Nos. 1 and 2 is disinfected with sodium hypochlorite and then subsequently piped into the GST. The water is then pumped out to the distribution system via the HSPs. Well No. 1 is housed in a concrete block building. The main operations building is constructed of concrete block with a stucco finish, and has rooms for operations, restroom, sodium hypochlorite storage tanks and feed skid, HSPs and controls. An emergency generator with a 2,054-gallon diesel fuel storage tank was recently installed on the northwest side of the CAB-2 site.





#### 3.0 PERMITS

The CAB facilities are regulated by SWFWMD and FDEP. SWFWMD issues the facilities a Water Use Permit (WUP) which provides the limits to the withdrawal rates and quantities of the seven wells, cumulatively and individually. FDEP issues permits for physical plant modifications, and WRWSA must operate the facilities and monitor water quality to meet FDEP regulations.

#### 3.1 SWFWMD Permit Review

The current SWFWMD WUP (No. 20 007121.006) was issued March 13, 2012, with Citrus County and the WRWSA granted as the permittees. This 10-year permit expires March 13, 2022<sup>1</sup>. Under the current permit the total combined permitted withdrawal quantity for the seven wells is 4.597 million gallons per day (MGD) and the peak month withdrawal rate is 6.574 MGD.

The withdrawal quantities were based on SWFWMD population projections of 26,410 by 2022, plus an annual average quantity of 0.509 MGD provided to another unspecified public supply entity with a separate wholesale permit. The current SWFWMD permit is included in **Appendix C**.

The WUP also provides individual withdrawal limits for each well based on Annual Average Daily Flow (AADF) and peak month flow rate. **Table 3-1** depicts the flow rate quantities for each well.

Table 3-1 SWFWMD Permitted Withdrawal Limits for Wells Nos. 1 through 7

Well No.	Annual Average Daily (gpd)	Peak Month (gpd) <sup>1</sup>
1	229,850	430,000
2	229,850	430,000
3	459,700	645,000
4	689,550	752,000
5	689,550	806,000
6	1,379,100	1,935,000
7	919,400	1,576,000
TOTAL	4,597,000	6,574,000

<sup>&</sup>lt;sup>1</sup> SWFWMD calculates the peak month as the average daily use during the highest water use month.

#### 3.1.1 SWFWMD Permit Compliance

**Table 3-2** provides a summary of the permit compliance requirements with specific conditions from the SWFWMD WUP.

CHA

3-1

<sup>&</sup>lt;sup>1</sup> Given this permit will expire within the next 10 months, it is recommended that the renewal process commence within the next 6 months to allow adequate time for response to requests for additional information.

Table 3-2 Summary of Compliance with SWFWMD WUP Specific Conditions

Specific Condition	Compliance	
Meter existing withdrawals	These are recorded continuously	
Submit monthly meter readings	These are reported as required to SWFWMD	
	The County has ability to pump from several	
Allow pumpage distribution flexibility	well combinations	
Report water quality, quarterly	This is reported to SWFWMD	
Report monitor well water levels, quarterly	This is reported to SWFWMD	
Cap unused wells, monthly	There are no permanent unused wells	
Submit an annual water use report, due each April	This is reported to SWFWMD annually	
	The County implements ongoing programs,	
Continue to develop and implement existing water	including water conservation workshops, and	
conservation programs	residential irrigation evaluation program	
Maintain a per capita rate of no more than 150 gpd	This is reported as required to SWFWMD in the	
per person by the year 2019	Public Supply Annual Report	

The monthly withdrawal quantities are recorded by the County staff and submitted to FDEP. CHA reviewed the MORs for January 2016 to February 2021 and summarized the monthly AADF and the peak month flows into graphs.

**Figure 3-1** shows the historical flow delivered from the CAB facilities. The facilities have exceeded the AADF limit as stated in the SWFWMD WUP for the cumulative well withdrawal limits in the years 2016, 2019 and 2020. The facilities are in compliance with the peak month limit indicated by the SWFWMD WUP.

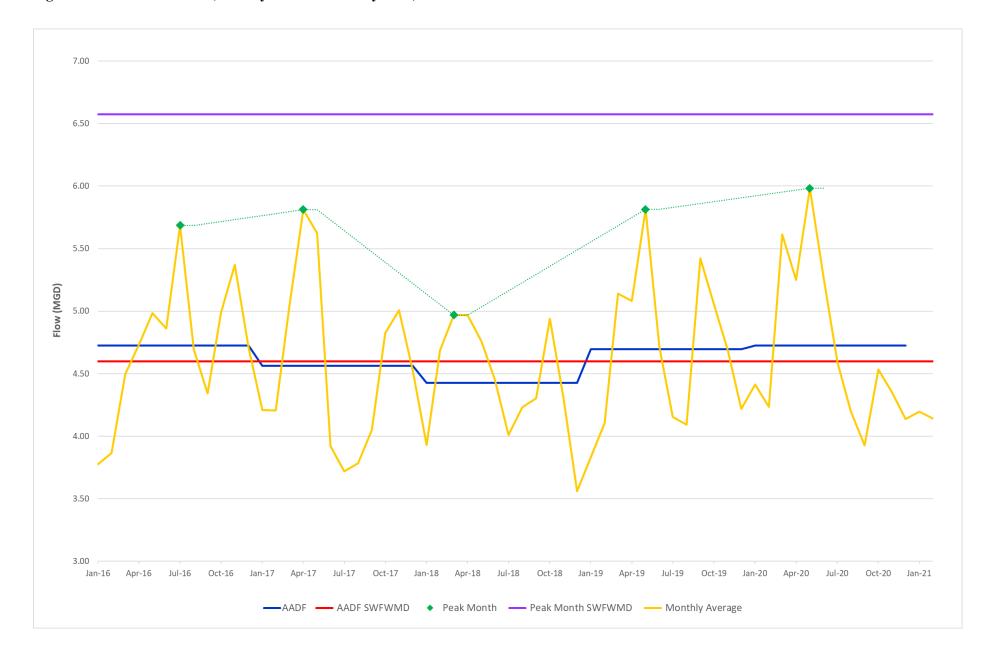
**Appendix D** includes details of flow quantities for each well from January 2016 to February 2021. Based on the individual well withdrawal records, several wells have instances where the pumpage has exceeded the SWFWMD AADF limits; **Table D-1** in **Appendix D** summarizes the findings. Well Nos. 3, 4, 5, 6 and 7 exceeded the Peak Monthly Flow Limit and the AADF several times during the 2016-2021 period. The permit allows for production at individual wells to exceed the AADF or peak monthly limits by up to 40%, so long as the total annual average and total peak month withdrawals are within the prescribed limits. Exceedances from Well Nos. 3, 4, and 5 are beyond the 40% "allowance" with respect to Peak Monthly quantities indicated by the SWFWMD permit. Withdrawals from Well No. 3 also exceed the AADF limit (by ~52%, or ~12% over the allowance). The exceedances were observed during the dry-weather months or drought conditions and, as such, are most likely associated with irrigation.

#### 3.1.2 Water Shortage Restrictions

SWFWMD has year-round water restrictions in effect, limiting irrigation to no more than 2 days per week throughout the district. The County has implemented tiered rates to discourage high water use and, recently, in June 2021, passed a resolution to limit irrigation to 1 day per week to further discourage water use. This has been effective in lowering water usage. The AADF has declined and as of May 2021, is close to being in compliance with the AADF limit.



Figure 3-1 Combined Flows (January 2016 to February 2021)





#### 3.2 FDEP Permit Compliance

On July 9, 2004, FDEP issued Citrus County Utilities a Capacity Determination, which concluded a total capacity of 14.54 MGD for both CAB WTFs. FDEP rules do not establish operating permits for drinking water systems. Therefore, compliance with FDEP rules and regulations is determined through monitoring, reporting, and inspections of the facilities by FDEP personnel. Because compliance is not managed through conditions of any permit, these conditions are generally specific to the construction described in the permit. The major FDEP requirements to maintain the facilities in compliance are depicted in **Table 3-3**. FDEP identified no known compliance issues.

Table 3-3 Summary of Compliance with FDEP Rules and Regulations

Specific Condition	Compliance
Limit the maximum daily demand (MDD) for	The current MORs from 2016 to 2020 show no
any 24-hour period to less than the design capacity of the facilities:	exceedances over the permitted MDD operating capacity of 14.54 MGD.
Maintain a minimum pressure of 20 psi throughout the distribution system:	The CAB facilities monitor the pressure leaving the facilities and at various locations throughout the distribution system to ensure compliance with the requirements.
Maintain a minimum chlorine residual of 0.2 mg/L at all parts of the distribution system, at all times:	Daily chlorine residual readings are taken and recorded.
Record daily flow values and provide FDEP with MORs:	Daily flows are taken and recorded and MORs are submitted to FDEP in the required timeframe.
Perform FDEP required compliance chemical monitoring:	All required chemical monitoring is performed and submitted to FDEP, as required.
Maintain and operate the CAB facilities in accordance with Section 62-555.350, F.A.C:	The CAB facilities are kept in good condition, maintenance is performed in the required timeframes, and the facilities are operated in accordance with Section 62-555.350, F.A.C.



#### 4.0 WELLFIELD, WTF CAPACITY AND CONDITION EVALUATIONS

In addition to a permit and compliance evaluation, the capacities and the overall condition of the wellfields and WTFs were evaluated based on observations during the site visit on March 5, 2021 and a review of the data gathered from the County. The observed condition and operation descriptions are defined as follows:

- **Excellent:** installed within the last year at the time of the evaluation.
- **Satisfactory:** normal wear based on the known age; well-maintained with no noticeable or very minor corrosion, leaks, broken or missing components. Equipment may have reached the end of its useful life; however, the observable condition can be satisfactory.
- **Needs Maintenance:** noticeable corrosion, damage, or degradation that can be fixed, rebuilt, or replaced with parts at minimal cost to extend its useful life.
- Needs Replacement: corroded, damaged, or degraded beyond rebuilding or repair.

#### 4.1 Wellfield Condition Assessment and Capacity

#### 4.1.1 Wellfield Condition Assessment

On March 5, 2021, the CHA Team conducted a field inspection of the seven wells. **Table 4-1** shows the field inspection observations for each major unit process.

**Table 4-1 Wellfield Condition** 

Unit Process	Observed Conditions and Operation	
Well No. 1 (CAB-2 WTF)		
Visible Well Pump, Piping, Electrical, and Controls	Satisfactory	
Well Building	Satisfactory	
Well No. 2 (CAB-2 WTF)		
Visible Well Pump, Piping, Electrical, and Controls	Satisfactory	
Well No. 3 (CAB-1 WTF)		
Visible Piping, Electrical, and Controls	Satisfactory	
Well No. 4 (CAB-1 WTF)		
Visible Piping, Electrical, and Controls	Satisfactory	
Well No. 5 (Offsite CAB-1 WTF)		
Visible Piping, Electrical, and Controls	Satisfactory	
Overall Site	Satisfactory	
Well No. 6 (Offsite CAB-1 WTF)		
Visible Piping, electrical, and controls	Satisfactory	
Overall Site	Satisfactory	
Well No. 7 (Offsite CAB-1 WTF)		
Visible Piping, electrical, and controls	Satisfactory	
Emergency Generator	Satisfactory	
Fuel Storage Tank*	Satisfactory	
Well Building and Overall Site	Satisfactory	

<sup>\*</sup>Fuel storage tank is schedule to be replaced.



Based on visual evaluation and feedback from the County, as noted in the tables all equipment is in satisfactory condition and well-maintained. The 400-kW generator at Well No. 7, manufactured by Caterpillar, is 21 years old. The County indicted that the 1,000 gallons fuel storage tank will be replaced in the near future.

The County also mentioned the following updates:

- Soft starters at Well Nos. 5 and 6 were replaced in 2016.
- Roof at Well No.7 was recently replaced.
- The submersible well pumps at Well Nos. 4 and 7 were replaced with vertical turbine pumps within the past 3-4 years.

#### 4.1.2 Wellfield Capacity

FDEP regulates the wellfield capacity for a public water system via Section 62-555.315(3) and Section 62-555.320(6), F.A.C. The sections state that the total well capacity connected to a water system shall equal at least the system's design MDD including design fire flow demand if fire protection is being provided. In addition, the total well capacity with the largest producing well out of operation shall equal at least the design average daily water demand (ADD) and preferably the design maximum-day water demand for the system. **Table 4-2** summarizes the capacities of the wells.

**Table 4-2 Wellfield Capacity** 

Plant	Well No.	Design Capacity (gpm)	Design Capacity (MGD)
	3*	1,600	2.304
	4*	1,600	2.304
CAB-1	5	1,500	2.160
	6	3,400	4.896
	7	3,600	5.184
CAR 2	1	850	1.224
CAB-2	2	900	1.296
7	Total	11,850	17.064

<sup>\*</sup>Well Nos. 3 and 4 are not operated at the same time.

From January 2016 to February 2021, the CAB facilities had an MDD of 8.881 MGD. The design MDD is 14.544 MGD. The minimum fire flow demand is 1,000 gpm for 2 hours, which results in an additional (short-term) demand of 1.44 MGD, for a total of 15.984 MGD. The total wellfield design capacity is 17.064 MGD and, therefore, meets the requirement of MDD and fire flows.



# 4.2 CAB WTF Condition Assessments and Component Capacity

#### **4.2.1 CAB WTF Condition Assessment**

On March 5, 2021, the CHA Team conducted a field inspection of the CAB-1 and CAB-2 WTFs. **Table 4-3** and **Table 4-4** depict the field inspection observations for each major unit process.

**Table 4-3 CAB-1 WTF Conditions** 

Unit Process	Observed Conditions and Operation	
Disinfection System		
Bulk Storage Tanks	Needs Replacement	
Feed Skid	Excellent (installed in 2020)	
Residual Meter	Excellent (installed in 2020)	
<b>Pre-stressed Concrete Ground Storage Tanks</b>		
GST No.1	Satisfactory	
GST No.2	Satisfactory	
HSPs		
HSP No.1	Satisfactory	
HSP No.2	Satisfactory	
HSP No.3	Satisfactory	
HSP No.4	Satisfactory	
<b>Booster Pump Station</b>		
Booster Pump No.1	Satisfactory	
Booster Pump No.2	Satisfactory	
<b>Emergency Power System</b>		
Generator	Excellent (installed in 2019)	
Fuel Storage Tank	Excellent (installed in 2019)	
Operations Building	Satisfactory	
Visible Site Piping	Satisfactory	
Visible Site Electrical and Controls	Satisfactory	
Overall WTF Site	Satisfactory	

**Table 4-4 CAB-2 WTF Conditions** 

<b>Unit Process</b>	Observed Conditions and Operation	
Disinfection System		
Bulk Storage Tanks	Needs Replacement	
Feed Skid	Excellent (installed in 2020)	
Residual Meter Excellent (installed in 2020)		
Pre-stressed Concrete Ground Storage Tank		
GST No.1	Satisfactory	
HSPs		
HSP No.1*	Satisfactory	
HSP No.2	Satisfactory	
HSP No.3	Satisfactory	
<b>Booster Pump Station</b>		
Booster Pump No.1	Satisfactory	
Booster Pump No.2	Satisfactory	



Unit Process	Observed Conditions and Operation	
<b>Emergency Power System</b>		
Generator	Excellent (installed in 2019)	
Fuel Storage Tank	Excellent (installed in 2019)	
Operations Building	Satisfactory	
Visible Site Piping	Satisfactory	
Visible Site Electrical and Controls**	Satisfactory	
Overall WTF Site	Satisfactory	

<sup>\*</sup> HSP No. 1 motor replaced in 2020

Based on visual evaluation and discussions with the County, as noted in the tables, the majority of the equipment is in satisfactory condition and well-maintained. The County noted the following additional updates:

- Air conditioning system at the High Service Pump Building was replaced in 2017.
- The generators at CAB-1 and CAB-2 are manufactured by Caterpillar and were replaced in 2019.
- SCADA system at CAB-2 was replaced in 2020.
- The ground storage tanks at CAB-1 and CAB-2 were last inspected in January of 2021. The tank coating (stucco) was also inspected and found to be in satisfactory condition.
- The motor on HSP No. 3 was recently replaced.

#### 4.2.2 Capacity Evaluation

#### 4.2.2.1 Disinfection System Capacity

In 2008, Citrus County converted from gas chlorine (Cl<sub>2</sub>) to sodium hypochlorite (NaOCl) for the disinfection systems at both CAB facilities. The disinfection system capacity shall be such that the minimum chlorine residual of 1.2 mg/L (after chlorine demand) at the points-of-entry (POEs) can be maintained when maximum chlorine demand coincides with maximum flow rate. At a chlorine dose of 1.90 mg/L, the chemical feed pumps at CAB-1 and CAB-2 should be able to pump 24 gallons per hour (gph) and 5 gph, respectively at design MDD.

The sodium hypochlorite system requires a 30-day chemical supply on ADD and dosage conditions. The ADD for CAB-1 and CAB-2 are 4.343 and 0.269 MGD, respectively. Based on these conditions, the required storage volume for CAB-1 is 1,652 gallons and 102 gallons at CAB-2. The chlorine storage capacity at CAB-1 and CAB-2 are adequate.

#### 4.2.2.2 Storage Capacity

FDEP regulates the minimum storage capacity of WTFs according to Rule 62-555.320(19), F.A.C., which requires that the total storage capacity of the WTFs meet at least 25% of the MDD of the system plus a design fire-flow rate and fire-flow duration. For this evaluation, the design fire-flow rate is 1,000 gpm and the duration is 2 hours. Thus, 120,000 gallons of fire-flow storage is required



<sup>\*\*</sup>SCADA system replaced in 2020

by FDEP in addition to 25% of the MDD based on an MDD of 8.881 MGD. The required storage capacity is therefore 2.340 MG.

The existing total system storage capacity is 9.0 MG, and therefore, the CAB WTFs have sufficient storage capacity.

#### 4.2.2.3 HSP Capacity

FDEP regulations for the HSP capacity are in Section 62-555.320(15), F.A.C. According to the regulation, the total capacity of all HSP stations connected to a water system shall be sufficient to:

- Meet at least the water system's peak hour demand or the maximum daily demand plus fireflow, whichever is the largest.
- Maintain a minimum gauge pressure of 20 psi throughout the water system's distribution system up to each customer's point of connection to the distribution system.

The MDD from January 2016 through February 2021 was 8.881 MGD for the system. The MDD plus fire-flow demand of 1,000 gpm (1.44 MGD) is 10.321 MGD for the system. The peak hour demand is 13.32 MGD (MDD times an industry standard peaking factor of 1.5) for the water system.

These requirements need to be satisfied based on the HSP firm capacity with the largest pump out of service. As shown in **Table 4-5**, the total WTF firm capacity is 15.408 MGD and meets the peak hour flow.

**Table 4-5 Pumping Capacity of the CAB Facilities** 

Facility	Pump Number	Design Capacity (gpm)	Design Capacity (MGD)
CAB-1*	1	2,700	3.888
	2	2,700	3.888
	3	2,700	3.888
	4	2,700	3.888
CAB-2**	1	400	0.576
	2	1,300	1.872
	3	1,300	1.872
Total l	Firm Capacity	10,700	15.408

<sup>\*</sup>Only 3 HSPs at CAB-1 can run at a given time. Booster Pumps only serve the area near CAB-1; therefore, they are not included in this table, nor were they included in the capacity evaluation.

The total firm pump capacity of the system is 15.408 MGD. The HSP is the limiting factor for the capacities of both CAB WTFs. Based on these criteria, it is recommended that a Capacity Analysis Report (CAR) be prepared in accordance with Rule 62-555.348, FAC to project future flows and HSP needs. The HSP meets the current capacity; however, when the pumps are replaced, it is recommended to replace one or more pumps with larger capacity pumps if necessary, to accommodate future flows. This would also be an opportunity to address known pressure shortfalls in some sections of the distribution system.



<sup>\*\*</sup>Pump 1 is manually switched and not included in the capacity evaluation

#### 4.2.2.4 Emergency Power Capacity

FDEP requirements for stand-by power are covered in Section 62-555.320(14), F.A.C. The requirements stipulate that the total stand-by power shall provide for operation of that portion of the system's water source, treatment, and pumping facilities necessary to deliver potable water that meets all applicable primary and secondary standards at a rate that is at least equal to the systems ADD.

In 2019, two (2) new 400-kW/500kVA generator was installed at the CAB-1 and CAB-2 facilities. The generator installed at CAB-1 is capable of operating Well No. 3 or 4 (only one at a time), the disinfection system, and two of the HSPs.

The 400-kW/500kVA generator installed in CAB-2 is capable of operating both of the wells, the disinfection system, and HSP Nos. 2 and 3. **Table 4-6** and **Table 4-7** summarize the stand-by power capabilities of the CAB wellfields and HSPs. Well No. 7 has a 400-kW generator that provides emergency power.

**Table 4-6 Emergency Power Capacity for the Wells** 

Facility	Well Number	Design Capacity (GPM)
CAB-1	3*	1,600
	4*	1,600
	7	3,600
CAB-2	1	850
	2	900
TOTAL		6,950

<sup>\*</sup>Only one of the (Wells No. 3 or 4) is operated at one time on stand-by power.

**Table 4-7 Emergency Power Capacity for the HSPs** 

Facility	<b>HSP Number</b>	<b>Design Capacity (GPM)</b>
CAB-1	1	2,700
	2	2,700
CAB-2	2	1,300
	3	1,300
TOTAL		8,000

<sup>\*</sup>Booster Pump only serve the area near CAB-1; therefore, were not included in the capacity evaluation.

Thus, the wellfield capacity on emergency power is 6,950 gpm, or 10.01 MGD, and the HSP capacity on stand-by power is 11.52 MGD. The minimum requirement for stand-by power capacity is 4.606 MGD. Therefore, the emergency power for both WTFs satisfies the requirement.



#### 5.0 WELLFIELDS AND WTF MAINTENANCE RECORDS

Based on the field observations and review of historical documents, the CAB wellfield and WTFs appear to be well maintained by Citrus County. Reviews of the R&R Annual Reports invoices from 2016 to 2020 indicate a number of R&R expenditures with total costs ranging from \$19,186 to \$801,292 per year. **Table 5-1** summarizes the total expenditures for each year.

**Table 5-1 Annual R&R Expenditures** 

Year	Expenditure
2016	\$146,965
2017	\$86,132
2018	\$217,366
2019	\$801,292
2020	\$19,186
Total	\$1,270,944

The annual reports indicate that several expenditures less than \$2,500 from the R&R fund were to address day-to-day maintenance issues. The repairs and maintenance items are noted in the invoices included in the R&R Annual Reports. In 2019, the generators at CAB-1 and CAB-2 were replaced. Additionally, during this period, there were several repairs made to the pump at Well No. 7, building improvements, new motors on booster and high service pumps, leakage repair to the 30-inch water main and other minor items.

The County should continue to maintain a minimum expenditure limit of \$2,500 to be qualified as a R&R item as stipulated in the Water Supply Contract between WRWSA and Citrus County. Given the equipment at the CAB-1 and CAB-2 facilities and the maintenance it has historically required, the existing agreement appears to need to be re-evaluated with respect to increasing the contribution amount to provide sufficient funds for a viable, perpetual R&R program. Sections 7 and 8 provide a review of the R&R fund and recommendations for moving forward with the new Water Supply Contract.



#### 6.0 FUTURE PLANS

Citrus County is working on an update to its Water Master Plan, which is expected to be completed sometime in 2022. Once completed, projected flows will be re-evaluated against the current well and treatment capacities. Expansion plans, if necessary, will be prepared in accordance with this evaluation. However, the main focus of this report for the future is to establish an updated annual County contribution to the R&R fund based on a re-evaluation of the R&R needs and the current fund balance.



#### 7.0 RENEWAL AND REPLACEMENT FUND

#### 7.1 History of the R&R Fund

A Joint Use, Operation and Management Agreement was made between WRSWA and Citrus County on August 22, 1989. The Agreement was made to provide a central water system to serve the customers of Citrus County. As stated in the Agreement, Citrus County is required to reimburse WRSWA for the capital costs associated with the construction of the CAB wellfield and WTFs. It also requires Citrus County to contribute to an R&R fund for the CAB facilities. Four amendments have been made to the Agreement:

- February 4, 1992, Amendment 1
- January 24, 1995, Amendment 2
- August 20, 1997, Amendment 3
- August 19, 1998, Amendment 4 (final)

The second amendment, which is the most significant, noted that the R&R would include only the actual costs of equipment replacement since the County has adequate manpower and resources to be responsible for all installation, maintenance, and repair of the subject infrastructure.

The 2016 Water Supply Contract requires an evaluation of the condition of capital equipment, projected useful life, and R&R fund balances for potential changes in the annual contribution and other provisions as outlined in Section 11. The evaluation is set to occur every 5 years starting in 2020.

#### 7.2 Status of Current Fund

**Table 7-1** depicts activity in the R&R account during fiscal years 2016 to 2020. In 2019, major expenditures to replace the emergency power generators at each of the two WTFs utilized more than one third of the fund balance, and reduced the balance below the \$2 million minimum balance.

**Table 7-1 R&R Account Activity Summary** 

Activity	2016	2017	2018	2019	2020
Beginning					
Balance	\$2,104,402.57	\$2,140,306.85	\$2,248,536.82	\$2,239,763.50	\$1,652,843.28
Deposits	\$182,870.00	\$180,000.00	\$180,000.00	\$180,000.00	\$180,000.00
Interest					
Revenue	\$0	\$14,362.8	\$28,592.83	\$34,372.67	\$18,095.63
Expenditures	\$(146,965.72)	\$(86,132.83)	\$(217,366.15)	\$(801,292.89)	\$(19,186.89)
Ending Balance	\$2,140,306.85	\$2,248,536.82	\$2,239,763.50	\$1,652,843.28	\$1,831,752.02



#### 7.3 R&R Program Analysis

An R&R program is intended to extend the useful life of a piece of equipment by repairing or replacing parts in a preventative maintenance program. Funds should be made available through appropriate budgeting to allow for periodic renewal and ultimate replacement of equipment.

The CAB facilities have been in service since the late 1980s and early 1990s. Much of the mechanical and electrical equipment has been in operation for over 30 years and is nearing the end of its industry standard useful life. Renewal of some equipment may extend the useful life, but full-scale replacement of equipment is expected to increase over the next 10 years.

**Table E-1** in **Appendix E** is a revised projected engineer's opinion of probable costs for R&R of facilities at CAB-1 and CAB-2. The table includes both periodic renewal costs that would include rebuilding existing equipment as well as periodic full-scale replacement. These costs are based on construction costs and engineering experience with similar projects and materials are at a planning level opinion of cost. Costs were estimated in 2021 dollars and projected using a 4% inflation rate.

Also included in **Appendix E** is an annual contribution evaluation that varies the contribution amount against the running total R&R for each year to determine the appropriate annual contribution.



#### 8.0 RECOMMENDATIONS

Generally, the CAB-1 and CAB-2 facilities appear to be in good condition. However, several expenditures from the R&R fund appear to be related to small expenditures (less than \$2,500) instead of providing for the renewal or replacement of the CAB facilities. To improve operations and reliability and continue compliance with permit conditions CHA recommends the following:

- Continue to maintain maintenance records for each piece of equipment to track failures and establish trends based on the maintenance history.
- Perform a Capacity Analysis Report to project future flows and HSP needs.
- Reapply for the SWFWMD Water Use Permit in a timely fashion. It expires on March 13, 2022.
- Increase annual contribution to the fund from \$180,000 to \$270,000 to maintain the R&R fund balance between \$2,000,000 and \$3,000,000 by the end of fiscal year 2027, as stated in the Water Supply Contract. See Agreement in **Appendix A**.
- Maintain a minimum expenditure of \$2,500 to qualify for use from the R&R fund.
- Continue conducting an evaluation of the facilities every 5 years. Closely monitor costs to allow the R&R budget to be adjusted, if necessary as the planning period progresses. Based on age, equipment replacements are expected early in the planning period. Budgeting should, therefore, reflect replacement costs early in the planning period, with renewal costs occurring later.
- Further evaluate the capacities for CAB-1 and CAB-2 WTFs to provide a better understanding
  of the capacity limits and if upgrades to the HSPs and pipelines are required when they are
  replaced.
- The existing motor control center at CAB-1 is obsolete (Square-D Model 4). Therefore, immediate replacement is recommended.
- The motor starter panel at Well No. 5 has been modified in the field which does not meet current National Electrical Code requirements. Replacement with a factory engineered unit with a UL-508a rating of 42k AIC SCCR is recommended. The main disconnect may require replacement to withstand the available short circuit current from the large pad mounted transformer a few feet away.
- A fault analysis at Well No. 6 due to the proximity of the utility pad mounted transformer is recommended.
- At Well No. 7 the anti-siphon solenoid valve (generator fuel system) will need to be replaced and made active.
- A fault analysis is recommended at Well No. 7 due to the proximity of the utility pad mounted transformer.



• Recommend infrared scan of major electrical equipment to locate potential failures. There are splice boxes at CAB-1 and CAB-2 that are of interest since a cable failure could result in total loss of power to the facility.



# Appendix A

**2016 Water Supply Contract** 



# WATER SUPPLY CONTRACT between the WITHLACOOCHEE REGIONAL WATER SUPPLY AUTHORITY and CITRUS COUNTY, FLORIDA





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# WATER SUPPLY CONTRACT

#### BETWEEN

#### WITHLACOOCHEE REGIONAL WATER SUPPLY AUTHORITY

#### AND

#### CITRUS COUNTY, FLORIDA

THIS CONTRACT, entered into this 11th day of October 2016, by and between the WITHLACOOCHEE REGIONAL WATER SUPPLY AUTHORITY, a regional water supply authority created and existing pursuant to Sections 373.713 and 163.01, Florida Statutes, and other applicable law, acting by and through its Board of Directors, the governing board thereof ("Authority"); and CITRUS COUNTY, a political subdivision of the State of Florida, acting by and through its Board of County Commissioners, the governing board thereof ("the County"), collectively referred to as the "Parties".

#### WITNESSETH:

WHEREAS, the Authority was created for the purpose of developing, storing and supplying water for county and municipal purposes and exists pursuant to the Revised and Restated Interlocal Agreement Creating the Withlacoochee Regional Water Supply Authority executed January 14, 2014; and

WHEREAS, the Authority and the County entered into an Interlocal Agreement dated October 20, 1987, an Interlocal Agreement dated May 9, 1988, a Joint Use and Operation Agreement dated August 22, 1989, as amended by the First Amendment dated February 4, 1992, the Second Amendment dated January 24, 1995, the Third Amendment dated August 20, 1997 and the final Amendment dated August 19, 1998, all of which address the development, operation and maintenance of the Charles A. Black Water Supply Facilities (CAB Facilities) located in Citrus County, Florida; and

WHEREAS, the Authority and the County entered into a Contract for Water Supply dated August 22, 1989, as amended on February 4, 1992, addressing water supply from the CAB Facilities; and

WHEREAS, it is the intent of the Parties that this Contract govern the operation, maintenance, alteration, replacement and expansion of the Authority's CAB Facilities and payments by Citrus County to the Authority; and

WHEREAS, expansions to the Authority's CAB Facilities including but not limited to the design, permitting and construction of new water supply sources may be financed for the County through the issuance of Authority revenue bonds, capital contributions from the County, capital contributions from Southwest Florida Water Management District (SWFWMD), or other governmental grants, or any combination thereof; and

WHEREAS, the County desires to purchase water from the Authority according to the terms and conditions of this Contract, and the Authority desires to provide the County water according to the terms and conditions of this Contract further governed by the SWFWMD Water Use Permit (WUP) associated with the CAB Facilities; and

WHEREAS, by this Contract the County is assuring to the Authority that it will purchase or cause payment to be made for a specified minimum quantity of potable water supplies to be delivered by the Authority to the County.

**NOW, THEREFORE**, in consideration of the foregoing recitations, and of the mutual covenants and agreements hereafter set forth, the Authority and the County intending to be legally bound hereby agree as follows:

- 1. **DEFINITIONS.** In the absence of a clear implication otherwise, capitalized terms used in this Contract and in the attached exhibits shall have the following meanings:
- 1.1 <u>Annual Average Daily Quantity</u> The total water quantity provided by the Authority to the County in a Contract Year divided by 365.
- 1.2 <u>Annual Entitlement</u> means the minimum amount of water to be made available to the County during a given Contract Year. Said annual entitlement shall be expressed as an average and peak month quantity as specified in the SWFWMD WUP.
- 1.3 <u>Authority</u> The Withlacoochee Regional Water Supply Authority.
- 1.4 <u>Authority Board</u> The Authority's governing body.
- 1.5 Base Rate Charge Means the rate per thousand gallons of water produced from the CAB facilities established by this Contract that the County agrees to pay. The Base Rate Charge is applied to the monthly water production to determine monthly Base Rate Charge payments made by the County to the Authority.
- 1.6 <u>Charles A. Black Water Supply Facilities (CAB Facilities)</u> Known as CAB 1 and CAB 2 and all associated real property, interest in real property, fixtures, personal property, wells,

buildings, treatment systems, pumps, pipes, storage facilities, reservoirs, water transmission mains, and appurtenant or associated facilities, any future expansion of said facilities and appurtenant or associated installations owned, leased or otherwise controlled by the Authority and used for the provision of potable water supply located in Citrus County and as further described in "Exhibit A."

- 1.7 <u>Contract Year</u> The period between execution of this Contract and September 30, 2016, and each fiscal year of the Authority (beginning on each October 1 and ending on the immediately following September 30) thereafter during the term of this Contract.
- 1.8 <u>Co-Permittees</u> Citrus County and the Withlacoochee Regional Water Supply Authority; which share the power and ability to collectively apply for all regulatory permits or approvals and to respond to all issues that may arise therefrom.
- 1.9 <u>Customers</u> Citrus County, Authority members and other utilities that enter into a separate contract with the Authority for water supply from the CAB Facilities.
- 1.10 <u>Delivery Point(s)</u> The point(s) of connection between the CAB Facilities and the distribution system of the County or other Customer(s). The Delivery Points for the County are included in Exhibit "A."
- 1.11 <u>Fiscal Year</u> Means the Authority's fiscal year starting October 1 and ending September 30 of each year.
- 1.12 <u>Interlocal Agreement</u> Means the Revised and Restated Interlocal Agreement Creating the Withlacoochee Regional Water Supply Authority executed January 14, 2014 and any amendments thereto.
- 1.13 <u>Member Governments</u> Members of the Authority. This term refers to Citrus, Hernando, Marion and Sumter counties and the municipalities within these counties which have become members of the Authority.
- 1.14 MGD Million gallons per day.
- 1.15 <u>Party or Parties</u> Party shall mean a signatory to this Contract. Parties shall mean Citrus
   County and the Authority.
- 1.16 Peak Month Quantity The maximum water quantity to be provided by the Authority to the County in any given month. The Peak Month Quantity shall be that amount specified in the WUP Issued by the SWFWMD for the CAB facilities.

- 1.17 <u>Permits</u> All licenses, permits, authorizations or other approvals from any government or governmental agency, whether federal, state, regional or local, necessary or convenient for the acquisition, construction, expansion and operation of the CAB Facilities, including but not limited to any WUP issued by the SWFWMD.
- 1.18 <u>Renewal and Replacement Charges</u> The charges established by the Authority for the exclusive purpose of funding renewals and replacements of the CAB Facilities.
- 1.19 Renewal and Replacement Costs The capital expenditures as may be identified by Citrus County and approved in advance by the Authority for the ordinary renewal, replacement, upgrade and betterment of the Authority CAB Facilities. Renewal and Replacement Costs include, but are not necessarily limited to such items as the refurbishment or replacement of well pump motors, generators, storage tanks and telemetry. Renewal and Replacement Costs do not include such items as normal maintenance (painting, cleaning, calibrations, etc.). Renewal and Replacement Costs do not include capital expenditures associated with the expansion or addition of water treatment, storage, pumping or transmission capacity.
- 1.20 Renewal and Replacement Fund The fund established by the Authority for the exclusive purpose of funding renewals and replacements of the CAB Facilities. The balances on deposit in the Renewal and Replacement Fund will be expended for those Renewal and Replacement Costs specifically identified by the County and approved by the Authority.
- 1.21 <u>Water Supply Emergency</u> A loss or reduction in System Capacity caused by drought or a sudden, unexpected, unavoidable interruption in water delivery as declared by resolution by the Authority Executive Director with subsequent ratification by the Authority Board, or by the Authority Board.
- 2. **TERM**. The term of this Contract shall begin on the date of its complete execution by the Parties. The term of this Contract is ten (10) years with the option for the County to renew for four (4) additional ten (10) year periods. The contract shall automatically renew on the anniversary date unless the County, in County's sole discretion, notifies the Authority that it does not wish to renew the Contract at least six (6) months before the renewal date. Additionally, the County, in its sole discretion, may cancel this Contract at any time upon twelve (12) month's written notice to the Authority. If during the Contract term, the Authority issues Obligations to construct additional System Capacity to provide additional or maintain existing supply to the County that is secured from

the payments made by the County for service from the Authority and which repayment period extends beyond the termination date of the Contract as set forth above, the Contract will automatically be extended to include the last payment date of such additional Obligations. Before the expiration of this Contract, the Authority and the County recognize that a new contract or extension of this Contract will need to be in place to provide ongoing water service from the CAB Facilities and both Parties agree to work together in good faith to extend this Contract or create a new contract prior to this Contract's expiration date to meet the overall intent of the Authority to provide regional drinking water.

- 3. **AUTHORITY CAPACITY**. The Authority shall not be prohibited from maintaining unallocated capacity of the CAB Facilities so long as the Authority meets all of the County's capacity needs first.
- 4. **REPRESENTATION OF THE PARTIES**. The Authority and Citrus County make the following representations:
- 4.1 Each Party is duly organized and existing in good standing under the laws of the State of Florida and is duly qualified and authorized to carry on the governmental functions and operations as contemplated by this Contract.
- 4.2 Each Party has the power, authority and legal right to enter into and perform its obligations set forth in this Contract, and the execution, delivery and performance hereof by it a) has been duly authorized by its governing board; b) does not require any other approvals by any other governmental officer or body; c) does not require any consent or referendum of the voters for Authority financed projects; d) will not violate any judgment, order, law or regulation applicable to the Party; e) will not result in a default in any bond covenant; and f) does not constitute a default under, or result in the creation of, any lien, charge, encumbrance or security interest upon the assets of the Party under any agreement or instrument to which it is a Party or by which the Party and its assets may be found or affected except as provided herein under Section 12.4.
- 4.3 This Contract has been duly entered into and delivered by the respective County Commission and Authority Board, as of the date of its full execution by the Parties, constitutes a legal, valid and binding obligation of said Party, fully enforceable in accordance with its terms provided the enforceability thereof may be limited by any applicable bankruptcy, insolvency,

- reorganization or other similar laws affecting creditors' rights generally, or by the exercise of judicial discretion in accordance with general principles of equity.
- 4.4 There is no action, suit or proceeding, at law or in equity, before or by any court or governmental authority, pending or, to the best of the Party's knowledge, threatened against the Party which is not resolved by the execution of this Contract, wherein any unfavorable decision, ruling or finding would materially adversely affect the performance by the Party of its obligations hereunder or the other transactions contemplated hereby, or which, in any way, would adversely affect the validity or enforceability of this Contract, or any other agreement or instrument entered into by the Party in connection with the transaction contemplated hereby.
- 5. **DELIVERY OF WATER**. During each Contract Year, the Authority shall deliver water to the County in accordance with the terms and conditions of this Contract. The County shall pay for and the Authority shall timely develop and deliver new water supply sources and facilities to meet the needs of the County as set forth herein.
- 5.1 <u>Delivery Points</u>. The Authority shall deliver water to the County only at the Delivery Points as identified in Exhibit "A". Additional Delivery Points may be added by mutual agreement of the Authority and the County.
- 6. **LIMITATION OF PRODUCTION**. In no event shall the Authority be required to provide water from the CAB Facilities to the County in excess of any existing applicable Florida Department of Environmental Protection (FDEP) or SWFWMD permits. The County shall provide to the Authority a written schedule of requested deliveries for the next Contract Year prior to July 1 proceeding that year. Such schedule shall only be necessary when the County anticipates those quantities needed in the coming Contract Year will exceed those quantities contained in the most recent schedule submitted by the County. However, this schedule shall not be binding on the Authority for any amount but is intended to give the Authority an indication of the consumption levels needed by the County for subsequent years. Should the County identify future water needs that exceed the FDEP or SWFWMD permitted quantities of the CAB Facilities, the County shall notify the Authority in writing of this need at least two (2) years prior to the need occurring to ensure adequate time to address potential engineering, permitting and testing requirements.

- 7. RIGHT TO INCREASE ANNUAL ENTITLEMENT. If the Authority is serving water utilities other than the County from the CAB Facilities and in the event the County herein wishes to increase its entitlement to all or a larger part of the CAB Facilities permitted quantities, subject to the limitations of the Paragraph above, the County shall notify the Authority of the amount of increase desired as soon as possible, but not less than one (1) year prior to the end of any contract year, so that the Authority may be able to coordinate the production of water to the County.
- 8. SHORTAGE OF SUPPLY. If applicable, the percentage reduction of water delivered made necessary by drought, emergency, failures or any other cause, will be the same to each Authority customer receiving water from the CAB facilities based upon each customer's annual entitlement or maximum delivery as the percentage of total necessary reduction. The Authority shall use its good faith efforts if such reduction in water delivery occurs to obtain funds necessary to provide additional construction of well fields or expansion of the facilities in order to provide for the needs of the County. In such events the Parties shall cooperate and coordinate their efforts to insure water production and to implement conservation policies to lessen the impact of such emergencies or drought. The Base Rate Charge shall not be abated or waived by such occurrence(s).
- 9. **PRIOR AGREEMENTS**. It is the intent of the Parties hereto that this Agreement shall replace and supersede all previous agreements between the parties except those documents that convey or require the conveyance of any interest in property, whether real or personal in nature.
- 10. WATER RATE. The County shall pay to the Authority the rates set forth herein. The amount of water production at CAB 1 and 2 shall be determined by the County and shall be measured and reported consistent with the SWFWMD WUP monthly meter reading and reporting requirements for the CAB Facilities. Only the cumulative total of the individual withdrawal point metered quantities shall be included in the County's calculation of monthly water produced.
- 10.1 <u>Base Rate Charge</u>. The initial Base Rate Charge shall be \$0.1335 per one thousand gallons withdrawn.
- Annual Cost of Living Adjustments to the Rate. Beginning in the first full Contract Year, the Authority shall apply a cost of living adjustment to the rate set forth in section 10.1 on an annual basis. The Adjustment shall be equal to the annual adjustment that the County applies to its customer's rates not to exceed three percent (3%). The County's adjustment is set

- annually and begins automatically in October upon the start of the County's budget year. The adjustment shall take effect on a fiscal year basis, starting on October 1<sup>st</sup> of each year.
- Monthly Water Payments. The County shall pay its Base Rate Charge payment on a monthly basis following the calendar month in which the charges were incurred. The County shall submit payment to the Authority for the monthly charges within thirty (30) days of the end of the billing month. The Base Rate Charge established in section 10.1 will be applied to the monthly production by the County to determine the required monthly payment to the Authority. Payment shall be accompanied by a statement documenting the water production and payment calculation. Documentation of water production shall be in accordance with Section 12.4.1(5) of this Contract. Failure to pay monies shall create a debt. Should the County fail to pay within ninety (90) days after the billing month the County shall be in default pursuant to this Contract.
- 10.4 Minimum Production Charge. Should the County's total payments derived from Base Rate Charge payments for water production during a Contract Year, exclusive of the R&R fund payments, amount to less than \$224,000, the County agrees to pay the difference between actual total Base Rate Charge payments and the \$224,000 Contract Year minimum, regardless of the amount of water purchased. Said amount shall be paid no later than the third month of the following Contract Year. The parties acknowledge that at times equipment maintenance or failure, construction delays, failures to obtain permits, limitations on permits, transmission line ruptures or defects, or acts of God may prevent the Authority from performing its obligations of this Contract. If such temporary events prevent the Authority's performance for periods of thirty (30) days or less County's payment obligations shall not be adjusted. However, if such events prevent the Authority from performing for an amount of time in excess of thirty (30) days, the County will be excused from payment on a pro-rata basis for the period of the Authority's non-performance.
- 10.5 <u>Source of Payments</u>. The County's obligation to pay any monies due under this Contract does not constitute general indebtedness. Neither the Authority nor the holders of any obligations issued by the Authority in order to finance or refinance the expansion, alteration, improvement, replacement or operation of the Authority CAB Facilities shall have a right to require or compel the County to exercise its ad valorem taxing power to pay its obligations

and liabilities under this contract or to compel payment from any source other than as indicated in this Section. The County, however, shall and does hereby covenant to set water rates for its respective customers at a level sufficient to pay all monies due the Authority under this Contract. The County shall fix, revise, maintain and collect such fees, rates, tariffs, rentals or other charges for the use of products, services and facilities of their water utility systems as shall be necessary to fund the timely payment of their respective obligations and liabilities under this Contract as well as all other obligations payable from the revenues of their water systems.

11. RENEWAL AND REPLACEMENT RESERVE FUNDS. The County shall be responsible for budgeting and maintaining a Renewal and Replacement (R&R) Reserve fund for purposes of replacing and renewing capital facilities at the CAB Facilities. These funds are held in trust by the County for the Authority and are funds of the Authority. These funds shall be available to the County for capital facility replacement, renewal and major repair purposes at the CAB Facilities. The County shall administer these funds for the sole purpose of having adequate funds for capital facility replacement, renewal and major repair at CAB 1 and 2. Interest earnings on the R&R fund shall be deposited into the R&R account. The renewal, replacement and major repair to the capital facilities listed in Exhibit B are eligible for reimbursement from the R&R Reserve Fund. The County shall request prior authorization from the Authority for utilization of these funds, documenting the capital facilities to be affected, the need for renewal, replacement or major repair, the associated costs and timeline for incurring said costs. The County shall make such requests in writing and shall afford reasonable time for the Authority to review and approve such requests. The County shall inform the Authority as soon as is practical when it has identified the need for utilization of funds from the R&R Reserve fund. It is recognized that unanticipated events may occur, including emergencies, where prior Authority approval to replace or repair capital equipment or facilities at the CAB Facilities is not practical. In the event of such circumstances, the County shall inform the Authority in a timely manner of the need to repair or replace such equipment and the anticipated request to subsequently be reimbursed by the Authority from the R&R Reserve fund. The County agrees to utilize the most cost effective and efficient means for renewal, replacement and repair of CAB facilities, including utilization of applicable County purchasing policies and

procedures. The Authority agrees that its approval for utilization of funds from this account shall not be unreasonably withheld.

- 11.1 Contributions to the R&R Fund The County shall make contributions to the R&R fund in the amount of \$180,000 per year. The County shall make said payments in twelve monthly payments in the amount of \$15,000 per month.
- 11.2 <u>Minimum Capital Expense Eligible Amount</u> Capital renewal, replacement and repair expenses of \$2,500 or less for any individual expense shall not be eligible for reimbursement from the R&R Reserve fund.
- 11.3 <u>Maximum R&R Reserve Fund Balance</u> The R&R Reserve Fund shall have a maximum balance amount of \$3,000,000. Once the balance in the R&R Reserve Fund reaches this amount, the County shall no longer be required to place additional amounts in the fund. Interest earnings from the Fund shall continue to accumulate to the Fund even after the \$3,000,000 maximum has been reached.
- 11.4 <u>Minimum R&R Reserve Fund Balance</u> The R&R Reserve Fund shall have a minimum balance amount of \$2,000,000. Once the balance in the R&R Reserve Fund reaches this amount, the County shall resume payments into the account consistent with section 11.1 above.
- 11.5 R&R Reserve Fund Reporting The County shall provide to the Authority an annual report on contributions to and utilization of the R&R Reserve Fund, describing the date and amount of contributions to the Fund, interest earnings in the Fund; and the date, amount, and description of expenditures from the fund, including the purpose of the capital facility replacement, renewal or major repair. This annual report shall be for the prior Contract Year and shall be provided no later than January 31<sup>st</sup> in the following Contract Year.
- Periodic Engineering Evaluation of the CAB Facilities and Associated R&R Fund Requirements Pursuant to Section 12.4.2 below, the WRWSA is responsible for, at its expense, periodically inspecting the CAB facilities, determining the adequacy of the R&R fund and the County's contributions to the R&R fund. If it is determined through this periodic evaluation that the provisions above governing the R&R fund need to be modified, the Parties agree to develop mutually acceptable revisions to the above. Expenses incurred by the Authority for the Engineering Evaluation may be reimbursed from the R&R fund.

- 12. **OPERATION AND MAINTENANCE.** The Authority and the County herein agree to the County operating and maintaining the CAB Facilities together with all transmission lines and appurtenances thereto upon the following terms and conditions:
- 12.1 Costs Incurred All costs incurred by the County in managing, operating, maintaining and securing the Authority's facilities, including but not limited to the general administrative costs of the County related to all services performed by the County under this Contract, capital expenditures for items such as tools, equipment and vehicles necessary or convenient for the operation, management, maintenance and security of the Authority's facilities including any and all landscaping, irrigation and general area maintenance, all fees for consultants and other professionals needed and necessary for said maintenance and operations will be the responsibility of the County and not eligible for reimbursement from the R&R Reserve Funds.
- 12.2 <u>Appointment</u> the Authority herein appoints and employs the County to supervise, direct and control the management and operations of the CAB Facilities on the terms and conditions hereinafter set forth. The County herein accepts such engagement and shall faithfully perform services to be provided by it under this contract during the contract year and or years as herein provided.
- 12.3 Relationship of the Parties the County shall have the full power and authority to do all things necessary or reasonably proper to bring about the proper operation of the CAB Facilities and to meet the Authority's production obligations to Citrus County pursuant to this Contract. The County shall have complete control and discretion in the management and operation of the CAB Facilities and in the performance of its services and responsibilities hereunder. In taking any action pursuant to this Contract, the County, an independent contractor, shall be acting only as the appointed representative of the Authority, and nothing in this Contract shall be construed as creating a tenancy, partnership, joint venture or any other relationship between the parties hereto. All employees of the County shall be considered as County employees and at no time shall same be considered as employees of the Authority. Any contracts undertaken by the County for purposes of fulfilling its duties and obligations under this Operation and Maintenance provision shall be solely the responsibility of the County and that the County shall save and hold harmless the Authority from any

- liability or breach thereunder. Should the County intend to contract out the operation and/or maintenance of the CAB facilities to a third party, the County shall seek the Authority's concurrence prior to entering into any such contract.
- Delineation of Duties subject to all rights of control incident to the appointment as provided herein, the Authority and the County agree that the County shall have complete managerial control over the operation of the CAB Facilities during the term of this Contract. It is understood and contemplated by the parties that the Authority may assume operation and maintenance of the facilities at some mutually agreeable future date. That it is also understood by the parties that subject to the County's consent the Authority could consider the employment of the County employees who might be a part of the management and operation of the CAB Facilities in order to avoid displacement of employees and affording the Authority a positive operational transition with experienced staff personnel.
  - 12.4.1 <u>County's Responsibility</u> The County's responsibilities under this Contract shall include, but not be limited to the following:
    - 1) Operation and maintenance of the CAB Facilities shall be the responsibility and the obligation of the County. The County shall be responsible to adopt an adequate budget to pay all of the Operating and Maintenance Costs of the CAB facilities, and to provide for renewal and replacement costs to keep the CAB Facilities in good operating order, consistent with Section 11. The County shall provide sufficient personnel, with the required licenses and appropriate experience to undertake all regulatory requirements, including, but not limited to, those imposed by the FDEP, SWFWMD, the State of Florida Department of Health and the United States Environmental Protection Agency. If new regulatory requirements necessitate capital improvements or budget amendments, the County shall take all necessary actions to accomplish the same. The County shall be responsible for all regulatory violations including compliance costs or penalties assessed for same, which arise out of or are solely created through: (1) material errors or omissions by its personnel and agents in the day-to-day operations of the CAB Facilities; or (2) the failure of the County to timely proceed administratively to undertake or complete a requirement imposed by any regulatory agency in any consent order or operating permit. The

County shall maintain adequate catastrophic insurance on the CAB Facilities on such terms and amounts as established by the County in coordination with the Authority and shall include the Authority as co-insured thereon as it relates to its assets.

- 2) Compliance with all FDEP, SWFWMD and other environmental permits.
- 3) Protecting the quantity and quality of water produced from the Authority's facilities.
- 4) Altering and modifying the Authority's facilities provided such activities are undertaken with the Authority's approval.
- 5) Measuring and reporting water production. The County shall use its reasonable efforts to measure all water delivered to the County. The Authority shall own and the County shall maintain the meters used for measuring water production. The County shall maintain complete and accurate records of its water measurements. Production quantities shall be measured and reported consistent with the SWFWMD WUP monthly meter reading and reporting requirements for the CAB Facilities. Monthly water flow measurements recorded by the County shall be the exclusive means of determining the quantity of water delivered under this Agreement. The metering equipment shall be of standard make and type, installed at a readily accessible location, and shall record flow with accuracy sufficient to meet all applicable reporting requirements. The County will check the accuracy of the meters pursuant to appropriate provisions of the WUP on an every-five-years basis and will provide a copy of the SWFWMD required flow meter accuracy report to the Authority concurrent with submittal to the SWFWMD. Upon request and at the expense of the Authority, the Authority may make arrangements for a meter test to be conducted by an independent testing facility that shall conform to the manufacture's standards and where appropriate conduct the test as a field test. The County may be present when the meters are checked for accuracy, and the test records shall be made available for inspection by the County upon reasonable request. If the accuracy of the meter is determined to be greater than five (5) percent beyond the limits prescribed by the manufacturer, the meter will be assumed to have been inaccurate from the mid-point of the time since the last inspection, or the last calibration, or the last

independently certified test, whichever is less. The following month's billing will be adjusted taking into account the nature of the inaccuracy to show a credit or additional charge to the County for the metered flow for that period. For billing purposes, the total of all of the meter readings from the individual wells will be used. The County will read and record the meter readings for all of the wells on the same day and add the readings together to arrive at the total production for the CAB facilities. If for any reason, the well meters cannot be used, the influent flow meters at the plants will be used on a temporary basis while the issues with the well meters are being resolved. In the event that neither of the above procedures is possible, the methodology for monthly reporting of well withdrawals to the SWFWMD will be utilized.

- 6) Determining how much water should be produced on the Authority's facilities during drought or near drought conditions.
- 7) Environmental, hydrogeological and hydraulic monitoring of the Authority's facilities.
- 8) In coordination with the Authority as co-permittee, renew any existing permits or obtain new permits, and prepare and submit all data and reports required by such permits. During the term of this Contract, the County shall have the primary responsibility for the preparation of all necessary permit applications, however, the Authority shall be given the full opportunity to participate in preparing said applications and in reviewing same prior to submittal to the permitting agency. The Authority and the County shall be co-applicants on such permits.
- 9) Investigating any complaints relative to operation of the CAB Facilities and any adverse impacts resulting from the production of water from the Authority facilities. The County shall keep the Authority informed of any such complaints and resolution thereof.
- 10) Maintenance of the CAB Facilities including, but not limited to all repairs and replacements necessary and incident thereto with respect to equipment and facilities.
- 11) Keeping the Authority informed of all aspects of operations and maintenance. This shall include, at a minimum, an operations and maintenance annual report to be

provided to the Authority Board of Directors at a regularly scheduled meeting during the January – March timeframe.

- 12) Allowing the CAB Facilities to be inspected by Authority representatives.
- 13) Providing the Authority the County's current and any updates regarding the operation and maintenance procedures for the CAB Facilities.
- 14) Maintain liability and casualty insurance in a manner consistent with other County insurance coverage and shall include the Authority as co-insured thereon as it relates to its assets.
- 15) Copying the Authority on all important communications regarding the CAB facilities, including any compliance issues and providing a copy of the Public Supply Annual Report required by the SWFWMD.
- 12.4.2 <u>Authority's Responsibility</u> -- The Authority's responsibilities under this Contract shall include, but not be limited to the following:
  - 1) General overview of the County's operation of the CAB Facilities,
  - 2) Inspecting same through the Authority's engineering consultant with reference to repair, maintenance and operation thereof, including, at its expense, evaluation of the current condition of capital equipment, the projected useful life of capital facilities and development of recommended renewal/replacement schedules, and evaluation of the R&R fund for possible changes in the annual contributions necessary and other provisions as outlined in section 11. Said evaluation may be reimbursed from the R&R fund. Said evaluation shall occur every five years, commencing in 2020, unless circumstances warrant otherwise.
  - 3) Coordinating with the County in the renewal of applicable permits, and
  - 4) Coordinating with the County in the administration of the Renewal and Replacement Reserve Fund and timely response to County requests for utilization of said funds for purposes associated with the CAB Facilities.
- 12.5 <u>Permitting, Administrative and Judicial Proceedings</u> the County and the Authority shall jointly participate in any administrative or judicial proceedings necessary for the issuance of any permits relating to the operation of the Authority facilities and the acquisition and construction of any new capital expenditures at the Authority's facilities. The Authority and

the County shall share the responsibility and obligations involved in any such proceedings. The Authority shall be co-permit holder on all permits in connection with the Authority facilities during the term of this contract. The County and the Authority shall use their best efforts to obtain all Permits necessary to obtain water in accordance with this Contract.

- 12.6. <u>Additional Representations and Warranties of the County</u> the County hereby represents and warrants to the Authority as follows:
  - 12.6.1 <u>Cooperation with Authority</u> the County shall cooperate with the Authority to accomplish the efficient and proper operation of the Authority's facilities.
  - 12.6.2 <u>County's Indemnification</u> the County shall indemnify and save and hold the Authority harmless from and against all losses and all claims, demands, payments, suits, actions, recoveries, expenses, and judgments caused by or in any way resulting or rising out of any negligent or wrongful act or omission by the County or any of its employees or representatives in connection with the performance of the County's duties under this Contract to the extent permitted by Florida Law. Further that the County shall be liable to the Authority to replace any asset due to casualty loss. Nothing herein shall be construed as a waiver of the County's sovereign immunity.
- 12.7 <u>Additional Representations and Warranties of the Authority</u> the Authority hereby represents and warrants to the County as follows:
  - 12.7.1 <u>Cooperation with County</u> the Authority shall cooperate with the County to accomplish the efficient and proper operation of the Authority's facilities.
  - 12.7.2 <u>Permits</u> the Authority shall use its best efforts to assist the County in obtaining any and all permits required for the Authority facilities.
  - 12.7.3 <u>Authority's Indemnification</u> the Authority shall indemnify and save and hold the County harmless from and against all losses and all claims, demands, payments, suits, actions, recoveries, expenses, and judgments caused by or in any way resulting or rising out of any negligent or wrongful act or omission by the Authority or any of its employees or representatives in connection with the Authority's facilities to the extent permitted by Florida Law. Nothing herein shall be construed as a waiver of the Authority's sovereign immunity.

- 13. UTILIZATION OF CONTRACT REVENUES. The Authority may utilize the revenues derived from this Contract for the purposes deemed necessary and appropriate in the sole discretion of the Authority Board, including but not limited to administration, water supply development projects, including water conservation projects, and for the purpose of securing any revenue bonds issued by the Authority to finance new water supply projects of the Authority. In recognition of the fact that these revenues originate from Citrus County, the Authority Board, in its sole discretion, may give priority consideration to projects which benefit Citrus County utilities.
- 14. **DEFAULT AND REMEDY**. Recognizing the County's paramount need for a safe and dependable source of water supply, the Parties agree this Contract may not be terminated except as specified in Section 2 and the remedy for a breach of the Contract shall be specific performance, injunctive relief and any other equitable relief, as well as monetary damages.
- 15. APPLICABLE LAW AND VENUE. The laws of the State of Florida govern the validity, interpretation, construction and performance of this Contract and venue for any suit involving this Contract shall be in Citrus County, Florida. The Court of jurisdiction shall be the Circuit Court of the Fifth Judicial Circuit in and for Citrus County, Florida.
- 16. **NO ASSIGNMENT**. The rights, obligations and interests of the County and Authority under this Contract may not be wholly or partially sold, assigned, transferred, pledged or hypothecated unless approved in writing by all Parties.
- 17. **NOTICE**. All notices, demands, requests and other communications shall be deemed sufficient and properly given, if in writing and delivered in person to the following addresses, sent by certified mail, or by overnight delivery, postage prepaid with return receipt requested, at such addresses; provided, if such notices, demands, requests or other communications are sent by mail or overnight delivery, they shall be deemed as given on the third day following such mailing which is not a Saturday, Sunday or a day on which United States mail is not delivered:

As to Authority: The Authority's Executive Director's Office 3600 W Sovereign Path, Suite 228 Lecanto, Florida 34461 As to County: Citrus County Administrator's Office 110 N. Apopka Ave. Inverness, FL 34450

With copy to: County Attorney's office 110 N. Apopka Ave. Inverness, 34450

The Parties may, by like notice, designate any further or different addresses to which subsequent notices shall be sent.

- 18. **RELATIONSHIP OF THE PARTIES**. Nothing herein shall be deemed to constitute any Party a partner or joint venturer, or to create any fiduciary relationship among the Parties.
- 19. **THIRD PARTY BENEFICIARIES**. No right or cause of action shall accrue upon or by reason hereof, or for the benefit of any person not expressly named as a Party in this Contract, except for any holders of Obligations and/or credit enhancers relating to Obligations who shall be third party beneficiaries of this Contract.
- 20. WAIVER. Unless otherwise specifically provided by the terms of this Contract, no delay or failure to exercise a right resulting from any breach of this Contract shall impair such right or shall be construed to be a waiver thereof, but such right may be exercised from time to time and as often as may be deemed expedient. Any waiver shall be in writing and signed by the Party granting such waiver. If any representation, warranty or covenant contained in this Contract is breached by either Party and thereafter waived by the other Party, such waiver shall be limited to the particular breach so waived and shall not be deemed to waive, either expressly or impliedly, any other breach under this Contract.
- 21. **AUTHORIZED REPRESENTATIVES**. For purposes of this Contract, the Parties authorized representatives are as follows: the Authority Executive Director and the Citrus County Administrator. Any Party may change its authorized representative at any time by written notice to all other Parties.
- 22. **SECTION CAPTIONS AND REFERENCES**. The section headings and captions contained herein are included for convenience only and shall not be considered part of this Contract or affect in any manner its construction or interpretation. Except as otherwise indicated, all references herein to sections are to sections of this Contract.

- 23. **SEVERABILITY**. In the event any provision of this Contract shall, for any reason, be determined invalid, illegal or unenforceable by a Court of law, the Parties agree the remainder of said Contract shall continue to be in full force and effect.
- 24. **AMENDMENT**. This Contract may only be amended by a writing duly executed by the Authority and the County.
- 25. **ENTIRE AGREEMENT**. This Contract shall constitute the entire agreement of the Authority and the County with respect to the Authority's provision of water supply.
- 26. **FURTHER ASSURANCES**. The Authority and the County each shall use all reasonable efforts to provide such information, execute such further instruments and documents and take actions as may be reasonably requested by another Party and not inconsistent with the provisions of this Contract and not involving the assumption of obligations or liabilities different from, in excess of or in addition to those expressly provided for in this Contract to carry out the intent of this Contract.
- 27. **CONSENTS**. To the extent that the consent of any Party to this Contract is required as a condition to the action of other Parties, such consent shall not be unreasonably withheld and shall be in writing.
- 28. SUCCESSORS AND ASSIGNS. This Contract shall be binding upon and inure to the benefit of the respective successors, permitted assigns, administrators and trustees of the Authority and the County.
- 29. **EXECUTION OF DOCUMENTS**. This Contract shall be executed in two (2) duplicate originals, either of which shall be regarded for all purposes as an original and both of which shall constitute one and the same instrument.
- 30. **INTERLOCAL AGREEMENT**. This Contract shall constitute an interlocal agreement pursuant to Section 163.01, Florida Statutes. A true and correct copy of this Contract and any subsequent amendments shall be recorded by the Authority with the clerk of the circuit court in Citrus County.
- 31. **AMBIGUITY**. The Parties agree that each one has played an equal part in the negotiation and drafting of this Contract, and in the event any ambiguity should be asserted or realized in the interpretation or construction of this Contract, the result of such ambiguity shall be equally assumed and realized by each Party.

## 32. **SOVEREIGN IMMUNITY.**

- 32.1 County The County intends to avail itself to the benefits of Sections 768.28 and 163.01(9)(c), Florida Statutes, and of other statutes and common law governing sovereign immunity to the fullest extent possible. In accordance with Section 163.01(5)(o), Florida Statutes, therefore the County is not jointly liable for the torts of the officers or employees of the Authority, or any other tort attributable to the Authority, and that only the Authority shall be liable for torts attributable to it or for torts of its officers or employees, and then only to the extent of the waiver of sovereign immunity or limitation of liability specified in Section 768.28, Florida Statutes. The County intends the Authority to have all the privileges and immunities from liability and exemptions from laws, ordinances, rules and common law which apply to the municipalities and counties of the State of Florida. Nothing in this Contract is intended to inure to the benefit of any third-party for the purposes of allowing any claim which would otherwise be barred under the Doctrine of Sovereign Immunity or by operation of law.
- 32.2 Authority The Authority intends to avail itself to the benefits of Sections 768.28 and 163.01(9)(c), Florida Statutes, and of other statutes and common law governing sovereign immunity to the fullest extent possible. In accordance with Section 163.01(5)(o), Florida Statutes, therefore the Authority is not jointly liable for the torts of the officers or employees of the County, or any other tort attributable to the County, and that only the County shall be liable for torts attributable to it or for torts of its officers or employees, and then only to the extent of the waiver of sovereign immunity or limitation of liability specified in Section 768.28, Florida Statutes. The Authority intends the County to have all the privileges and immunities from liability and exemptions from laws, ordinances, rules and common law which apply to the municipalities and counties of the State of Florida. Nothing in this Contract is intended to inure to the benefit of any third-party for the purposes of allowing any claim which would otherwise be barred under the Doctrine of Sovereign Immunity or by operation of law.
- 33. **CONFLICT WITH INTERLOCAL AGREEMENT**. To the extent any provision herein shall conflict with a provision in the Interlocal Agreement, the provision in the Interlocal Agreement shall be controlling.

- 34. **GOOD FAITH**. The Parties agree to exercise good faith and fair dealing in respect to all matters relating to this Contract.
- 35. **DISSOLUTION OF THE AUTHORITY**. If for any reason the Authority is dissolved, all assets of the Authority located within Citrus County shall automatically transfer to the County subject to any remaining obligations thereon to Southwest Florida Water Management District. This reverter clause also includes any funds accumulated in the Renewal and Replacement Reserve account established pursuant to this Contract. Any funds in such account shall automatically transfer to the County upon the Authority's dissolution.

IN WITNESS WHEREOF, the Authority and the County have executed this Contract on the day, month and year first above written.

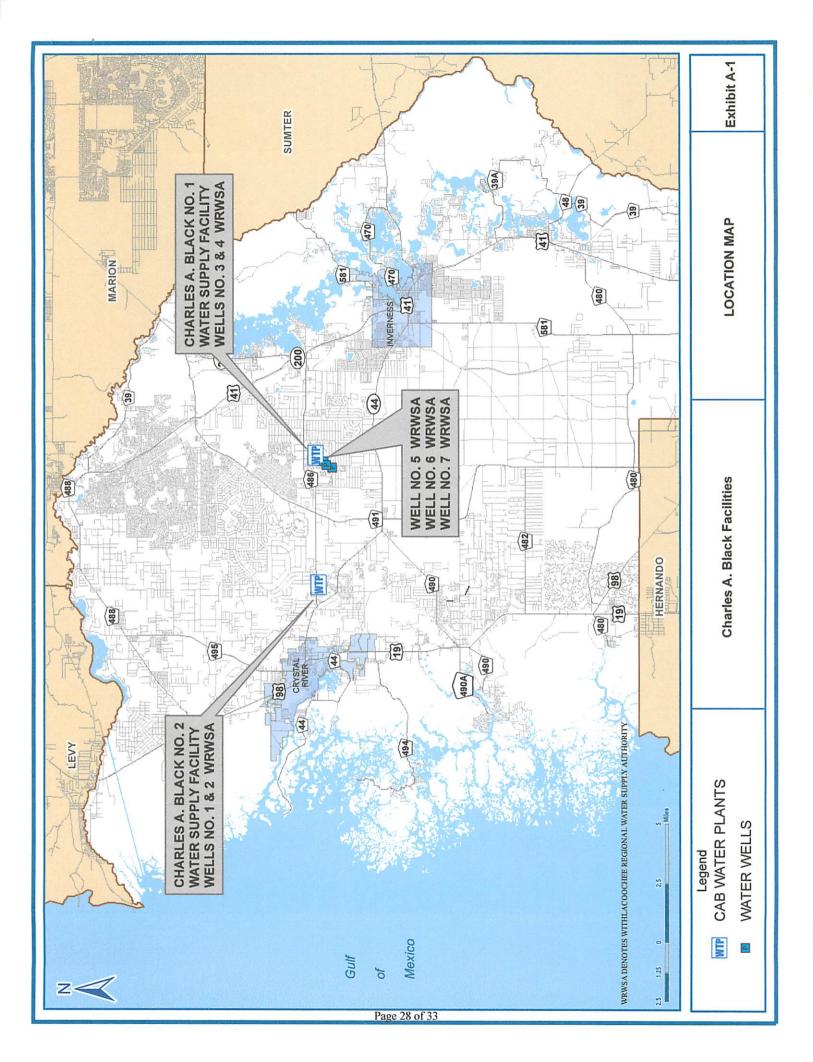
	CITRUS COUNTY
WITNESS:	
Bloom	By:
Doughell	Date: 10/12/16
Approved as to form:	
Attorney for Citrus County	
WHTNESS	WITHLACOOCHEE REGIONAL WATER SUPPLY AUTHORITY
WITNESS:	
Sichard S. Chun	By: Denne Damt
Caroly L'Stout	Date: 9-21-2016
Approved as to form:	
Attorney for WRWSA	
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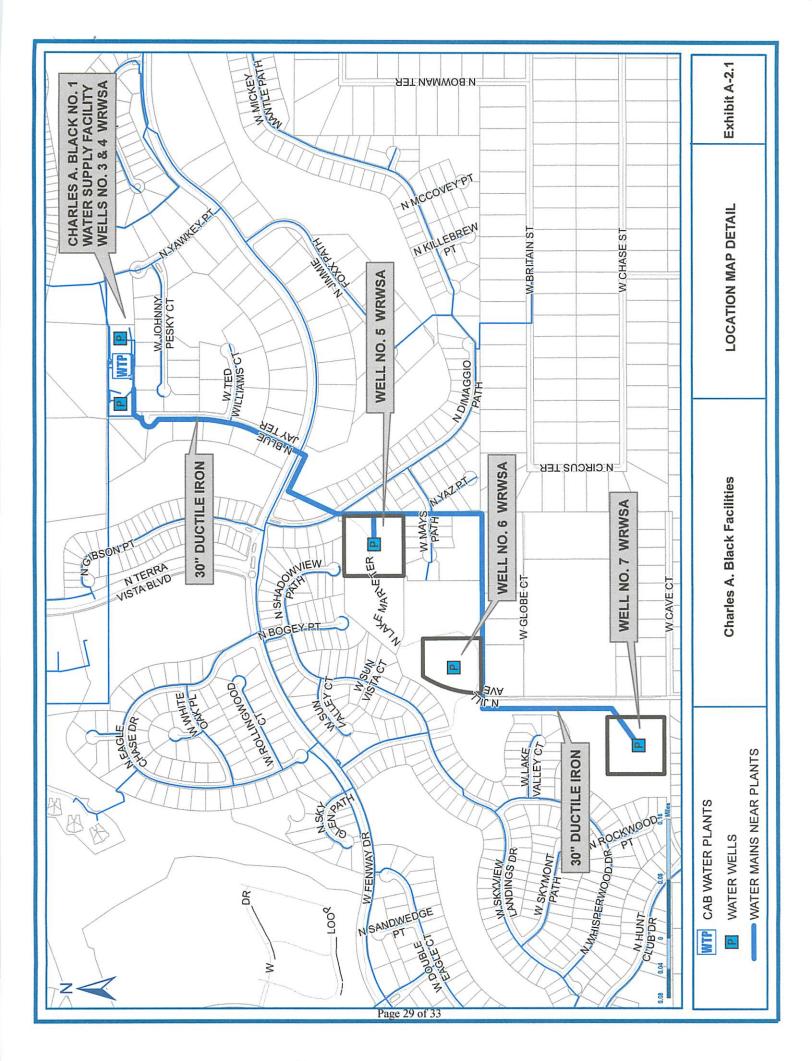
## STATE OF FLORIDA COUNTY OF CITRUS

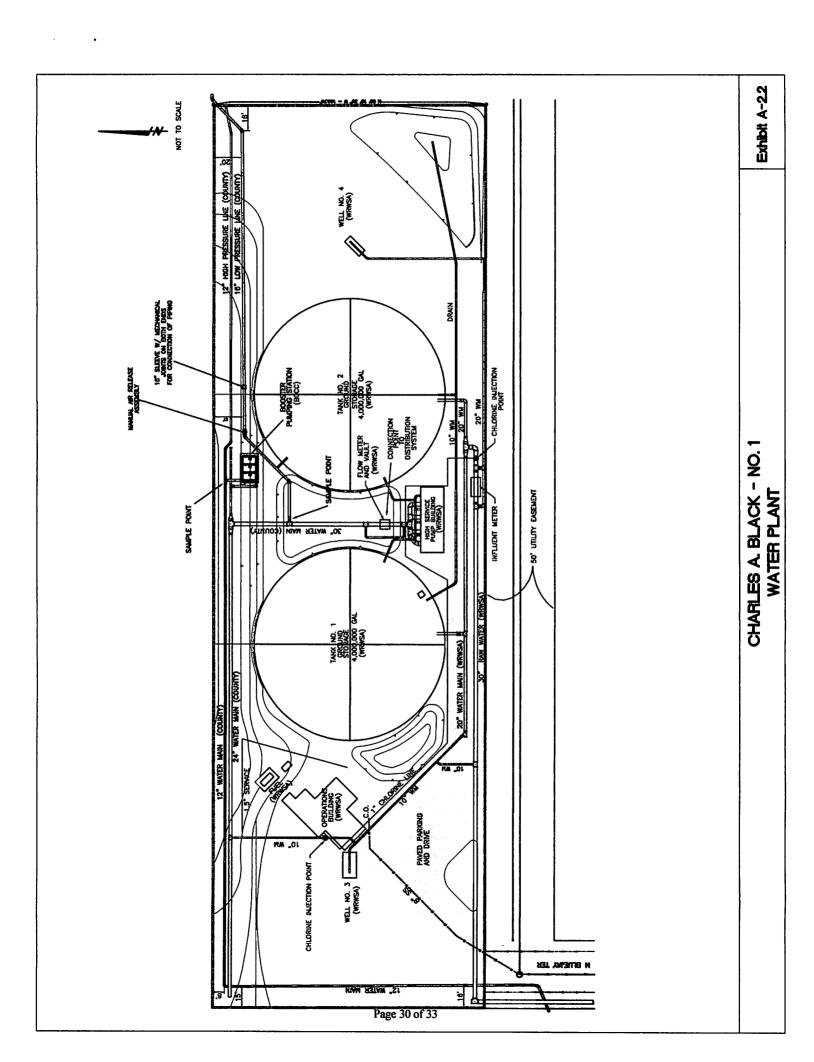
I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State
aforesaid and in the County aforesaid to take acknowledgements, personally appeared,
Bonald E. Kitchen Jr., to me known to be the person described in
and who executed the foregoing instrument on behalf of the Citrus County, and
, acknowledged before me that
, executed same as a free act and deed for the
uses and purposes therein stated.
WITNESS my hand and official seal in the County and State last aforesaid this
day of
STATE OF FLORIDA COUNTY OF CITRUS WITHLACOOCHEE REGIONAL WATER SUPPLY AUTHORITY  I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State aforesaid and in the County aforesaid to take acknowledgements, personally appeared,
Dennie Damato, to me known to be the person described in
and who executed the foregoing instrument on behalf of the Withlacoochee Regional Water
Supply Authority, and, acknowledged before
me that, executed same as a free act and dee
for the uses and purposes therein stated.
WITNESS my hand and official seal in the County and State last aforesaid this
day ofleplewler, 2016.  Notary Public  My Commission Expires:

## **Contract Exhibits**

- A. Charles A. Black (CAB) Water Supply Facilities
  - A-1 General Location of the Charles A. Black Wellfield Facilities
  - A 2.1 CAB 1 Facilities General Location Map Details
  - A 2.2 CAB 1 Water Plant
  - A-3 CAB 2 Water Plant
- B. Renewal and Replacement Fund Eligible Capital Facilities







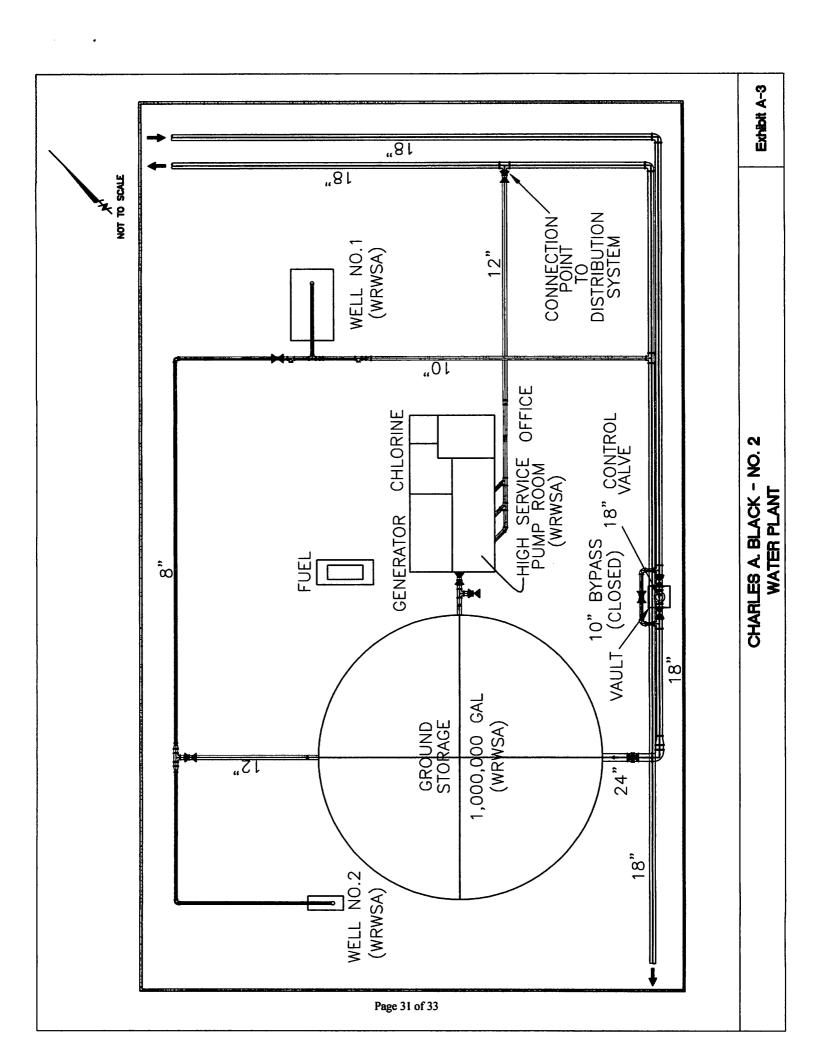


Exhibit B. Renewal and Replacement Fund Eligible Capital Facilities

Plant / Well	Description	Equipment ID#	Owner
CAB 1	Control Building	FAC # B33-A	WRWSA
CAB 1	High Service Pump Building	FAC # B33-B	WRWSA
CAB 1	4 MG Crom Storage Tank #1	CAB1-2500	WRWSA
CAB 1	4 MG Crom Storage Tank #2	CAB1-2501	WRWSA
CAB 1	High Service Pump Motor #1	CAB1-1100	WRWSA
CAB 1	High Service Pump Motor #2	CAB1-1101	WRWSA
CAB 1	High Service Pump Motor #3	CAB1-1102	WRWSA
CAB 1	High Service Pump Motor #4	CAB1-1103	WRWSA
CAB 1/ Well 3	Well #3 Pump Motor	CAB1-1106	WRWSA
CAB 1/ Well 4	Well #4 Pump Motor	CAB1-1107	WRWSA
CAB 1/ Well 5	Well #5 Pump Motor	CAB1-1108	WRWSA
CAB 1/ Well 6	Well #6 Pump Motor	CAB1-1109	WRWSA
CAB 1/ Well 7	Well #7 Pump Motor	CAB1-1110	WRWSA
CAB 1	Compressor Motor	CAB1-1111	WRWSA
CAB 1	High Service Pump #1	CAB1-1300	WRWSA
CAB 1	High Service Pump #2	CAB1-1301	WRWSA
CAB 1	High Service Pump #3	CAB1-1302	WRWSA
CAB 1	High Service Pump #4	CAB1-1303	WRWSA
CAB 1	Chlorine Booster pump #1	CAB1-1306	WRWSA
CAB 1	Chlorine Booster pump #2	CAB1-1307	WRWSA
CAB 1	Chlorine Booster pump #3	CAB1-1308	WRWSA
CAB 1	Chlorine Booster pump #4	CAB1-1309	WRWSA
CAB 1	Vacuum Pump	CAB1-1310	WRWSA
CAB 1	Well Pump #3	CAB1-1311	WRWSA
CAB 1	Well Pump #4	CAB1-1312	WRWSA
CAB 1	Well Pump #5	CAB1-1313	WRWSA
CAB 1	Well Pump #6	CAB1-1314	WRWSA
CAB 1	Well Pump #7	CAB1-1315	WRWSA
CAB 1	Compressor	CAB1-1400	WRWSA
CAB 1	350 KW Generator	CAB1-1700	WRWSA
CAB 1	High Service Pump Control Panel #1	CAB1-2100	WRWSA
CAB 1	High Service Pump Control Panel #2	CAB1-2101	WRWSA
CAB 1	High Service Pump Control Panel #3	CAB1-2102	WRWSA
CAB 1	High Service Pump Control Panel #4	CAB1-2103	WRWSA
CAB 1	Cummins Diesel Engine for 350 KW Generator	CAB1-2200	WRWSA
CAB 1	High Service Pump Building Overhead Crane	CAB1-2300	WRWSA
CAB 1	Chlorine Building Overhead Crane	CAB1-2301	WRWSA
CAB 1	1000 Gallon Above Ground Fuel Tank	CAB1-2700	WRWSA
CAB I	1,500 gallon Sodium Hypochlorite Storage Tank	CAB1-2701	WRWSA
CAB I	1,500 gallon Sodium Hypochlorite Storage Tank	CAB1-2702	WRWSA
CAB 1/ Well 3	10" Well Meter	853013	WRWSA
CAB 1/ Well 4	10" Well Meter	872804	WRWSA
CAB 1/ Well 5	10" Well Meter	920001	WRWSA

CAB 1/ Well 6	14" Well Meter	920008	WRWSA
CAB 1/ Well 7	14" Well Meter	920009	WRWSA
CAB 1	18" Treated Water Effluent Flow Meter	920005	WRWSA
CAB 1	20" Raw Water Influent Flow Meter	910005	WRWSA
CAB 1 Well 7	400 KW Generator	CABW7-1700	WRWSA
CAB 1 Well 7	Caterpillar Diesel Engine for 400 KW Generator	CABW7-2200	WRWSA
CAB 1 Well 7	1000 Gallon Above Ground Fuel Tank	CABW7-2700	WRWSA
			WRWSA
Plant / Well	Description	Equipment ID#	
CAB 2	Control Building	B15-B	WRWSA
CAB 2	Well #1 Building	B15-A	WRWSA
CAB 2	1 MG Crom Storage Tank	CAB2-2500	WRWSA
CAB 2	High Service Pump Motor #1	CAB2-1100	WRWSA
CAB 2	High Service Pump Motor #2	CAB2-1101	WRWSA
CAB 2	High Service Pump Motor #3	CAB2-1102	WRWSA
CAB 2	Well #1 Pump Motor	CAB2-1103	WRWSA
CAB 2	Well #2 Pump Motor	CAB2-1104	WRWSA
CAB 2	Chlorine Booster Pump Motor #1	CAB2-1105	WRWSA
CAB 2	Chlorine Booster Pump Motor #2	CAB2-1106	WRWSA
CAB 2	High Service Pump #1	CAB2-1300	WRWSA
CAB 2	High Service Pump #2	CAB2-1301	WRWSA
CAB 2	High Service Pump #3	CAB2-1302	WRWSA
CAB 2	Well #1 Pump	CAB2-1303	WRWSA
CAB 2	Well #2 Pump	CAB2-1304	WRWSA
CAB 2	Chlorine Booster Pump #1	CAB2-1305	WRWSA
CAB 2	Chlorine Booster Pump #2	CAB2-1306	WRWSA
CAB 2	300 KW Generator	CAB2-1700	WRWSA
CAB 2	Rolls Royce Diesel Engine for 300 KW Generator	CAB2-2200	WRWSA
CAB 2	1000 Gallon Above Ground Fuel Tank	CAB2-2700	WRWSA
CAB 2	150 gallon Sodium Hypochlorite Storage Tank	CAB2-2701	WRWSA
CAB 2	150 gallon Sodium Hypochlorite Storage Tank	CAB2-2702	WRWSA
CAB 2	6" Well #1 Flow Meter	841282	WRWSA
CAB 2	6" Well #2 Flow Meter	872589	WRWSA
CAB 2	12" Treated Water Effluent Flow Meter		WRWSA

## Appendix B

**Site Photographs** 





**CAB-1 WTF - Operations and Chemical Building** 



**CAB-1** WTF - Operations and Monitoring Room





**CAB-1 WTF - Sodium Hypochlorite Storage Tanks** 



CAB-1 WTF - Sodium Hypochlorite Feed Skid





CAB-1 WTF – High Service Pumps



**CAB-1 WTF - Booster Pump Station** 





CAB-1 WTF - Well No. 3



CAB-1 WTF - Well No. 4





CAB-1 WTF – Emergency Generator



CAB-1 WTF – Storage Tank





CAB-1 WTF Offsite - Well No. 5



CAB-1 WTF Offsite - Well No. 6





CAB-1 WTF Offsite – Well No. 7



CAB-1 WTF Offsite - Well No. 7 Emergency Generator





CAB-2 WTF – Overall Site and Well No. 1 Building



CAB-2 WTF - Well No. 1





**CAB-2 WTF - Sodium Hypochlorite Storage Tanks** 



CAB-2 WTF - Sodium Hypochlorite Feed Skid





**CAB-2 WTF – High Service Pumps** 



**CAB-2 WTF - Emergency Generator** 





CAB-2 WTF - Well No. 2



# Appendix C

# Southwest Florida Water Management District Water Use Permit





# Southwest Florida Water Management District

2379 Broad Street, Brooksville, Florida 34604-6899 (352) 796-7211 or 1-800-423-1476 (FL only) SUNCOM 628-4150 TDD only 1-800-231-6103 (FL only) On the Internet at: WaterMatters.org

An Equal
Opportunity
Employer

Bartow Service Office 170 Century Boulevard Bartow, Florida 33830-7700 (863) 534-1448 or 1-800-492-7862 (FL only)

Sarasota Service Office 6750 Fruitville Road Sarasota, Florida 34240-9711 (941) 377-3722 or 1-800-320-3503 (FL only) Tampa Service Office 7601 Highway 301 North Tampa, Florida 33637-6759 (813) 985-7481 or 1-800-836-0797 (FL only)

March 13, 2012

Citrus County Board of County Commissioners/Attn: Ken Cheek 3600 W Sovereign Path Lecanto, FL 34461

Withlacoochee Regional Water Supply Auth./Al 1107 Shalimar Drive Tallahassee, FL 32312

Subject: Final Agency Action Transmittal Letter

Individual Water Use Permit
Permit No.: 20 007121.006

Project Name: Charles A Black Water Supply System

County: Citrus

Dear Permittee(s):

Your Water Use Permit has been approved. Final approval is contingent upon no objection to the District's action being received by the District within the time frames described in the enclosed Notice of Rights.

The information received by the District will be kept on file to support the District's determination regarding your application. This information is available for viewing or downloading through the District's Application and Permit Search Tools located at www.WaterMatters.org/permits.

The Districts action in this matter only becomes closed to future legal challenges from members of the public if such persons have been properly notified of the District's action and no person objects to the District's action within the prescribed period of time following the notification. The District does not publish notices of agency action. If you wish to limit the time within which a person who does not receive actual written notice from the District may request an administrative hearing regarding this action, you are strongly encouraged to publish, at your own expense, a notice of agency action in the legal advertisement section of a newspaper of general circulation in the county or counties where the activity will occur. Publishing notice of agency action will close the window for filing a petition for hearing. Legal requirements and instructions for publishing notice of agency action, as well as a noticing form that can be used is available from the District's website at www.WaterMatters.org/permits/noticing. If you publish notice of agency action, a copy of the affidavit of publishing provided by the newspaper should be sent to the District's Tampa Service Office, for retention in the File of Record for this agency action.

Please be advised that the Governing Board has formulated a water shortage plan referenced in a Standard Water Use Permit Condition (Exhibit A) of your permit, and will implement such a plan during periods of water shortage. You will be notified during a declared water shortage of any change in the conditions of your Permit or any suspension of your Permit, or of any restriction on your use of water for the duration of any declared water shortage. Please further note that water conservation is a condition of your Permit and should be practiced at all times.

The ID tags for your withdrawals shall be installed by a District representative. This representative will attempt to contact you within 30 days to discuss placement of your tags. If you have any questions or concerns regarding your tags, please contact Frank Gargano at extension 4289, in the Brooksville Service Office. If you have any questions or concerns regarding your permit or any other information, please contact the Water Use Permit Bureau in the Tampa Service Office.

Sincerely,

#### Darrin Herbst, P.G.

Water Use Permit Bureau

Enclosures: Approved Permit

Notice of Rights

cc: C & D Engineering Inc

C & D Engineering Inc./Attn Layne Cady, P.E.

Ken Cheek

# SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT WATER USE PERMIT INDIVIDUAL PERMIT NO. 20 007121.006

PERMIT ISSUE DATE: March 13, 2012 EXPIRATION DATE: March 13, 2022

The Permittee is responsible for submitting an application to renew this permit no sooner than one year prior to the expiration date, and no later than the end of the last business day before the expiration date, whether or not the Permittee receives prior notification by mail. Failure to submit a renewal application prior to the expiration date and continuing to withdraw water after the expiration date is a violation of Chapter 373, Florida Statutes, and Chapter 40D-2, Florida Administrative Code, and may result in a monetary penalty and/or loss of the right to use the water. Issuance of a renewal of this permit is contingent upon District approval.

TYPE OF APPLICATION: Renewal

GRANTED TO: Citrus County Board of County Commissioners/Attn: Ken Cheek

3600 W Sovereign Path Lecanto, FL 34461

Withlacoochee Regional Water

1107 Shalimar Drive Tallahassee, FL 32312

PROJECT NAME: Charles A Black Water Supply System

WATER USE CAUTION AREA(S): Not in a WUCA

COUNTY: Citrus

#### TOTAL QUANTITIES AUTHORIZED UNDER THIS PERMIT (in gallons per day)

 ANNUAL AVERAGE
 4,597,000 gpd

 PEAK MONTH 1
 6,574,000 gpd

1 Peak Month: Average daily use during the highest water use month.

#### **ABSTRACT:**

This is a renewal with modification of an existing water use permit for public supply use. The authorized quantities shown above represent a decrease from those previously permitted. The annual average quantity decreased from 6,272,000 gallons per day (gpd) to 4,597,000 gpd and the peak month quantity decreased from 8,781,000 gpd to 6,574,000 gpd. The decreases are due to the District's requirement that public supply permittees have and maintain a per capita rate of no more than 150 gpd per person by the year 2019. The 5-year average per capita rate for the years 2006 to 2010 is 183 gpd. The quantities on the previous permit revision were based on a per capita rate of 258 gpd. According to population projections and per capita rates agreed upon by District staff and the permittee, the actual use quantities should decline slightly from the currently used quantity of 4,579,745 gpd until the year 2019 when the quantities should start increasing to the permitted quantity. There are no changes in Use Type from the previous revision. Quantities are based on a District-projected population of 26,410 by 2022 plus an annual average quantity of 509,000 gpd provided to another public supply entity with its own wholesale permit.

Special conditions include those that require the permittee to record and report monthly meter readings, implement conservation measures, report billing practices, report quarterly water quality sample results, record and report water level measurements, cap wells not in use, submit annual public supply reports, comply with the per capita rate, and maintain a water conserving rate structure.

#### WATER USE TABLE (in gpd)

	ANNUAL	PEAK
<u>USE</u>	<u>AVERAGE</u>	<u>MONTH</u>
Public Supply	4,597,000	6,574,000

#### **USE TYPE**

Fire Fighting/Testing

Line Flushing

Qty'S Sold Or Otherwide Provic

Residential Mobile Home

Residential Multi-Family

Residential Single Family

Treatment Losses (Backflushing

#### **PUBLIC SUPPLY:**

Population Served: 26,410

Per Capita Rate: 150 gpd/person

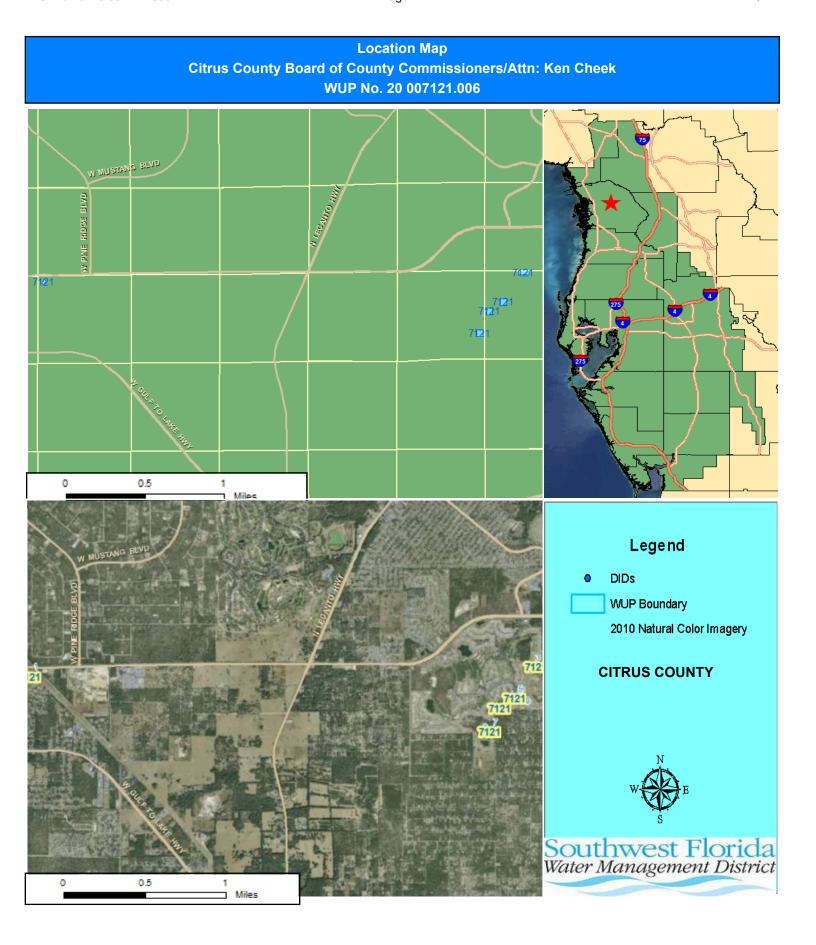
#### WITHDRAWAL POINT QUANTITY TABLE

Water use from these withdrawal points are restricted to the quantities given below:

I.D. NO. PERMITTEE/ <u>DISTRICT</u>	DIAM (in.)	DEPTH TTL./CSD.FT. (feet bls)	USE DESCRIPTION	AVERAGE (gpd)	PEAK MONTH (gpd)
MCW-1 / 1	12	173 / 173	Public Supply	229,850	430,000
MCW-2 / 2	12	143 / 109	Public Supply	229,850	430,000
HHW-1 / 3	16	422 / 220	Public Supply	459,700	645,000
HHW-2 / 4	16	423 / 222	Public Supply	689,550	752,000
WRWSA-1 / 5	12	341 / 282	Public Supply	689,550	806,000
WRWSA-2 / 6	24	301 / 236	Public Supply	1,379,100	1,935,000
WRWSA-3 / 7	24	321 / 238	Public Supply	919,400	1,576,000

#### WITHDRAWAL POINT LOCATION TABLE

DISTRICT I.D. NO.	LATITUDE/LONGITUDE
1	28° 53' 26.70"/82° 31' 59.70"
2	28° 53' 25.80"/82° 32' 01.00"
3	28° 53' 32.80"/82° 26' 41.30"
4	28° 53' 32.80"/82° 26' 36.30"
5	28° 53' 15.20"/82° 26' 52.30"
6	28° 53' 09.90"/82° 27' 01.30"
7	28° 52' 57.10"/82° 27' 08.00"



#### **STANDARD CONDITIONS:**

The Permittee shall comply with the Standard Conditions attached hereto, incorporated herein by reference as Exhibit A and made a part hereof.

#### **SPECIAL CONDITIONS:**

1. All reports and data required by condition(s) of the permit shall be submitted to the District according to the due date(s) contained in the specific condition. If the condition specifies that a District-supplied form is to be used, the Permittee should use that form in order for their submission to be acknowledged in a timely manner. The only alternative to this requirement is to use the District Permit Information Center (www.swfwmd.state.fl.us/permits/epermitting/) to submit data, plans or reports online. There are instructions at the District website on how to register to set up an account to do so. If the report or data is received on or before the tenth day of the month following data collection, it shall be deemed as a timely submittal.

All mailed reports and data are to be sent to:

Southwest Florida Water Management District Tampa Service Office, Water Use Permit Bureau 7601 U.S. Hwy. 301 North Tampa, Florida 33637-6759

Submission of plans and reports: Unless submitted online or otherwise indicated in the special condition, the original and two copies of each plan and report, such as conservation plans, environmental analyses, aquifer test results, per capita annual reports, etc. are required.

Submission of data: Unless otherwise indicated in the special condition, an original (no copies) is required for data submittals such as crop report forms, meter readings and/or pumpage, rainfall, water level evapotranspiration, or water quality data. (499)

- 2. The average day, peak monthly, and maximum daily, if applicable, quantities for District ID Nos. 1, 2, 3, 4, 5, 6, and 7, Permittee ID Nos. MCW-1, MCW-2, HHW-1, HHW-2, WRWSA-1, WRWSA-2, and WRWSA-3, shown in the production withdrawal table are estimates based on historic and/or projected distribution of pumpage, and are for water use inventory and impact analysis purposes only. The quantities listed for these individual sources are not intended to dictate the distribution of pumpage from permitted sources. The Permittee may make adjustments in pumpage distribution as necessary up to 40% above the annual average and peak month quantities for the individual wells, so long as adverse environmental impacts do not result and the Permittee complies with all other conditions of this Permit. In all cases, the total annual average withdrawal and the total peak month withdrawal are limited to the quantities set forth above.(221)
- 3. The Permittee shall immediately implement the District-approved water conservation plan dated June 2, 2011 that was submitted in support of the application for this permit. Conservation measures that the Permittee has already implemented shall continue, and proposed conservation measures shall be implemented as proposed in the plan. Progress reports on the implementation of water conservation practices indicated as proposed in the plan as well as achievements in water savings that have been realized from each water conservation practice shall be submitted March 1, 2017.(449)
- 4. Any wells not in use, and in which pumping equipment is not installed shall be capped or valved in a water tight manner in accordance with Chapter 62-532.500(3)(a)(4), F.A.C.(568)
- 5. Beginning January 1, 2012, the Permittee shall comply with the following requirements:
  - A. Customer billing period usage shall be placed on each utility-metered, customer's bill.
  - B. Meters shall be read and customers shall be billed no less frequently than bi-monthly.
  - C. The following information, as applicable to the customer, shall be provided at least once each calendar year and a summary of the provisions shall be provided to the District annually as described in Section D, below. The information shall be provided by postal mailings, bill inserts, online notices, on the bill or by other means. If billing units are not in gallons, a means to convert the units to gallons must be provided.

- 1. To each utility-metered customer in each customer class Information describing the rate structure and shall include any applicable:
  - a. Fixed and variable charges,
  - b. Minimum charges and the quantity of water covered by such charges,
  - c. Price block quantity thresholds and prices,
  - d. Seasonal rate information and the months to which they apply, and
  - e. Usage surcharges
- 2. To each utility-metered single-family residential customer Information that the customer can use to compare its water use relative to other single-family customers or to estimate an efficient use and that shall include one or more of the following:
- a. The average or median single-family residential customer billing period water use calculated over the most recent three year period, or the most recent two year period if a three year period is not available to the utility. Data by billing period is preferred but not required.
- b. A means to calculate an efficient billing period use based on the customer's characteristics, or
- c. A means to calculate an efficient billing period use based on the service area's characteristics.
- D. Annual Report: The following information shall be submitted to the District annually by October 1 of each year of the permit term to demonstrate compliance with the requirements above. The information shall be current as of the October 1 submittal date.
- 1. Description of the current water rate structure (rate ordinance or tariff sheet) for potable and non-potable water.
- Description of the current customer billing and meter reading practices and any proposed changes to these practices (including a copy of a bill per A above).
- 3. Description of the means the permittee uses to make their metered customers aware of rate structures, and how the permittee provides information their metered single-family residential customers can use to compare their water use relative to other single-family customers or estimate an efficient use (see C 1 & 2 above). (592)
- 6. The Permittee shall maintain a water conserving rate structure for the duration of the permit term. Any changes to the water conserving rate structure described in the application shall be described in detail as a component of the next Annual Report on Water Rate, Billing and Meter Reading Practices of the year following the change.(659)
- 7. The Permittee shall submit a "Water Use Annual Report" to the District by April 1 of each year on their water use during the preceding calendar year using the form, "Public Supply Water Use Annual Report Form" (Form No. LEG-R.047.00 (09/09)), referred to in this condition as "the Form," and all required attachments and documentation. The Permittee shall adhere to the "Instructions for Completion of the Water Use Annual Report" attached to and made part of this condition in Exhibit B. The Form addresses the following components in separate sections.

#### Per Capita Use Rate

A per capita rate for the previous calendar year will be calculated as provided in Part A of the Form using Part C of the Form to determine Significant Use deduction that may apply. Permittees that cannot achieve a per capita rate of 150 gpd according to the time frames included in the "Instructions for Completion of the Water Use Annual Report," shall include a report on why this rate was not achieved, measures taken to comply with this requirement, and a plan to bring the permit into compliance.

#### Residential Use

Residential use shall be reported in the categories specified in Part B of the Form, and the methodology used to determine the number of dwelling units by type and their quantities used shall be documented in an attachment.

#### Non-Residential Use

Non-residential use quantities provided for use in a community but that are not directly associated with places of residence, as well as the total water losses that occur between the point of output of the treatment plant and accountable end users, shall be reported in Part B of the Form.

In an attachment to the Form, the Permittee shall describe the following:

- 1. Description of any ongoing audit program of the water treatment plant and distribution systems to address reductions in water losses.
- 2. An update of the water conservation plan that describes and quantifies the effectiveness of measures currently in practice, any additional measures proposed to be implemented, the scheduled implementation dates, and an estimate of anticipated water savings for each additional measure.
- 3. A description of the Permittees implementation of water-efficient landscape and irrigation codes or ordinances, public information and education programs, water conservation incentive programs, identification of which measures and programs, if any, were derived from the Conserve Florida Water Conservation Guide, and provide the projected costs of the measures and programs and the projected water savings.

#### Water Audit

If the current water loss rate is greater than 10% of the total distribution quantities, a water audit as described in the "Instructions for Completion of the Water Use Annual Report" shall be conducted and completed by the following July 1, with the results submitted by the following October 1. Indicate on Part A of the Form whether the water audit was done, will be done, or is not applicable.

#### Alternative Water Supplied Other Than Reclaimed Water

If the Permittee provides Alternative Water Supplies other than reclaimed water (e.g., stormwater not treated for potable use) to customers, the information required on Part D of the Form shall be submitted along with an attached map depicting the areas of current Alternative Water Use service and areas that are projected to be added within the next year.

#### Suppliers of Reclaimed Water

1. Permittees having a wastewater treatment facility with an annual average design capacity equal to or greater than 100,000 gpd:

The Permittee shall submit the "SWFWMD Annual Reclaimed Water Supplier Report" on quantities of reclaimed water that was provided to customers during the previous fiscal year (October 1 to September 30). The report shall be submitted in Excel format on the Compact Disk, Form No. LEG-R.026.00 (05/09), that will be provided annually to them by the District. A map depicting the area of reclaimed water service that includes any areas projected to be added within the next year, shall be submitted with this report.

- 2. Permittees that have a wastewater treatment facility with an annual average design capacity less than 100,000 gpd:
- a. The Permittee has the option to submit the "SWFWMD Annual Reclaimed Water Supplier Report," Form No. LEG-R.026.00, as described in sub-part (1) above, or
- b. Provide information on reclaimed water supplied to customers on Part E of the Form as described in the "Instructions for Completion of the Water Use Annual Report".

#### Updated Service Area Map

If there have been changes to the service area since the previous reporting period, the Permittee shall update the service area using the map that is maintained in the District's Mapping and GIS system. (660)

- 8. This permit was issued annual average quantities based on a projected allowable per capita rate of 150 gpd for a projected functional population of 26,410 in 2022. The Permittee shall reduce their actual compliance per capita rate to 168 by 2014, as reported in the Water Use Annual Report submitted April 1, 2015. The Permittee shall achieve an actual compliance per capita of 150 gpd in 2019, as reported in the Water Use Annual Report submitted April 1, 2020.(66)
- 9. Water quality samples from the withdrawal points listed below shall be collected after pumping the withdrawal point at its normal rate for a pumping time specified below, or to a constant temperature, pH, and conductivity. The frequency of sampling per water quality parameter is listed in the table according to the withdrawal point. The recording and reporting shall begin according to the first sample date for existing wells and shall begin within 90 days of completion of any proposed wells. Samples shall be collected whether or not the well is being used unless infeasible. If sampling is infeasible, the Permittee shall indicate the reason for not sampling on the water quality data form or in the space for comments in the WUP Portal for data submissions. For sampling, analysis and submittal requirements see Exhibit B, Water Quality Sampling Instructions, attached to and made part of this permit.

Existing District ID No. 3/Permittee ID No. WRWSA 3 for Chloride and Sulfate, after a minimum pumping time of 15 minutes, on a quarterly basis, with first sample due date of 03/10/2012.

(752)

- 10. This permit shall be modified if an additional source of water is provided for public supply use from a separate entity. This includes additional Alternative Water Supply quantities and irrigation water for lawn/landscape and common areas. The Permittee shall notify the District of the additional water source and submit an application to modify the permit to acknowledge receipt.(68)
- 11. The Permittee shall continue to record and submit water levels relative to National Geodetic Vertical Datum 1929 for the following wells and report them to the District at the frequency listed for the aquifer listed. The maximum and minimum water levels shall be recorded on the last day of each month, or as close to the last day of each month as possible. The readings shall be reported online via the WUP Portal at the District website or mailed in hardcopy on District-provided forms to the Water Use Permit Bureau, on or before the tenth day of the following month. The frequency of recording may be modified by the Water Use Permit Bureau Chief, as necessary to ensure the protection of the resource.

District ID No	Permitte ID No.	<u>Aquifer</u>	Recording Frequency
10	10	Floridan	Monthly, Report the maximum and minimum
			values for the last day of each month
(758)			

12. The following withdrawal facilities shall continue to be maintained and operated with existing, non-resettable, totalizing flow meters or other measuring device(s) as approved by the Water Use Permit Bureau Chief: District ID Nos. 1, 2, 3, 4, 5, 6, and 7, Permittee ID Nos. MCW-1, MCW-2, HHW-1, HHW-2, WRWSA-1, WRWSA-2, and WRWSA-3. Meter reading and reporting, as well as meter accuracy checks every five years shall be in accordance with instructions in Exhibit B, Metering Instructions, attached to and made part of this permit.(719)

#### 40D-2 Exhibit A

#### WATER USE PERMIT STANDARD CONDITIONS

- 1. The Permittee shall provide access to an authorized District representative to enter the property at any reasonable time to inspect the facility and make environmental or hydrologic assessments. The Permittee shall either accompany District staff onto the property or make provision for access onto the property.
- 2. When necessary to analyze impacts to the water resource or existing users, the District shall require the Permittee to install flow metering or other measuring devices to record withdrawal quantities and submit the data to the District.
- 3. The District shall collect water samples from any withdrawal point listed in the permit or shall require the permittee to submit water samples when the District determines there is a potential for adverse impacts to water quality.
- 4. A District identification tag shall be prominently displayed at each withdrawal point that is required by the District to be metered or for which withdrawal quantities are required to be reported to the District, by permanently affixing the tag to the withdrawal facility.
- 5. The Permittee shall mitigate to the satisfaction of the District any adverse impact to environmental features or off-site land uses as a result of withdrawals. When adverse impacts occur or are imminent, the District shall require the Permittee to mitigate the impacts. Adverse impacts include the following:
  - A. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams or other watercourses; or
  - B. Damage to crops and other vegetation causing financial harm to the owner;
  - C. Damage to the habitat of endangered or threatened species.
- 6. The Permittee shall mitigate, to the satisfaction of the District, any adverse impact to existing legal uses caused by withdrawals. When adverse impacts occur or are imminent, the District shall require the Permittee to mitigate the impacts. Adverse impacts include the following:
  - A. A reduction in water levels which impairs the ability of a well to produce water;
  - B. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams or other watercourses; or
  - C. Significant inducement of natural or manmade contaminants into a water supply or into a usable portion of an aquifer or water body.
- 7. Notwithstanding the provisions of Rule 40D-1.6105, F.A.C., persons who wish to continue the water use permitted herein and who have acquired ownership or legal control of permitted water withdrawal facilities or the land on which the facilities are located must apply to transfer the permit to themselves within 45 days of acquiring ownership or legal control of the water withdrawal facilities or the land.
- 8. If any of the statements in the application and in the supporting data are found to be untrue and inaccurate, or if the Permittee fails to comply with all of the provisions of Chapter 373, Florida Statutes (F.S.), Chapter 40D, Florida Administrative Code (F.A.C.), or the conditions set forth herein, the Governing Board shall revoke this permit in accordance with Rule 40D-2.341, F.A.C., following notice and hearing.
- 9. Issuance of this permit does not exempt the Permittee from any other District permitting requirements.
- 10. The Permittee shall cease or reduce surface water withdrawal as directed by the District if water levels in lakes fall below the applicable minimum water level established in Chapter 40D-8, F.A.C., or rates of flow in streams fall below the minimum levels established in Chapter 40D-8, F.A.C.
- 11. The Permittee shall cease or reduce withdrawal as directed by the District if water levels in aquifers fall below the minimum levels established by the Governing Board.
- 12. The Permittee shall not deviate from any of the terms or conditions of this permit without written approval by the District.

- 13. The Permittee shall practice water conservation to increase the efficiency of transport, application, and use, as well as to decrease waste and to minimize runoff from the property. At such time as the Governing Board adopts specific conservation requirements for the Permittee's water use classification, this permit shall be subject to those requirements upon notice and after a reasonable period for compliance.
- 14. The District may establish special regulations for Water-Use Caution Areas. At such time as the Governing Board adopts such provisions, this permit shall be subject to them upon notice and after a reasonable period for compliance.
- 15. In the event the District declares that a Water Shortage exists pursuant to Chapter 40D-21, F.A.C., the District shall alter, modify, or declare inactive all or parts of this permit as necessary to address the water shortage.
- 16. This permit is issued based on information provided by the Permittee demonstrating that the use of water is reasonable and beneficial, consistent with the public interest, and will not interfere with any existing legal use of water. If, during the term of the permit, it is determined by the District that the use is not reasonable and beneficial, in the public interest, or does impact an existing legal use of water, the Governing Board shall modify this permit or shall revoke this permit following notice and hearing.
- 17. All permits issued pursuant to these Rules are contingent upon continued ownership or legal control of all property on which pumps, wells, diversions or other water withdrawal facilities are located.

# Exhibit B Instructions

#### METERING INSTRUCTIONS

The Permittee shall meter withdrawals from surface waters and/or the ground water resources, and meter readings from each withdrawal facility shall be recorded on a monthly basis within the last week of the month. The meter reading(s) shall be reported to the Water Use Permit Bureau on or before the tenth day of the following month. The Permittee shall submit meter readings online using the Permit Information Center at www.swfwmd.state.fl.us/permits/epermitting/ or on District supplied scanning forms unless another arrangement for submission of this data has been approved by the District. Submission of such data by any other unauthorized form or mechanism may result in loss of data and subsequent delinquency notifications. Call the Water Use Permit Bureau in Tampa at (813) 985-7481 if difficulty is encountered.

The meters shall adhere to the following descriptions and shall be installed or maintained as follows:

- 1. The meter(s) shall be non-resettable, totalizing flow meter(s) that have a totalizer of sufficient magnitude to retain total gallon data for a minimum of the three highest consecutive months permitted quantities. If other measuring device(s) are proposed, prior to installation, approval shall be obtained in writing from the Water Use Permit Bureau Chief.
- 2. The Permittee shall report non-use on all metered standby withdrawal facilities on the scanning form or approved alternative reporting method.
- 3. If a metered withdrawal facility is not used during any given month, the meter report shall be submitted to the District indicating the same meter reading as was submitted the previous month.
- 4. The flow meter(s) or other approved device(s) shall have and maintain an accuracy within five percent of the actual flow as installed.
- 5. Meter accuracy testing requirements:
  - A. For newly metered withdrawal points, the flow meter installation shall be designed for inline field access for meter accuracy testing.
  - B. The meter shall be tested for accuracy on-site, as installed according to the Flow Meter Accuracy Test Instructions in this Exhibit B, every five years in the assigned month for the county, beginning from the date of its installation for new meters or from the date of initial issuance of this permit containing the metering condition with an accuracy test requirement for existing meters.
  - C. The testing frequency will be decreased if the Permittee demonstrates to the satisfaction of the District that a longer period of time for testing is warranted.
  - D. The test will be accepted by the District only if performed by a person knowledgeable in the testing equipment used.
  - E. If the actual flow is found to be greater than 5% different from the measured flow, within 30 days, the Permittee shall have the meter re-calibrated, repaired, or replaced, whichever is necessary. Documentation of the test and a certificate of re-calibration, if applicable, shall be submitted within 30 days of each test or re-calibration.
- 6. The meter shall be installed according to the manufacturer's instructions for achieving accurate flow to the specifications above, or it shall be installed in a straight length of pipe where there is at least an upstream length equal to ten (10) times the outside pipe diameter and a downstream length equal to two (2) times the outside pipe diameter. Where there is not at least a length of ten diameters upstream available, flow straightening vanes shall be used in the upstream line.
- 7. Broken or malfunctioning meter:
  - A. If the meter or other flow measuring device malfunctions or breaks, the Permittee shall notify the District within 15 days of discovering the malfunction or breakage.
  - B. The meter must be replaced with a repaired or new meter, subject to the same specifications given above, within 30 days of the discovery.
  - C. If the meter is removed from the withdrawal point for any other reason, it shall be replaced with another meter having the same specifications given above, or the meter shall be reinstalled within 30 days of its removal from the withdrawal. In either event, a fully functioning meter shall not be off the withdrawal point for more than 60 consecutive days.

- 8. While the meter is not functioning correctly, the Permittee shall keep track of the total amount of time the withdrawal point was used for each month and multiply those minutes times the pump capacity (in gallons per minute) for total gallons. The estimate of the number of gallons used each month during that period shall be submitted on District scanning forms and noted as estimated per instructions on the form. If the data is submitted by another approved method, the fact that it is estimated must be indicated. The reason for the necessity to estimate pumpage shall be reported with the estimate.
- 9. In the event a new meter is installed to replace a broken meter, it and its installation shall meet the specifications of this condition. The permittee shall notify the District of the replacement with the first submittal of meter readings from the new meter.

#### FLOW METER ACCURACY TEST INSTRUCTIONS

- Accuracy Test Due Date The Permittee is to schedule their accuracy test according to the following schedule:
  - A. For existing metered withdrawal points, add five years to the previous test year, and make the test in the month assigned to your county.
  - B. For withdrawal points for which metering is added for the first time, the test is to be scheduled five years from the issue year in the month assigned to your county.
  - C. For proposed withdrawal points, the test date is five years from the completion date of the withdrawal point in the month assigned to your county.
  - D. For the Permittee's convenience, if there are multiple due-years for meter accuracy testing because of the timing of the installation and/or previous accuracy tests of meters, the Permittee can submit a request in writing to the Water Use Permit Bureau Chief for one specific year to be assigned as the due date year for meter testing. Permittees with many meters to test may also request the tests to be grouped into one year or spread out evenly over two to three years.
  - E. The months for accuracy testing of meters are assigned by county. The Permittee is requested but not required to have their testing done in the month assigned to their county. This is to have sufficient District staff available for assistance.

January Hillsborough February Manatee, Pasco

March Polk (for odd numbered permits)\*
April Polk (for even numbered permits)\*

May Highlands

June Hardee, Charlotte

July None or Special Request August None or Special Request

September Desoto, Sarasota October Citrus, Levy, Lake

November Hernando, Sumter, Marion

December Pinellas

- 2. **Accuracy Test Requirements**: The Permittee shall test the accuracy of flow meters on permitted withdrawal points as follows:
  - A. The equipment water temperature shall be set to 72 degrees Fahrenheit for ground water, and to the measured water temperature for other water sources.
  - B. A minimum of two separate timed tests shall be performed for each meter. Each timed test shall consist of measuring flow using the test meter and the installed meter for a minimum of four minutes duration. If the two tests do not yield consistent results, additional tests shall be performed for a minimum of eight minutes or longer per test until consistent results are obtained.
  - C. If the installed meter has a rate of flow, or large multiplier that does not allow for consistent results to be obtained with four- or eight-minute tests, the duration of the test shall be increased as necessary to obtain accurate and consistent results with respect to the type of flow meter installed.
  - D. The results of two consistent tests shall be averaged, and the result will be considered the test result for the meter being tested. This result shall be expressed as a plus or minus percent (rounded to the nearest one-tenth percent) accuracy of the installed meter relative to the test meter. The percent accuracy indicates the deviation (if any), of the meter being tested from the test meter.

<sup>\*</sup> The permittee may request their multiple permits be tested in the same month.

- 3. **Accuracy Test Report:** The Permittees shall demonstrate that the results of the meter test(s) are accurate by submitting the following information within 30 days of the test:
  - A. A completed Flow Meter Accuracy Verification Form, Form LEG-R.014.00 (07/08) for each flow meter tested. This form can be obtained from the District's website (www.watermatters.org) under "ePermitting and Rules" for Water Use Permits.
  - B. A printout of data that was input into the test equipment, if the test equipment is capable of creating such a printout;
  - C. A statement attesting that the manufacturer of the test equipment, or an entity approved or authorized by the manufacturer, has trained the operator to use the specific model test equipment used for testing;
  - D. The date of the test equipment's most recent calibration that demonstrates that it was calibrated within the previous twelve months, and the test lab's National Institute of Standards and Testing (N.I.S.T.) traceability reference number.
  - E. A diagram showing the precise location on the pipe where the testing equipment was mounted shall be supplied with the form. This diagram shall also show the pump, installed meter, the configuration (with all valves, tees, elbows, and any other possible flow disturbing devices) that exists between the pump and the test location clearly noted with measurements. If flow straightening vanes are utilized, their location(s) shall also be included in the diagram.
  - F. A picture of the test location, including the pump, installed flow meter, and the measuring device, or for sites where the picture does not include all of the items listed above, a picture of the test site with a notation of distances to these items, with a notation of distances to these items.

#### WATER QUALITY INSTRUCTIONS

The Permittee shall perform water quality sampling, analysis and reporting as follows:

- 1. The sampling method(s) from both monitor wells and surface water bodies shall be designed to collect water samples that are chemically representative of the zone of the aguifer or the depth or area of the water body.
- 2. Water quality samples from monitor wells shall be taken after pumping the well for the minimum time specified (if specified) or after the water reaches a constant temperature, pH, and conductivity.
- 3. The first submittal to the District shall include a copy of the laboratory's analytical and chain of custody procedures. If the laboratory used by the Permittee is changed, the first submittal of data analyzed at the new laboratory shall include a copy of the laboratory's analytical and chain of custody procedures.
- 4. Any variance in sampling and/or analytical methods shall have prior approval of the Water Use Permit Bureau Chief.
- 5. The Permittee's sampling procedure shall follow the handling and chain of custody procedures designated by the certified laboratory which will undertake the analysis.
- 6. Water quality samples shall be analyzed by a laboratory certified by the Florida Department of Health utilizing the standards and methods applicable to the parameters analyzed and to the water use pursuant to Chapter 64E-1, Florida Administrative Code, "Certification of Environmental Testing Laboratories."
- 7. Analyses shall be performed according to procedures outlined in the current edition of <u>Standard Methods for the Examination of Water and Wastewater</u> by the American Public Health Association-American Water Works Association-Water Pollution Control Federation (APHA-AWWA-WPCF) or <u>Methods for Chemical Analyses of Water and Wastes by the U.S. Environmental Protection Agency (EPA).</u>
- 8. Unless other reporting arrangements have been approved by the Water Use Permit Bureau Chief, reports of the analyses shall be submitted to the Water Use Permit Bureau, online at the District WUP Portal or mailed in hardcopy on or before the tenth day of the following month. The online submittal shall include a scanned upload of the original laboratory report. The hardcopy submittal shall be a copy of the laboratory's analysis form. If for some reason, a sample cannot be taken when required, the Permittee shall indicate so and give the reason in the space for comments at the WUP Portal or shall submit the reason in writing on the regular due date.
- 9. Water quality samples shall be collected based on the following timetable for the frequency listed in the special condition:
- 10. The parameters and frequency of sampling and analysis may be modified by the District as necessary to ensure the protection of the resource.

Frequency Timetable

Weekly Same day of each week

Quarterly Same week of February, May, August, November

Semi-annually Same week of **May**, **November**Monthly Same week of each month

#### ANNUAL REPORT SUBMITTAL INSTRUCTIONS

The "Public Supply Water Use Annual Report Form" (Form No. LEG-R.023.00 (01/09)), is designed to assist the Permittee with the annual report requirements, but the final authority for what must be included in the Water Use Annual Report is in this condition and in these instructions. Two identical copies of the "Public Supply Water Use Annual Report Form" and two identical copies of all required supporting documentation shall be included if submitted in hard copy. "Identical copy" in this instance means that if the original is in color, then all copies shall also be printed in color. If submitted electronically, only one submittal is required; however, any part of the document that is in color shall be scanned in color.

- 1. **Per Capita Use Rate** A per capita rate for the previous calendar year will be progressively calculated until a rate of 150 gpd per person or less is determined whether it is the unadjusted per capita, adjusted per capita, or compliance per capita. The calculations shall be performed as shown in Part A of the Form. The Permittee shall refer to and use the definitions and instructions for all components as provided on the Form and in Part B, Chapter 3, Section 3.6 of the "Water Use Permit Information Manual." Permittees that have interconnected service areas and receive an annual average quantity of 100,000 gpd or more from another permittee are to include these quantities as imported quantities. Permittees in the Southern Water Use Caution Area (SWUCA) or the Northern Tampa Bay Water Use Caution Area (NTBWUCA), as it existed prior to October 1, 2007, shall achieve a per capita of 150 gpd or less, and those in these areas that cannot achieve a compliance per capita rate of 150 gpd or less shall include a report on why this rate was not achieved, measures taken to comply with this requirement, and a plan to bring the permit into compliance. Permittees not in a Water Use Caution Area that cannot achieve a compliance per capita rate of 150 gpd or less by December 31, 2019 shall submit this same report in the Annual Report due April 1, 2020.
- 2. Residential Use Residential water use consists of the indoor and outdoor water uses associated with each category of residential customer (single family units, multi-family units, and mobile homes), including irrigation uses, whether separately metered or not. The Permittee shall document the methodology used to determine the number of dwelling units by type and the quantities used. Estimates of water use based upon meter size will not be accepted. If mobile homes are included in the Permittees multi-family unit category, the information for them does not have to be separated. The information for each category shall include:
  - A. Number of dwelling units per category,
  - B. Number of domestic metered connections per category,
  - C. Number of metered irrigation connections,
  - D. Annual average quantities in gallons per day provided to each category, and
  - E. Percentage of the total residential water use provided apportioned to each category.
- 3. **Non-Residential Use** Non-residential use consists of all quantities provided for use in a community not directly associated with places of residence. For each category below, the Permittee shall include annual average gpd provided and percent of total non-residential use quantities provided. For each category 1 through 6 below, the number of metered connections shall be provided. These non-residential use categories are:
  - A. Industrial/commercial uses, including associated lawn and landscape irrigation use,
  - B. Agricultural uses (e.g., irrigation of a nursery),
  - Recreation/Aesthetic, for example irrigation (excluding golf courses) of Common Areas, stadiums and school yards,
  - D. Golf course irrigation,
  - E. Fire fighting, system testing and other accounted uses,-
  - F. K-through-12 schools that do not serve any of the service area population, and
  - G. Water Loss as defined as the difference between the output from the treatment plant and accounted residential water use (B above) and the listed non-residential uses in this section.
- 4. **Water Audit** The water audit report that is done because water losses are greater than 10% of the total distribution quantities shall include the following items:
  - A. Evaluation of:
    - 1) leakage associated with transmission and distribution mains,

- overflow and leakage from storage tanks,
- leakage near service connections,
- illegal connections,
- 5) description and explanations for excessive distribution line flushing (greater than 1% of the treated water volume delivered to the distribution system) for potability,
- 6) fire suppression,
- 7) un-metered system testing,
- 8) under-registration of meters, and
- 9) other discrepancies between the metered amount of finished water output from the treatment plant less the metered amounts used for residential and non-residential uses specified in Parts B and C above, and
- B. A schedule for a remedial action-plan to reduce the water losses to below 10%.
- 5. **Alternative Water Supplied other than Reclaimed Water** Permittees that provide Alternative Water Supplies other than reclaimed water (e.g., stormwater not treated for potable use) shall include the following on <a href="Part D of the">Part D of the</a>
  Form:
  - A. Description of the type of Alternative Water Supply provided,
  - B. County where service is provided,
  - C. Customer name and contact information,
  - D. Customer's Water Use Permit number (if any),
  - E. Customer's meter location latitude and longitude,
  - F. Meter ownership information,
  - G. General customer use category,
  - H. Proposed and actual flows in annual average gallons per day (gpd) per customer,
  - I. Customer cost per 1,000 gallons or flat rate information,
  - J. Delivery mode (e.g., pressurized or non-pressurized),
  - K. Interruptible Service Agreement (Y/N),
  - L. Month/year service began, and
  - M. Totals of monthly quantities supplied.
- 6. **Suppliers of Reclaimed Water** Depending upon the treatment capacity of the Permittees wastewater treatment plant, the Permittee shall submit information on reclaimed water supplied as follows:
  - A. Permittees having a wastewater treatment facility with an annual average design capacity equal to or greater than 100,000 gpd shall utilize the "SWFWMD Annual Reclaimed Water Supplier Report" in Excel format on the Compact Disk, Form No. LEG-R.026.00 (05/09). The "SWFWMD Annual Reclaimed Water Supplier Report" is described in Section 3.1 of Chapter 3, under the subheading "Reclaimed Water Supplier Report" and is described in detail in Appendix A to Part B, Basis of Review of the "Water Use Permit Information Manual."
  - B. Permittees that have a wastewater treatment facility with an annual average design capacity less than 100,000 gpd can either utilize the "SWFWMD Annual Reclaimed Water Supplier Report," Form No. LEG-R.026.00, as described in sub-part (1) above or provide the following information on <a href="Part E of the Form">Part E of the Form</a>:
    - 1) Bulk customer information:
      - a) Name, address, telephone number,
      - b) WUP number (if any),
      - c) General use category (residential, commercial, recreational, agricultural irrigation, mining),
      - d) Month/year first served,
      - e) Line size
      - f) Meter information, including the ownership and latitude and longitude location,
      - g) Delivery mode (pressurized, non-pressurized).
    - Monthly flow in gallons per bulk customer.
    - 3) Total gallons per day (gpd) provided for metered residential irrigation.
    - 4) Disposal information:
      - a) Site name and location (latitude and longitude or as a reference to the service area map),
      - b) Contact name and telephone,

- c) Disposal method, and
- d) Annual average gpd disposed.

#### Darrin Herbst, P.G.

Authorized Signature
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

This permit, issued under the provision of Chapter 373, Florida Statues and Florida Administrative Code 40D-2, authorizes the Permittee to withdraw the quantities outlined above, and may require various activities to be performed by the Permittee as described in the permit, including the Special Conditions. The permit does not convey to the Permittee any property rights or privileges other than those specified herein, nor relieve the Permittee from complying with any applicable local government, state, or federal law, rule, or ordinance.

#### **Notice of Rights**

#### **ADMINISTRATIVE HEARING**

- 1. You or any person whose substantial interests are or may be affected by the District's action may request an administrative hearing on that action by filing a written petition in accordance with Sections 120.569 and 120.57, Florida Statutes (F.S.), Uniform Rules of Procedure Chapter 28-106, Florida Administrative Code (F.A.C.) and District Rule 40D-1.1010, F.A.C. Unless otherwise provided by law, a petition for administrative hearing must be filed with (received by) the District within 21 days of receipt of written notice of agency action. "Written notice" means either actual written notice, or newspaper publication of notice, that the District has taken or intends to take agency action. "Receipt of written notice" is deemed to be the fifth day after the date on which actual notice is deposited in the United States mail, if notice is mailed to you, or the date that actual notice is issued, if sent to you by electronic mail or delivered to you, or the date that notice is published in a newspaper, for those persons to whom the District does not provide actual notice.
- 2. Pursuant to Subsection 373.427(2)(c), F.S., for notices of agency action on a consolidated application for an environmental resource permit and use of sovereignty submerged lands concurrently reviewed by the District, a petition for administrative hearing must be filed with (received by) the District within 14 days of receipt of written notice.
- 3. Pursuant to Rule 62-532.430, F.A.C., for notices of intent to deny a well construction permit, a petition for administrative hearing must be filed with (received by) the District within 30 days of receipt of written notice of intent to deny.
- 4. Any person who receives written notice of an agency decision and who fails to file a written request for a hearing within 21 days of receipt or other period as required by law waives the right to request a hearing on such matters.
- 5. Mediation pursuant to Section 120.573, F.S., to settle an administrative dispute regarding District action is not available prior to the filing of a petition for hearing.
- 6. A request or petition for administrative hearing must comply with the requirements set forth in Chapter 28.106, F.A.C. A request or petition for a hearing must: (1) explain how the substantial interests of each person requesting the hearing will be affected by the District's action or proposed action, (2) state all material facts disputed by the person requesting the hearing or state that there are no material facts in dispute, and (3) otherwise comply with Rules 28-106.201 and 28-106.301, F.A.C. Chapter 28-106, F.A.C. can be viewed at www.flrules.org or at the District's website at www.WaterMatters.org/permits/rules.
- 7. A petition for administrative hearing is deemed filed upon receipt of the complete petition by the District Agency Clerk at the District's Tampa Service Office during normal business hours, which are 8:00 a.m. to 5:00 p.m., Monday through Friday, excluding District holidays. Filings with the District Agency Clerk may be made by mail, hand-delivery or facsimile transfer (fax). The District does not accept petitions for administrative hearing by electronic mail. Mailed filings must be addressed to, and hand-delivered filings must be delivered to, the Agency Clerk, Southwest Florida Water Management District, 7601 Highway 301 North, Tampa, FL 33637-6759. Faxed filings must be transmitted to the District Agency Clerk at (813) 987-6746. Any petition not received during normal business hours shall be filed as of 8:00 a.m. on the next business day. The District's acceptance of faxed petitions for filing is subject to certain conditions set forth in the District's Statement of Agency Organization and Operation, available for viewing at www.WaterMatters.org/about.

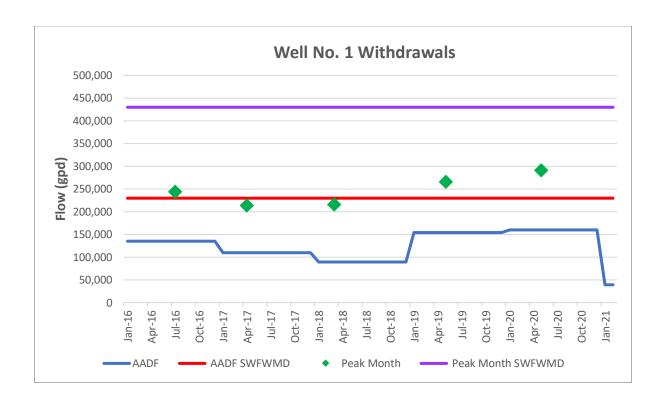
#### **JUDICIAL REVIEW**

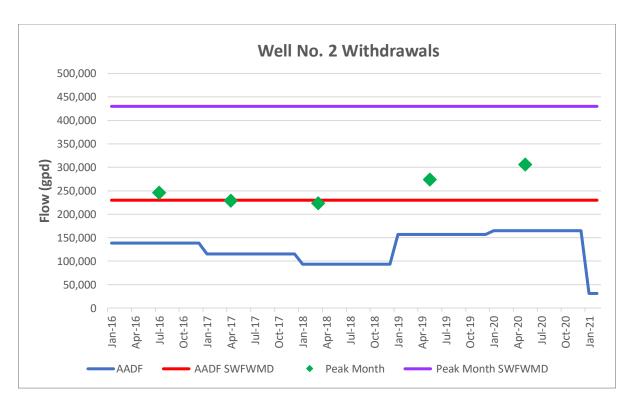
- 1. Pursuant to Sections 120.60(3) and 120.68, F.S., a party who is adversely affected by final District action may seek judicial review of the District's final action. Judicial review shall be sought in the Fifth District Court of Appeal or in the appellate district where a party resides or as otherwise provided by law.
- 2. All proceedings shall be instituted by filing an original notice of appeal with the District Agency Clerk within 30 days after the rendition of the order being appealed, and a copy of the notice of appeal, accompanied by any filing fees prescribed by law, with the clerk of the court, in accordance with Rules 9.110 and 9.190 of the Florida Rules of Appellate Procedure (Fla. R. App. P.). Pursuant to Fla. R. App. P. 9.020(h), an order is rendered when a signed written order is filed with the clerk of the lower tribunal.

# Appendix D

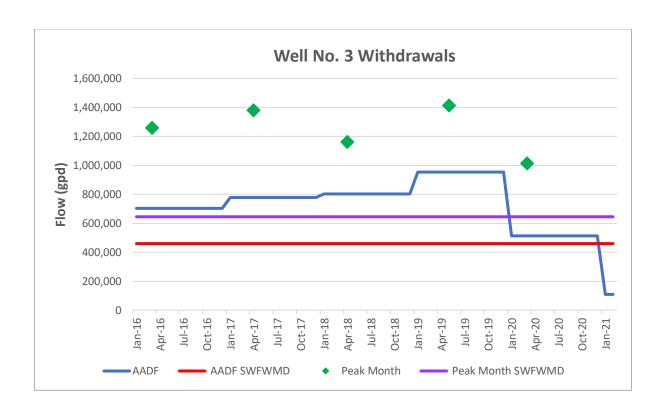
### **Individual Well Data**

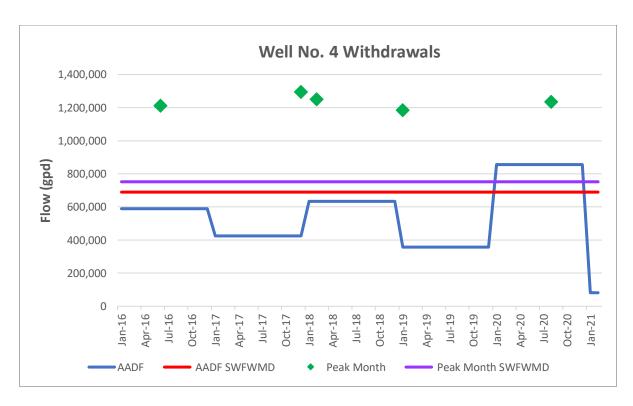




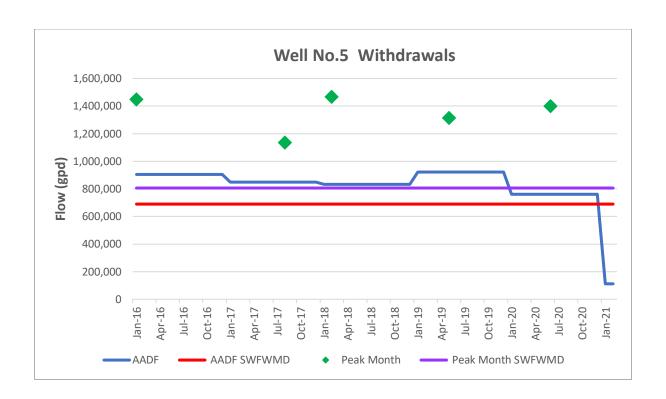


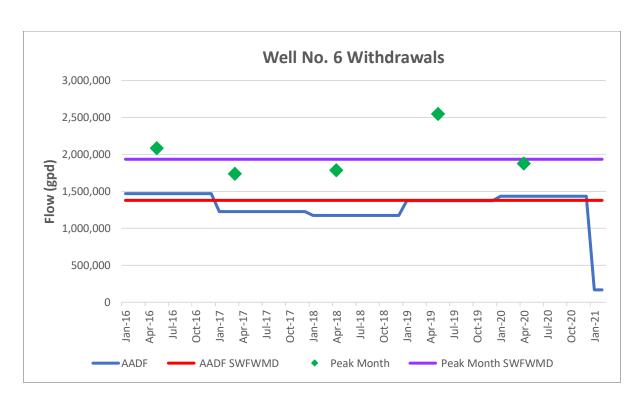




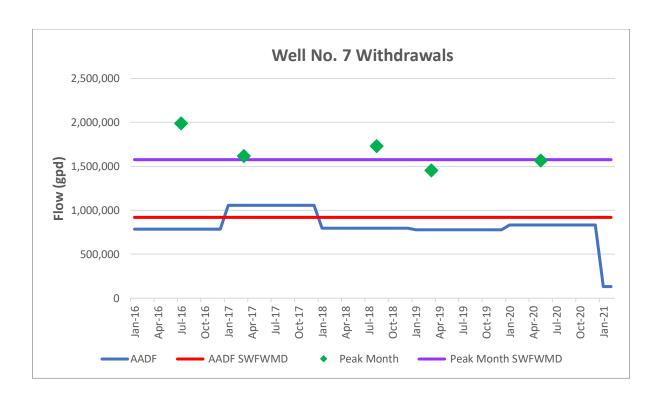














**Table D-1 Flow Exceedance Summary Table** 

Tubic	B I I IOW Exec	edance Summar	y Table			
			Well No. 3	3		
	AADF	Peak Month		Peak	AADF % above	Peak month % above
Year	SWFWMD limit	SWFWMD limit	AADF	Month	limit	limit
2016	459,700	645,000	702,921	1,258,290	35	49
2017	459,700	645,000	779,030	1,380,267	41	53
2018	459,700	645,000	801,989	1,160,067	43	44
2019	459,700	645,000	953,526	1,412,129	52	54
2020	459,700	645,000	514,101	1,013,516	11	36
2021	459,700	645,000	109,153	936,893	-321	31
			Well No. 4	1		
2016	689,550	752,000	588,874	1,211,767	-17	38
2017	689,550	752,000	424,058	1,295,419	-63	42
2018	689,550	752,000	634,312	1,249,536	-9	40
2019	689,550	752,000	358,033	1,185,581	-93	37
2020	689,550	752,000	855,923	1,235,355	19	39
2021	689,550	752,000	81,784	659,806	-743	-14
			Well No. 5	5		
2016	689,550	806,000	904,803	1,447,258	24	44
2017	689,550	806,000	848,496	1,133,613	19	29
2018	689,550	806,000	832,214	1,464,714	17	45
2019	689,550	806,000	921,838	1,311,645	25	39
2020	689,550	806,000	760,800	1,397,667	9	42
2021	689,550	806,000	111,945	843,821	-516	4
			Well No. 6	5		
2016	1,379,100	1,935,000	1,470,088	2,084,742	6	7
2017	1,379,100	1,935,000	1,228,575	1,736,484	-12	-11
2018	1,379,100	1,935,000	1,176,679	1,786,200	-17	-8
2019	1,379,100	1,935,000	1,373,918	2,548,452	-0.4	24
2020	1,379,100	1,935,000	1,435,742	1,876,233	4	-3
2021	1,379,100	1,935,000	168,699	1,251,677	-717	-55
			Well No. 7	1		
2016	919,400	1,576,000	784,395	1,985,194	-17	21
2017	919,400	1,576,000	1,056,786	1,616,839	13	3
2018	919,400	1,576,000	797,315	1,726,903	-15	9
2019	919,400	1,576,000	776,995	1,452,806	-18	-8
2020	919,400	1,576,000	832,312	1,565,419	-10	-1
2021	919,400	1,576,000	132,200	842,935	-595	-87

# Appendix E

Table E-1 – R&R Projected Expenditures
Table E-2 – Annual Contribution Evaluation



Table E-1 **R&R Projected Expenditures** 

Equipment Item	Year Installed	Age (Years)	Estimated Total Lifetime	2021 Estimated Remaining Life	FY22		FY23	FY24	FY25	FY26	FY27-31	FY32-36	FY	37-40
CAB-1 Facilities Replacements														
Well No. 3														
Well Piping Replacement	1987		30			\$	30,416							
Well Pump	1987	34	30	-4		\$	97,332							
Well No. 4														
Well Piping Replacement*	2017		30											
Well Pump*	2017	4	30	26										
Well No. 5														
Well Piping Replacement	1987	34	30					\$ 31,633						
Well Pump	1987	34	30	-4				\$ 101,226						
Well No. 6														
Well Piping Replacement	1987		30						\$ 32,898					
Well Pump	1987	34	30	-4					\$ 105,275					
Well No. 7														
Well Piping Replacement	2016		30											
Well Pump	2016		30											
Emergency Power System	2000	21	30	9							\$ 729,590			
Disinfection System														
NaOCl Storage Tanks	2021		10								\$ 37,006			
NaOCl Metering Pumps	2021		5								\$ 11,699			15,395
Cl Residual Meter	2021	0	5	5							\$ 3,510	\$ 3,790	5 \$	4,618
Prestressed Concrete Tanks	100	2.4		2.5										
Storage Tank 1	1987	34	60											
Storage Tank 2	1987	34	60	26										
High Service Pumping	2017	4	20	26										
HSP 1 & Motor**	2017		30		50.6	10								
HSP 2 & Motor	1987	34	30		50,6	13								
HSP 3 & Motor***	2019		30			¢.	50.607							
HSP 4 & Motor	1987	34	30			\$	52,637	t 54.742						
HSP Piping	1987	34	30					\$ 54,743						
High Service Pump Building****  Recetor Pumping Station	1987	34	50	16										
Booster Pumping Station  Receter Pump 1 & Motor	2000	21	20	0							\$ 70,000			
Booster Pump 1 & Motor	2000		30								\$ 70,000			
Booster Pump 2 & Motor Booster Pump 3 & Motor	2000		30 30								\$ 72,800 \$ 75,712			
Emergency Power System	2000	Δ1	30	7							ψ /3,/12			
Diesel Generator	2019	2	30	28										
Fuel Storage Tank	2019		30											
Operations Building	1987	34	50											
Electrical-MCC	1987		20		55,0	00								
SCADA System****	2021		5		55,0	00				\$ 23,092	\$ 28,095	\$ 34,182	2.	
S CLEAR STORM	2021	U	3	5						+ 25,072	20,073	Ψ 57,102	_	
Total CAB-1 Facilities Replacements				\$	105.6	13 \$	180.386	187,601	\$ 138,173	\$ 23.092	\$ 1,028,411	\$ 50,632	1 \$	20,013
*Well No 4 - Pump and piping replaced in 2017				Ψ	100,0	_υ Ψ	100,000	- 107,001	Ψ 1009110 Q	0,072	¥ 1,020,111	Ψ 20,00.	- Ψ	-0,010

\*Well No.4 - Pump and piping replaced in 2017 \*\*HSP No. 1 - Motor replaced in 2020

<sup>\*\*\*</sup>HSP No.3 - Motor was replaced ~2 years ago \*\*\*\*HSP Building - AC unit replaced in 2017

<sup>\*\*\*\*\*</sup>SCADA system replaced in 2021

	Year	Age	Estimated Total	2021 Estimated	EXZO	EVA	EX72.4	EVAS	EN/26	To.	V05 21	EX/22 26	EN25 40
Equipment Item	Installed		Lifetime	Remaining Life	FY22	FY23	FY24	FY25	FY26	F:	Y27-31	FY32-36	FY37-40
CAB-1 Facilities Renewals				Life									
Well No. 3													
Well Piping Replacement	1987	34	30	-4							\$	21,912	
Well Pump	1987	34	30								\$	54,778	
Well No. 4													
Well Piping Replacement*	2017	4	30	26							\$	18,730	
Well Pump*	2017	4	30								\$		
Well No. 5													
Well Piping Replacement	1987	34	30	-4									\$ 22,788
Well Pump	1987	34	30	-4									\$ 56,969
Well No. 6													
Well Piping Replacement	1987	34	30										\$ 23,700
Well Pump	1987	34	30										\$ 59,248
Well No. 7													
Well Piping Replacement	2016	5	30	25						\$	18,010		
Well Pump	2016	5	30	25						\$	45,024		
Emergency Power System	2000	21	30	9									
Disinfection System													
NaOCl Storage Tanks	2021	0	10	10									
NaOCl Metering Pumps	2021	0	5	5									
Cl Residual Meter	2021	0	5	5									
Prestressed Concrete Tanks													
Storage Tank 1	1987	34	60				\$ 15,000			\$	18,250 \$		
Storage Tank 2	1987	34	60	26			\$ 15,000			\$	18,250 \$	22,204	\$ 27,014
High Service Pumping													
HSP 1 & Motor**	2017	4	30								\$	23,788	
HSP 2 & Motor	1987	34	30										
HSP 3 & Motor***	2019	2	30								\$	25,729	
HSP 4 & Motor	1987	34	30										
HSP Piping	1987	34	30										
High Service Pump Building****	1987	34	50	16					\$ 50,000	\$	50,000 \$	50,000	
Booster Pumping Station													
Booster Pump 1 & Motor	2000	21	30										
Booster Pump 2 & Motor	2000	21	30										
Booster Pump 3 & Motor	2000	21	30	9									
Emergency Power System	201=	_	± A	• •									
Diesel Generator	2019	2	30										
Fuel Storage Tank	2019	2	30				Φ 20.000			¢	50.000 A	50,000	t 50.000
Operations Building	1987	34	50				\$ 30,000			\$	50,000 \$	50,000	\$ 50,000
Electrical-MCC	1987	34	20								\$	18,333	
SCADA System****	2021	0	5	5									
Total CAB-1 Facilities Renewals					\$ - \$		\$ 60,000		. ,		199,533 \$		· ·
Total CAB-1 R&R Costs					\$ 105,613 \$	180,386	\$ 247,601	\$ 138,173	\$ 73,092	<b>\$</b> 1	1,227,944 \$	405,133	\$ 286,746

	Year	Age	Estimated Total	2021 Estimated									
Equipment Item	Installed		Lifetime	Remaining Life	FY22	FY23	FY24	FY25	FY26	FY27-31	FY32-	<b>·36</b>	FY37-40
CAB-2 Facilities Replacements				Ziic									
Well No. 1													
Well	1984	37	30	-7 \$	30,416								
Well Pump	1984		30										
Well No. 2													
Well	1984	37	30	-7		\$ 31,633							
Well Pump*	1984	37	30	-7		\$ 101,226							
Disinfection System													
NaOCl Storage Tanks	2021	0	10	10						\$ 22,20	)4		
NaOCl Metering Pumps	2021	0	5	5						\$ 8,7	74 \$ 9	9,490 \$	11,546
Cl Residual Meter	2021	0	5	5						\$ 3,5	10 \$ 3	3,796 \$	4,618
Prestressed Concrete Tank	1992	29	60	31									
High Service Pumping													
HSP 1 & Motor	1992		30		50,613								
HSP 2 & Motor	1992		30			\$ 52,637							
HSP 3 & Motor	1992	29	30	1			54,743						
High Service Pump Building	1992	29	50	21									
Emergency Power System													
Generator	2019	2	30	28									
Fuel Storage Tank	2019	2	30	28									
Operations Building	1992	29	50	21									
SCADA System**	2020	1	5	4				\$ -		\$ -	\$	- \$	-
Total CAB-2 Replacements				\$	178,361	\$ 185,496	54,743	\$ -	\$ -	\$ 34.48	3 <b>7</b> \$ 13	3,286 \$	16,164
*Well No.2 pump repair in 2017						,,	- , -		•	- ,		, , , , ,	-, -
**SCADA system replaced in 2020													
CAB-2 Facilities Renewals													
Well No. 1													
Well Well	1984	37	30	-7							\$ 21	1,911	
Well Pump	1984		30									1,911 1,778	
Well No. 2	1704	31	50	- /							φ 34	+,776	
Well	1984	37	30	-7								\$	22,787
Well Pump*	1984		30									\$ \$	56,969
Disinfection System	1704	31	30	-/								Ф	20,209
NaOCl Storage Tanks	2021	0	10	10									
NaOCl Metering Pumps	2021		5										
Cl Residual Meter	2021		5										
Prestressed Concrete Tank	1992		60	_				\$ 15,600		\$ 18,98	30 \$ 23	3,092 \$	28,095
High Service Pumping	1774	43	00	. 31			,	Ψ 15,000		ψ 10,90	50 ψ 23	,·0,2 Φ	20,073
HSP 1 & Motor	1992	29	30	1									
HSP 2 & Motor	1992		30										
HSP 3 & Motor	1992		30										
High Service Pump Building	1992		50										
Emergency Power System	1792	2)	50	. 21									
Generator	2019	2	30	28									
Fuel Storage Tank	2019		30										
Operations Building	1992		50										
SCADA System**	2020		50										
DOILDII DJSWIII	2020	1	3	<del></del>									

Equipment Item  Year Age Estimated Total Estimated FY22 FY23 FY24 FY25 FY26 FY27-31 FY32-36 FY Installed (Years) Lifetime Remaining Life	Y37-40
<b>Total CAB-2 Facilities Renewals</b> \$ - \$ - \$ 15,600 \$ - \$ 18,980 \$ 99,780 \$	107,851
Total CAB-2 R&R Costs \$ 178,361 \$ 185,496 \$ 54,743 \$ 15,600 \$ - \$ 53,467 \$ 113,066 \$	124,015
Total CAB-1 + CAB-2 R&R Costs \$ 283,974 \$ 365,881 \$ 302,344 \$ 153,773 \$ 73,092 \$ 1,281,411 \$ 518,199 \$	410,761
Ending Balance of FY2020 1,831,752	
Annual Contribution (Deposit) \$ 270,000	
Running R&R Fund Balance \$ 1,817,778 \$ 1,721,897 \$ 1,689,553 \$ 1,805,780 \$ 2,002,688 \$ 2,071,277 \$ 2,903,078 \$ 2,002,688	,492,317

#### Criteria and Assumptions:

Replacements occur at the end of useful life, or shortly thereafter

Replacement assumes in-kind replacement with new equipment

Renewals generally occur at 1/2 the useful life for useful life of twenty years or less. Renewals generally occur at 1/3 the useful life for useful life of greater than 20 year. Renewals are 1/3 of the cost of replacement

Renewal assumes replacing worn parts with new parts in existing equipment

Costs less than \$2,500 are considered maintenance costs, not renewal and replacement costs

Costs provided assume a 4% inflation rate per year

*R&R does not include normal maintenance (painting, cleaning, calibrations, etc)* 

EPA sets forth life expectancy for these type of infrastructure, the estimated life expectancy shown herein is based on EPA guidelines and experience

Cells with bold/italic indicate years for which annual contributions are not necessary due to the maximum fund balance of \$3M being reached

 Table E-2
 Annual Contribution Evaluation

•	Annual Contribution	Ending Balance F 2020	Y FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34	FY 35	FY 36	FY 37	FY 38	FY 39	FY 40
3	90,00	0 \$ 1,831,73	2 \$ 1,637,778	\$ 1,361,897	\$ 1,149,553	\$ 1,085,780	\$ 1,102,688 \$	1,165,196 \$	1,185,196 \$	1,115,897 \$	381,615 \$	271,277	\$ 242,200	\$ 313,866 \$	283,730 \$	350,638	\$ 203,078 \$	177,145	\$ 187,387 \$	90,412	- ,
	100,00	0 \$ 1,831,73	2 \$ 1,647,778	\$ 1,381,897	\$ 1,179,553	\$ 1,125,780	\$ 1,152,688 \$	1,225,196 \$	1,255,196 \$	1,195,897 \$	471,615 \$	371,277	\$ 352,200	\$ 433,866 \$	413,730 \$	490,638	\$ 353,078 \$	337,145	\$ 357,387 \$	270,412	342,317
	110,00	0 \$ 1,831,75	2 \$ 1,657,778	\$ 1,401,897	\$ 1,209,553	\$ 1,165,780	\$ 1,202,688 \$	1,285,196 \$	1,325,196 \$	1,275,897 \$	561,615 \$	471,277	\$ 462,200	\$ 553,866	543,730 \$	630,638	\$ 503,078 \$	497,145	\$ 527,387	450,412	532,317
	120,00	0 \$ 1,831,75	2 \$ 1,667,778	\$ 1,421,897	\$ 1,239,553	\$ 1,205,780	\$ 1,252,688 \$	1,345,196 \$	1,395,196 \$	1,355,897 \$	651,615 \$	571,277	\$ 572,200	\$ 673,866	673,730 \$	770,638	\$ 653,078 \$	657,145	697,387	630,412	5 722,317
	130,00	0 \$ 1,831,75	2 \$ 1,677,778	\$ 1,441,897	\$ 1,269,553	\$ 1,245,780	\$ 1,302,688 \$	1,405,196 \$	1,465,196 \$	1,435,897 \$	741,615 \$	671,277	\$ 682,200	\$ 793,866	803,730 \$	910,638	\$ 803,078 \$	817,145	867,387	810,412	. ,- ,-
:	140,00	0 \$ 1,831,73	2 \$ 1,687,778	\$ 1,461,897	\$ 1,299,553	\$ 1,285,780	\$ 1,352,688 \$	1,465,196 \$	1,535,196 \$	1,515,897 \$	831,615 \$	771,277	\$ 792,200	\$ 913,866	933,730 \$	1,050,638	\$ 953,078 \$	977,145	\$ 1,037,387 \$	990,412	1,102,317
3	150,00	,,	2 \$ 1,697,778	\$ 1,481,897	\$ 1,329,553	\$ 1,325,780	\$ 1,402,688 \$	1,525,196 \$	1,605,196 \$	1,595,897 \$	921,615 \$	871,277	\$ 902,200	\$ 1,033,866 \$	1,063,730 \$	1,190,638	\$ 1,103,078 \$	1,137,145	\$ 1,207,387 \$	1,170,412	1,2>2,01,
	160,00	0 \$ 1,831,75	2 \$ 1,707,778	\$ 1,501,897	\$ 1,359,553	\$ 1,365,780	\$ 1,452,688 \$	1,585,196 \$	1,675,196 \$	1,675,897 \$	1,011,615 \$	971,277	\$ 1,012,200	\$ 1,153,866	1,193,730 \$	1,330,638	\$ 1,253,078 \$	1,297,145	1,377,387	1,350,412	5 1,482,317
3	5 170,00	,,	φ 1,717,770	\$ 1,521,897	\$ 1,389,553	\$ 1,405,780	\$ 1,502,688 \$	1,645,196 \$	1,745,196 \$	1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,101,015 ψ	1,071,277	· 1,122,200	\$ 1,273,866	1,323,730 \$	1,470,638	\$ 1,403,078 \$	1,457,145	\$ 1,547,387 \$	1,530,412	, , , , , , ,
	180,00	,,	2 \$ 1,727,778	\$ 1,541,897	\$ 1,419,553	\$ 1,445,780	\$ 1,552,688 \$	1,705,196 \$	1,815,196 \$	1,835,897 \$	-,, +	1,171,277	\$ 1,232,200	. , , ,	1,453,730 \$	1,610,638	\$ 1,553,078 \$	1,617,145	1,717,387	1,710,412	1,862,317
3	190,00	0 \$ 1,831,75	2 \$ 1,737,778	\$ 1,561,897	\$ 1,449,553	\$ 1,485,780	\$ 1,602,688 \$	1,765,196 \$	1,885,196 \$	1,915,897 \$	1,281,615 \$	1,271,277	\$ 1,342,200	\$ 1,513,866	1,583,730 \$	1,750,638	\$ 1,703,078 \$	1,777,145	\$ 1,887,387 \$	1,890,412	5 2,052,317
:	5 200,00	0 \$ 1,831,75	2 \$ 1,747,778	\$ 1,581,897	\$ 1,479,553	\$ 1,525,780	\$ 1,652,688 \$	1,825,196 \$	1,955,196 \$	1,995,897 \$	1,371,615 \$	1,371,277	\$ 1,452,200	\$ 1,633,866	1,713,730 \$	1,890,638	\$ 1,853,078 \$	1,937,145	\$ 2,057,387 \$	, ,	5 2,242,317
	210,00	0 \$ 1,831,75	2 \$ 1,757,778	\$ 1,601,897	\$ 1,509,553	\$ 1,565,780	\$ 1,702,688 \$	1,885,196 \$	2,025,196 \$	2,075,897 \$	1,461,615 \$	1,471,277	\$ 1,562,200	\$ 1,753,866 \$	1,843,730 \$	2,030,638	\$ 2,003,078 \$	2,097,145	\$ 2,227,387 \$	, ,	5 2,432,317
:	220,00	0 \$ 1,831,75	2 \$ 1,767,778	\$ 1,621,897	\$ 1,539,553	\$ 1,605,780	\$ 1,752,688 \$	1,945,196 \$	2,095,196 \$	2,155,897 \$	1,551,615 \$	1,571,277	\$ 1,672,200	\$ 1,873,866 \$	1,973,730 \$	2,170,638	\$ 2,153,078 \$	2,257,145	\$ 2,397,387	, ,	5 2,622,317
	3 230,00	0 \$ 1,831,75	2 \$ 1,777,778	\$ 1,641,897	\$ 1,569,553	\$ 1,645,780	\$ 1,802,688 \$	2,005,196 \$	2,165,196 \$	2,235,897 \$	1,641,615 \$	1,671,277	\$ 1,782,200	\$ 1,993,866 \$	2,103,730 \$	2,310,638	\$ 2,303,078 \$	2,417,145	\$ 2,567,387	,,	5 2,812,317
:	5 240,00	0 \$ 1,831,75	2 \$ 1,787,778	\$ 1,661,897	\$ 1,599,553	\$ 1,685,780	\$ 1,852,688 \$	2,065,196 \$	2,235,196 \$	2,315,897 \$	1,731,615 \$	1,771,277	\$ 1,892,200	\$ 2,113,866	2,233,730 \$	2,450,638	\$ 2,453,078 \$	2,577,145	\$ 2,737,387	2,790,412	3 2,762,317
3	250,00	0 \$ 1,831,73	2 \$ 1,797,778	\$ 1,681,897	\$ 1,629,553	\$ 1,725,780	\$ 1,902,688 \$	2,125,196 \$	2,305,196 \$	2,395,897 \$	1,821,615 \$	1,871,277	\$ 2,002,200	\$ 2,233,866 \$	2,363,730 \$	2,590,638	\$ 2,603,078 \$	2,737,145	\$ 2,907,387 \$	2,970,412	\$ 2,942,317
	260,00	0 \$ 1,831,73	2 \$ 1,807,778	\$ 1,701,897	\$ 1,659,553	\$ 1,765,780	\$ 1,952,688 \$	2,185,196 \$	2,375,196 \$	2,475,897 \$	1,911,615 \$	1,971,277	\$ 2,112,200	\$ 2,353,866 \$	2,493,730 \$	2,730,638	\$ 2,753,078 \$	2,897,145	\$ 2,817,387 \$	2,890,412	\$ 2,862,317
3	270,00	0 \$ 1,831,75	2 \$ 1,817,778	\$ 1,721,897	\$ 1,689,553	\$ 1,805,780	\$ 2,002,688 \$	2,245,196 \$	2,445,196 \$	2,555,897 \$	2,001,615 \$	2,071,277	\$ 2,222,200	\$ 2,473,866	2,623,730 \$	2,870,638	\$ 2,903,078 \$	2,787,145	\$ 2,707,387	2,520,412	3 2,492,317
	280,00	0 \$ 1,831,75	2 \$ 1,827,778	\$ 1,741,897	\$ 1,719,553	\$ 1,845,780	\$ 2,052,688 \$	2,305,196 \$	2,515,196 \$	2,635,897 \$	2,091,615 \$	2,171,277	\$ 2,332,200	\$ 2,593,866	2,753,730 \$	2,730,638	\$ 2,493,078 \$	2,377,145	\$ 2,297,387 \$	2,110,412	2,082,317
	290,00	0 \$ 1,831,73	2 \$ 1,837,778	\$ 1,761,897	\$ 1,749,553	\$ 1,885,780	\$ 2,102,688 \$	2,365,196 \$	2,585,196 \$	2,715,897 \$	2,181,615 \$	2,271,277	\$ 2,442,200	\$ 2,713,866	2,883,730 \$	2,860,638	\$ 2,623,078 \$	2,507,145	\$ 2,427,387 \$	2,240,412	\$ 2,212,317
:	300,00	0 \$ 1,831,73	2 \$ 1,847,778	\$ 1,781,897	\$ 1,779,553	\$ 1,925,780	\$ 2,152,688 \$	2,425,196 \$	2,655,196 \$	2,795,897 \$	2,271,615 \$	2,371,277	\$ 2,552,200	\$ 2,833,866 \$	2,713,730 \$	2,690,638	\$ 2,453,078 \$	2,337,145	\$ 2,257,387 \$	2,070,412	3 2,042,317
	310,00	0 \$ 1,831,75	2 \$ 1,857,778	\$ 1,801,897	\$ 1,809,553	\$ 1,965,780	\$ 2,202,688 \$	2,485,196 \$	2,725,196 \$	2,875,897 \$	2,361,615 \$	2,471,277	\$ 2,662,200	\$ 2,953,866 \$	2,833,730 \$	2,810,638	\$ 2,573,078 \$	2,457,145	\$ 2,377,387 \$	2,190,412	3 2,162,317
:	320,00	0 \$ 1,831,75	2 \$ 1,867,778	\$ 1,821,897	\$ 1,839,553	\$ 2,005,780	\$ 2,252,688 \$	2,545,196 \$	2,795,196 \$	2,955,897 \$	2,451,615 \$	2,571,277	\$ 2,772,200	\$ 2,753,866 \$	2,633,730 \$	2,610,638	\$ 2,373,078 \$	2,257,145	\$ 2,177,387	2,310,412	2,602,317
3	330,00	0 \$ 1,831,75	2 \$ 1,877,778	\$ 1,841,897	\$ 1,869,553	\$ 2,045,780	\$ 2,302,688 \$	2,605,196 \$	2,865,196 \$	2,705,897 \$	2,211,615 \$	2,341,277	\$ 2,552,200	\$ 2,863,866 \$	2,743,730 \$	2,720,638	\$ 2,483,078 \$	2,367,145	\$ 2,287,387 \$	2,100,412	3 2,072,317
3	340,00	0 \$ 1,831,75	2 \$ 1,887,778	\$ 1,861,897	\$ 1,899,553	\$ 2,085,780	\$ 2,352,688 \$	2,665,196 \$	2,935,196 \$	2,775,897 \$	2,291,615 \$	2,431,277	\$ 2,652,200	\$ 2,973,866 \$	2,853,730 \$	2,830,638	\$ 2,593,078 \$	2,477,145	\$ 2,397,387	2,210,412	3 2,182,317
	350,00	0 \$ 1,831,75	2 \$ 1,897,778	\$ 1,881,897	\$ 1,929,553	\$ 2,125,780	\$ 2,402,688 \$	2,725,196 \$	2,655,196 \$	2,495,897 \$	2,021,615 \$	2,171,277	\$ 2,402,200	\$ 2,733,866	2,963,730 <b>\$</b>	2,940,638	\$ 2,703,078 \$	2,587,145	\$ 2,507,387 \$	, , .	\$ 2,292,317
- 3	360,00	0 \$ 1,831,75	2 \$ 1,907,778	\$ 1,901,897	\$ 1,959,553	\$ 2,165,780	\$ 2,452,688 \$	2,785,196 \$	,, ,	, ,	7- 7 1		\$ 2,492,200	\$ 2,833,866 \$	2,713,730 \$	, ,,	\$ 2,453,078 \$	2,337,145	8 2,257,387 \$	2,070,412	, ,

Contributions cease once the R&R Reserve Fund reaches \$3M Interest earnings have not been calculated

Cells with bold/italic indicate years for which annual contributions are not necessary due to the maximum fund balance of \$3M being reached