

**PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
SUMMARY AGENDA
April 6, 2016 @ 9:30 a.m.**

Manatee County Administrative Center, Commission Chambers, First Floor
1112 Manatee Avenue West, Bradenton, Florida

ALL MEETINGS ARE OPEN TO THE PUBLIC

Commissioner Christopher G. Constance, Charlotte County, Chair
Commissioner Alan Maio, Sarasota County, Vice Chair
Commissioner Elton A. Langford, DeSoto County
Commissioner John R. Chappie, Manatee County

CALL TO ORDER

INVOCATION

Commissioner Elton Langford

PLEDGE OF ALLEGIANCE

Led by the Board

WELCOME GUESTS

PUBLIC COMMENTS

Open to the Public – Three (3) minute time limit per person. Anyone wishing to address the Board on any agenda item or non-agenda issue should complete a ‘request to speak’ card and hand to the recording secretary.

HOST COUNTY ADMINISTRATOR REMARKS

Ed Hunzeker, Manatee County Administrator

RESOLUTIONS/PRESENTATIONS

- 1. Recognition of Commissioner Chappie for his service as Chair for 2015**
- 2. Recognition of 2015 Plant Operations Excellence Award from the Department of Environmental Protection awarded to the Peace River Facility**

TENTATIVE BUDGET FOR FY 2017

- 1. Tentative Budget for FY 2017**

Presenter -

Patrick Lehman, Executive Director

Recommended Action -

Motion to approve Tentative Budget for FY 2017 in the amount of \$43,931,504.

In accordance with the ‘Second Amended Interlocal Agreement Creating the Peace River Manasota Regional Water Supply Authority’, the Authority is required to establish a tentative budget no later than May 15th of each ensuing year. Staff will present the proposed Tentative Budget for FY 2017 at the

meeting. The proposed Tentative Budget for FY 2017 is \$43,931,504.

The Tentative Budget for FY 2017 will be posted on the Authority's website and distributed for continued review by Authority members, customers and the public. A public hearing will be scheduled at which time the Board will adopt the final budget during a regularly scheduled meeting prior to August 15, 2016.

2. Resolution No. 2016-01 'Resolution Setting Forth Preliminary Schedules of Rates, Fees and Charges for FY 2017

Presenter - Patrick Lehman, Executive Director

Recommended Action - **Motion** to approve Resolution 2016-01 'Resolution Setting Forth Preliminary Schedules of Rates, Fees and Charges for FY 2017'.

Resolution 2016-01 formalizes the Board's adoption of the Tentative Budget for FY 2017, establishes its intent to set rates based upon the tentative budget. A public hearing will be scheduled at which time the Board will adopt the final budget during a regularly scheduled meeting prior to August 15, 2016.

CONSENT AGENDA

1. Minutes of January 28, 2016 Board of Directors meeting

Recommended Action - **Motion** to approve minutes of January 28, 2016 Authority meeting.

Draft minutes of January 28, 2016 Authority meeting are provided for Board approval.

Budget Action None

2. Minutes of February 25, 2016 Board of Directors meeting

Recommended Action - **Motion** to approve minutes of February 25, 2016 Authority meeting.

Draft minutes of February 25, 2016 Authority meeting are provided for Board approval.

Budget Action None

3. Reschedule August 3, 2016 Board of Directors meeting

Recommended Action - **Motion** to approve revised Board of Directors' meeting schedule for calendar year 2016.

There has been a request to reschedule the August 3, 2016 Board of Directors meeting to July 28, 2016 [time and venue remain the same]. Upon approval, the Authority's revised Board Meeting schedule will be sent to each county clerk and county commission chairman. Courtesy copies will also be provided to the Southwest Florida Water Management District and to the City of North Port. The meeting schedule is also posted on the Authority's website at www.regionalwater.org.

Budget Action None

4. Resolution 2016-02 ‘Recognition of the Month of April as Water Conservation Month’

Recommended Action - **Motion** to approve Resolution 2016-02 ‘Recognition of the Month of April as Water Conservation Month’.

By adoption of this resolution, the Authority will be joining with the State of Florida, water management districts, local governments and water-related organizations in recognizing the importance of water conservation in sustaining the water resource.

Budget Action None

5. Resolution 2016-03 ‘Recognition of National Drinking Water Week

Recommended Action - **Motion** to approve Resolution 2016-03 ‘Recognition of National Drinking Water Week’.

The importance of water is too often overlooked. Safe drinking water is the lifeblood of our communities yet few people understand the true value of what comes from their tap. The Authority is pleased to take this opportunity with the American Water Works Association to remind everyone that a reliable water system is essential to their everyday life by proclaiming May 1-7, 2016 as ‘National Drinking Water Week’.

Budget Action None

6. Award Contracts for Purchase of Water Treatment Chemicals

Recommended Action - **Motion** to award and authorize Executive Director to execute Contracts for Purchase of Water Treatment Chemicals with the recommended lowest responsible and responsive bidders listed below.

Water treatment chemicals were bid in accordance with the Authority’s Procurement Policy and staff recommends award of contracts to the lowest responsible and responsive bidders as listed below. Contracts will be effective through March 31, 2017 and are eligible for up to two one-year extensions upon mutual consent of the parties. Supporting materials include Notice of Award, bid tabulation, sample contract and PAC performance testing report.

Funds for these purchases are available in the FY 2016 Budget.

Bid Item	Chemical	Recommended Bidder	Unit Cost
No. 1	Ammonium Hydroxide 19% Solution	Airgas Specialty Products, Inc.	\$0.5054 per gallon
No. 2 *	Powdered Activated Carbon	Cabot Norit Americas	Hydro Darco S \$1,100 per ton
No. 3	Sodium Hypochlorite 12% Solution	Allied Universal Corporation	\$0.468 per gallon

*Low bidder determined to be the most cost effective based on 3rd party performance testing.

Budget Action – None

7. Award Contract for Sludge Loading and Hauling Services

Recommended Action -

Motion to award and authorize Executive Director to execute Contract for Sludge Loading and Hauling Services to the lowest responsible and responsive bidder, D. M. Construction Corporation, in the amount of \$7.45 per ton.

Bids were requested for the sludge loading and hauling of dewatered sludge from the Peace River Facility in accordance with the Authority's Procurement Policy. Three bids were timely received, and opened on March 15, 2016. Staff recommends award of the Contract for Sludge Loading and Hauling Services to the recommended lowest responsible and responsive bidder, D. M. Construction Corporation, in the amount of \$7.45 per ton. This represents a \$0.34 increase over our current vendor price of \$7.11 which has been in effect since 2013. Supporting materials include notice of award/bid tab and Contract.

Funds for these purchases are available in the FY 2016 budget.

Budget Action – None

8. Approve Proposal from Ovivo, LLC/TSC Jacobs for Rebuild and Installation Services of Three Rake Drive Units at the Peace River Facility

Recommended Action -

Motion to approve Proposal [No. Q02162016A-BS] from Ovivo USA, LLC/TSC Jacobs for Rebuild and Installation Services of Three Rake Drive Units at the Peace River Facility and authorize the Executive Director to execute same for \$240,000 with an additional \$12,000 as a contingency to be used as needed at the Executive Director's discretion.

Treatment Trains 3 & 4 and Thickener No. 1 were constructed in 2000 during the Peace River Option project and have seen 16 years of nearly continuous duty service. During that period, the sedimentation basin and thickener rake drives have accrued over 120,000 runtime hours of operation. Although these units are currently functional, they exhibit the typical wear, corrosion and weathering damage expected for industrial equipment operating in an environment of this sort. Failure of a rake drive can effectively shut down treatment facilities until repairs can be made. Since these devices are custom fabricated, repairs may take 6-12 weeks depending on what the failure is. Taking Trains 3 & 4 out-of-service this Spring for major concrete coatings restoration work provides a convenient opportunity to perform an overhaul on these rake drives.

Ovivo USA, LLC is the original equipment manufacturer of these rake drives and TSC Jacobs is their mechanical contracting partner who performs the field installations. Staff met with representatives from Ovivo USA, LLC and negotiated a scope of work to have the rake drives removed, overhauled and reinstalled. Proposal No. Q02162016A-BS in the amount of \$240,000 [\$80,000 per rake mechanism] for this work is attached. This cost is judged by staff to be a fair price for the work proposed. This work will take 4- 6 weeks to complete.

Staff memorandum on sole-source justification is attached.

Budget Action: None – Funds contained in FY 2016 R&R Budget for this project.

9. Resolution 2016-04 'Adopt 457 Governmental Deferred Compensation Plan for the Peace River Manasota Regional Water Supply Authority

Recommended Action -

Motion to approve Resolution 2016-04 'Adopt 457 Governmental Deferred Compensation Plan for the Peace River Manasota Regional Water Supply Authority'.

The Authority's current 457b Deferred Compensation Plan was established in 1994 under NACo and is currently being administered through Nationwide. After reviewing the current market for 457b plans, it was determined there are better 457b plan options that will assist the Authority in the attraction and retention of high quality employees.

Budget Action – None

10. Accept Customer Suppliers 20-Year Water Demand Projections

Recommended Action -

Motion to accept Customer provided demand projections for 2017 through 2036.

Each year Authority customers are required to provide the Authority with an updated 20-year water demand (annual average, peak month, maximum day) projection and identify the portion of their demand they require the Authority to fulfill. The Customers 2016 submittals (reflecting the 2017-2036 planning period) requested delivery of 31.53 MGD (average daily flow) from the Authority in 2017. Customer demand projections (in aggregate) for the 20-year planning period show average daily water demands increasing about 1.8% per year, from 79.9 MGD in 2017 to about 111.7 MGD in 2036.

Current average day supply capacity for the Authority and Customers is approximately 105 MGD. Analysis of Customer projections and existing supply capacity using the methodology established in the Authority's *Water Supply Master Plan 2015* shows need for development of an additional 26 MGD in supply capacity in the region during the next 20 years, with the first new supply needed in 2023. Customer projections identify development 17 MGD in new local supplies, with the first of those supplies being completed in 2023 (by North Port). In addition, Manatee County has indicated a potential need for 5 MGD in new regional supply in the 2034 timeframe. Assuming this Customer proposed/requested 22 MGD capacity (17 MGD local + 5 MGD Regional) is completed, an additional 4 MGD in new capacity must still be developed to meet demand and supply capacity targets within the 20-year planning period.

Staff memorandum is attached.

Budget Action – None

11. Approve Work Order No. 16-05 to MWH for Reservoir No. 2 Seepage Collection System Toe Drain Inspection

Recommended Action -

Motion to approve and authorize Executive Director to execute Work Order 16-05 to MWH for Reservoir No. 2 Seepage Collection System Toe Drain Inspection at a cost not to exceed \$99,977.

Work Order No. 16-05 will authorize the designer of Reservoir No. 2, MWH, to perform a video survey of conditions in the Reservoir No. 2 Embankment internal seepage collection toe drain system. Work will be conducted under the existing continuing services contract with MWH for Engineering Services.

The Reservoir No. 2 toe drain consists of 24,000 feet (4.6 miles) of PVC pipe ranging in size from 8 inches to 16 inches in diameter. The pipes are buried approximately 15 feet below ground surface with access via manholes located at the toe of the embankment. The video inspection is performed by a robotic camera lowered into the pipe through a manhole or other access point. All video is digitally recorded for evaluation. Observations at man-holes and discharge locations for this system indicate that groundwater has deposited iron bacteria within sections of the pipe and the extent of this deposition, and the general condition of the toe drains needs to be evaluated. Follow-up work in 2017 to clean sections of the toe drain may be required based on the video work.

The seepage collection system consists of a chimney drain, a blanket drain and a toe drain. These components are embedded within the earthen embankment that surrounds the water stored in the reservoir. Seepage from the reservoir pool is collected by the chimney drain and the blanket drain which then flows into the toe drain before being discharged to either Reservoir #1 or to the perimeter toe ditch. A properly functioning seepage collection system is critical to maintaining a safe, functional reservoir embankment.

Staff recommends approval of Work Order No. 16-05 to MWH for Reservoir No. 2 Seepage Collection System Toe Drain Inspection at a cost not to exceed \$99,977. Work is scheduled to be completed in approximately three months.

Staff memorandum and Work Order No. 16-05 are attached.

Budget Action – None

12. Novation of Contract from United Systems Computer Group, Inc. to Entech United, LLC

Recommended Action -

Motion to approve and authorize Executive Director to execute novation of existing contract from United Systems Computer Group, Inc. to Entech United, LLC.

The Authority currently has a professional services contract with ‘United Systems Computer Group, Inc.’ dated June 5, 2013. The attached March 11, 2016 correspondence serves notice that ‘United Systems Computer Group, Inc.’ has merged with another firm and changed its name to ‘Entech United, LLC’.

Since the Authority’s current contract is with ‘United Systems Computer Group, Inc.’ this change will require novation of the current contract to ‘Entech United, LLC’. The attached correspondence from Entech pledges that the novation will not result in changes in personnel or interruption of continuity of service and that all contractual obligations will continue to be satisfied with this name change. Staff recommends approval for novation of current from ‘United Systems Computer Group, Inc.’ to ‘Entech United, LLC’.

Budget Action – None

REGULAR AGENDA**1. Water Supply Conditions – Staff Presentation**

Presenter - Richard Anderson, System Operations Manager

Recommended Action - **Status Report.** This item is presented for the Board's information and no action is required.

Water Supply Conditions at the Peace River Facility as of March 20, 2016.

- Water Supply Quantity: Excellent
- Treated Water Quality: Excellent

March Water Demand	27.92 MGD
March River Withdrawals	18.69 MGD
<u>Storage Volume:</u>	
Reservoirs	6.75 BG
ASR	<u>5.47 BG</u>
Total	12.22 BG

Budget Action – None

2. Regional Integrated Loop System Phase 3B Interconnect Update (S.R. 681 to Clark Road)

Presenter - Mike Coates, Deputy Director

Recommended Action - **Status Report** This item is presented for the Board's information and no action is required.

The Phase 3B Interconnect project (S.R. 681 to Clark Road) will include installation of about 4.2 miles of 48-inch diameter pipeline from the northern terminus of the existing Phase 3A Regional Interconnect, north to Clark Road (see attached location map). The project will support Sarasota County's water needs from Clark Road north, and serve to extend the regional system toward a future interconnection with Manatee County. Design work for the project was initiated in February 2016. Estimated total project cost (design and construction) is \$27M, and project completion is scheduled in 2020.

a. Status of Interlocal Agreement between the Authority and Sarasota County

An Interlocal Agreement is required between Sarasota County and the Authority for development of the Phase 3B Regional Interconnect. The Agreement covers financial, ownership, capacity, property use, coordination and other pertinent requirements of the project. The Authority and the County are currently developing the Interlocal Agreement for the Phase 3B Interconnect. The target date for approval by the County and the Authority is June 1, 2016 in time to positively affect SWFWMD ranking of the project for FY 2017 co-funding.

b. Status of Out-of-Cycle Funding Request to SWFWMD for Phase 3B Preliminary Design Services

In September the Authority submitted a FY 2017 cooperative funding application to SWFWMD for the Phase 3B Regional Interconnect Project. While the application included project costs by year from FY 2016 through projected completion in 2020, only the FY 2017 and later costs are being considered by SWFWMD as part of that September application. In order to include 2016 project costs the Authority submitted an out-of-cycle funding request to SWFWMD on February 3, 2016 for FY 2016 activities (Preliminary Design work) on the Phase 3B Interconnect. The request was for 50% of the contracted \$397,958 Preliminary Design cost. SWFWMD Board action on the request is scheduled for April 26, 2016 and SWFWMD Staff recommendation is for approval.

Budget Action – None at this time.

3. SWFWMD FY 2017 Cooperative Funding Applications

Presenter -

Mike Coates, Deputy Director

Recommended Action -

Status Report. This item is presented for the Board's information and no action is required.

In September the Authority submitted FY 2017 co-funding applications for the three regional pipeline projects listed below. An update on each project and co-funding application is provided. A project location map is attached.

1) Phase 3B Interconnect (S.R. 681 to Clark Road)

The Phase 3B Interconnect project (S.R. 681 to Clark Road) will include installation of about 4.2 miles of 48" diameter pipeline from the northern terminus of the existing Phase 3A Regional Interconnect, north to Clark Road. The Authority's 2015 Water Supply Master Plan (WSMP) estimated total project cost is \$27M, and completion scheduled in 2020. Preliminary design work commenced in February 2016. An Interlocal Agreement between the Authority and Sarasota County for the project is in development and targeted for completion by June 1, 2016. Current SWFWMD ranking for the project is "low", but would be favorably revised with timely completion of the aforementioned Interlocal Agreement.

2) Phase 3D Interconnect (Fruitville Road to Manatee)

The Phase 3D Interconnect project (Fruitville Road to Manatee County) will include installation of about 3.6 miles of 24" diameter pipeline from Fruitville Road north along the Loraine Road corridor to the Manatee County line. The pipeline is to be installed by Schroeder Manatee Ranch (SMR), the developer of Lakewood Ranch, as part of the Loraine Road corridor improvements. Project design is complete. The Authority's 2015 WSMP estimated total project cost is \$15.5M and project completion is scheduled in 2018. Sarasota County and SMR have developed a draft agreement providing for SMR installation of the future regional pipeline facilities, then sale/conveyance of those facilities to the County. Thereafter the County and the Authority must work out terms for Authority acquisition for the pipeline. Current SWFWMD ranking for the project is "low", but could be favorably revised with timely completion of an Interlocal Agreement between the Authority and Sarasota County for Authority acquisition/ownership of this infrastructure.

3) Phase 4 Interconnect (Burnt Store WTP to Phase 1A)

The Phase 4 Interconnect project (Burnt Store to Phase 1A) will include installation of about 15.4 miles of 24" diameter pipeline from Burnt Store WTP in south Charlotte County to the Phase 1A regional facilities along U.S. 17 east of Punta Gorda. The Authority's 2015 WSMP estimated cost is \$28M and completion timeframe is approximately five (5) years. The Authority and Charlotte County continue discussions on the timing for the Phase 4 Interconnect. Current SWFWMD ranking for the project is "low", but could be favorably revised with timely completion of an Interlocal Agreement between the Authority and Charlotte County on the Phase 4 Interconnect.

Budget Action – None

4. Partially Treated Water Aquifer Storage & Recovery Concept Presentation

Presenter -

Mike Coates, Deputy Director

Recommended Action -

Status Report This item is presented for the Board's information and no action is required.

The Authority owns and operates the largest Aquifer Storage and Recovery (ASR) System in the eastern United States. The system has been installed incrementally over more than 30 years and now includes 21 ASR production wells and 24 monitoring wells. While this system is a critical storage component, contributing to the yield and reliability of the Peace River Facilities, it is operationally expensive. Water in ASR is fully treated twice to drinking water standards; first on injection in accordance with our existing operations permit for ASR; and again on recovery as water recovered from ASR is discharged to the raw water reservoir system because of naturally occurring arsenic picked up during storage in the limestone aquifer. Operationally this makes water from ASR twice as expensive as water from the reservoir system.

The Authority helped pave the way for recent regulatory changes in Florida that support the ASR concept, understanding that many of the state's water resource challenges can be addressed through use of seasonally abundant resources which requires a means to sustainably harvest and store those resources. ASR provides a viable option for the large volume storage required to effectively utilize those seasonally abundant resources.

Recently the FDEP has issued a number of permits authorizing storage or testing for partially treated ASR systems. Partial treatment may include minimal filtration and disinfection of water prior to injection for storage. The permitting concept allows a "zone of discharge" on property owner or controlled by the ASR operator, so it is conceptually very similar to the Authority's current "water quality criteria exemption" for arsenic, ensuring that arsenic above the 10 microgram/liter drinking water standard remains on Authority property. The ability to store partially treated water has potential to improve the operational viability of ASR, allowing increased storage, improved recovery efficiency and at the same time lower costs.

Staff will discuss this concept and present results from a recently completed preliminary study by the consulting firm CH2M (attached in tab a) on the viability of partially treated ASR at the Peace River site. Should the Board authorize moving ahead, the next step would be discussions with the FDEP about pilot testing partially treated ASR on a subset of wells at the Peace River Facility. Presentation materials are also attached (tab b).

Budget Action – None at this time.

5. Strategic Plan Implementation Process Update

Presenter - John Shearer, Shearer Consulting

Recommended Action - **Status Report.** This item is presented for the Board's information and no action is required.

John Shearer is facilitating the Strategic Plan Implementation Process with the Administrators and Utility staffs. Mr. Shearer will provide an update to the Board on progress and schedule for Plan implementation.

Budget Action – None

6. Legislative Session Wrap-Up

Presenter - Diane Salz, Governmental Consultant

Recommended Action - **Status Report.** This item is presented for the Board's information and no action is required.

Diane Salz, governmental consultant for the Authority will provide an update on results of the recently completed 2016 legislative session relative to the items on the Authority Board priorities list. Board-adopted legislative and regulatory priorities for 2016 and presentation materials are attached.

Budget Action - None

GENERAL COUNSEL'S REPORT

Presenter - Douglas Manson, General Counsel

Recommended Action - **Status Report.** This item is presented for the Board's information and no action is required.

EXECUTIVE DIRECTOR'S REPORT

Presenter - Patrick Lehman, Executive Director

Recommended Action - **Status Report.** This item is presented for the Board's information and no action is required.

1. Manson Bolves Donaldson P. A. Billing Summary for 1st Quarter

Attached is the billing summary for the 1st Quarter FY 2016 by Manson Bolves Donaldson, P.A. (MBD) showing total billing of \$53,268. The contract for legal services provides an annual contractual amount up to \$180,000 for services within the scope of the contract. Legal services provided outside the scope of the contract are to be approved by the Board.

Legal costs have been incurred by MBD in the settlement negotiations with RTD for the 1991 Rebuild Project and the funding agreements for the Phase 1 Regional Interconnect Pipeline. The work on these issues could be determined to be outside the contract scope of services. This is provided for information, no action is requested at this time.

2. Peace River Facility Silver Anniversary

The year 2016 marks the 25th anniversary of Peace River Manasota Regional Water Supply Authority's acquisition of the Peace River Facility. The facilities have been improved and expanded throughout the last quarter century to become a model for alternative water supply development, environmental sustainability, and operational excellence in the state.

The silver anniversary celebration of the Authority's acquisition of the Peace River Facilities will be part of the Friends of Peace Water annual BBQ on May 6, 2016 at the Peace River Facility. The celebration will highlight the vision and leadership over the years in forming and fostering the growth of the Peace River Manasota Regional Water Supply Authority.

Friends of Peace Water, Inc. Annual BBQ & PRF Silver Anniversary

Friday, May 6 @ 11:30 a.m.

Peace River Facility

8998 SW County Road 769 [Kings Highway]

Arcadia, FL

ROUTINE STATUS REPORTS

1. Hydrologic Conditions Report
2. Check Registers for January and February 2016
3. Regional Integrated Loop System Phase 1 Interconnect [U.S. 17 to Punta Gorda]
4. Peace River Basin Report

These reports are for informational purposes and no presentation is made. Staff is available for questions.

BOARD MEMBER COMMENTS

PUBLIC COMMENTS

Open to the Public – Three (3) minute time limit per person. Anyone wishing to address the Board on any issue should complete a 'request to speak' card and hand to the recording secretary.

SCHEDULE OF FUTURE MEETINGS

Friends of Peace Water, Inc. Annual BBQ – PRF Silver Anniversary

Friday, May 6 @ 11:30 a.m. – Peace River Facility

Next Authority Board Meeting

Wednesday, June 1, 2016 @ 9:30 a.m.

DeSoto County Administrative Building

Commission Chambers, First Floor

201 East Oak Street, Arcadia, Florida

ADJOURNMENT

**PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016**

**TENTATIVE BUDGET
ITEM 1**

Tentative Budget for FY 2017

Presenter -

Patrick Lehman, Executive Director

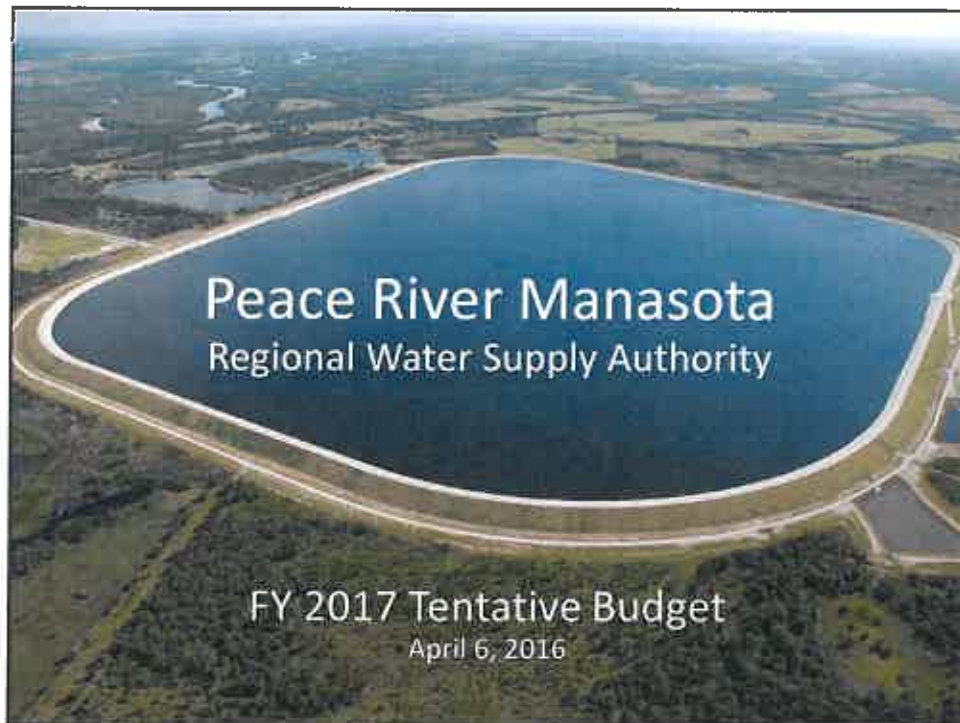
Recommended Action -

Motion to approve Tentative Budget for FY 2017 in the amount of \$43,931,504.

In accordance with the 'Second Amended Interlocal Agreement Creating the Peace River Manasota Regional Water Supply Authority', the Authority is required to establish a tentative budget no later than May 15th of each ensuing year. Staff will present the proposed Tentative Budget for FY 2017 at the meeting. The proposed Tentative Budget for FY 2017 is \$43,931,504.

The Tentative Budget for FY 2017 will be posted on the Authority's website and distributed for continued review by Authority members, customers and the public. A public hearing will be scheduled at which time the Board will adopt the final budget during a regularly scheduled meeting prior to August 15, 2016.

TAB A
Presentation



Tentative Budget for FY 2017

Mission of the Authority is:

"To provide the region with a sufficient, high quality, safe drinking water supply that is reliable, sustainable and protective of our natural resources now and into the future."

Vision of the Authority is:

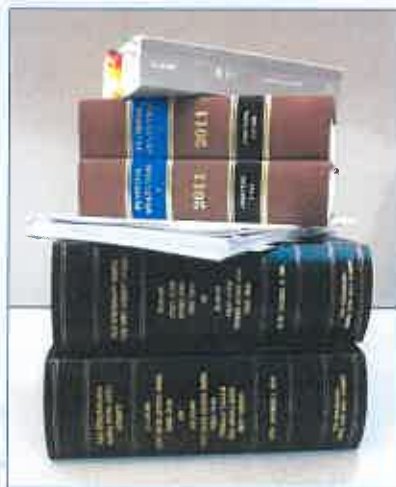
"Through cooperation and collaboration the Authority and its members shall create and maintain a sustainable, interconnected regional water supply system."

Tentative Budget for FY 2017

Budget Process Timeline/Schedule:

- Jan 28 - Authority Board meeting – Budget Process
- Mar 3 - Draft Budget for FY 2016 distributed to members' staffs
- Mar 9 - Members' staff meeting
- Mar 18 - Administrators' meeting
- Apr. 6 - Authority Board meeting – adopt Tentative Budget for FY 2016**
- May 4 - Members' staff meeting
- May 13 - Administrators' meeting
- June 1 - Authority Board meeting**
- July 6 - Members' staff meeting
- July 15 - Administrators' meeting
- July/Aug - Member County BOCC and North Port Commission meetings
- July 28 - Authority Board meeting and Public Hearing to adopt Final Budget for FY 2016**

Tentative Budget for FY 2017



Budget Documents:

- Second Amended Interlocal Agreement Creating the Peace River Manasota Regional Water Supply Authority (Oct. 2005)
- Peace River Manasota Regional Water Supply Authority Master Water Supply Contract (Oct. 2005)
- Resolution 2005-08 'Resolution Setting Forth Rate Setting Methodology' (Oct. 2005)
- Utility System Revenue Bonds
 - Series 2010
 - Series 2014
 - Series 2015
- Budget Policies (Feb. 2013)
- Strategic Plan for Peace River Manasota Regional Water Supply Authority (Oct. 2014)

Tentative Budget for FY 2017

Budget Obligations:

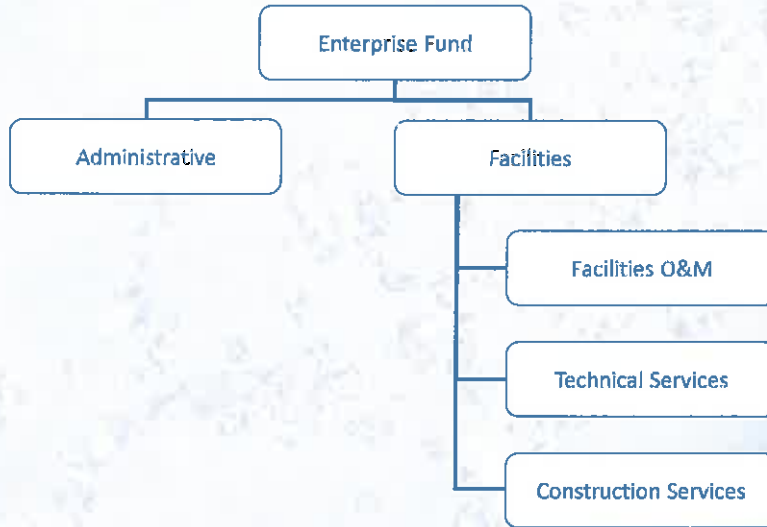
- Meet MWSC obligations [34.7 MGD]
- Meet Customer demands [January 2016 projections: 31.5 MGD]
- Plan long term water demands
- Efficient and effective Operations
- Investment in infrastructure
- Maintain financial stability/bond rating
- Maintain reasonable water rates:
 - ✓ Next fiscal year FY 2017
 - ✓ Near-term [2-5 years]
 - ✓ Long term [5-20 years]

Tentative Budget for FY 2017

Budget Analysis:

- Increase in cost consistent with increased water demand
- Staffing
 - Personnel compensation increase budgeted at 4% [comparable to members]
 - Health Insurance increase budgeted at 5%
 - Two new staff positions [increase from 45 to 47 FTE]
 - IT position
 - HR/Public Records position
- Contract Services reduction from increased in-house expertise
- Prioritize R&R funding to maintain infrastructure
- Reflects grant funds for CIP projects for Customers savings

Tentative Budget for FY 2017

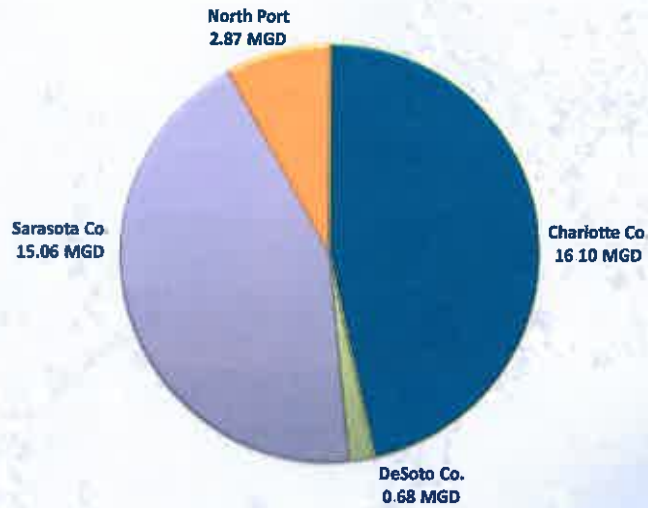


Tentative Budget for FY 2017

	FY 2016 Budget	FY 2017 Tentative Budget	Increase/ (Decrease)
Total Enterprise Fund	\$ 37,158,279	\$ 43,931,504	\$ 6,773,225
Administrative Office	\$ 659,500	\$ 686,500	\$ 27,000
Facilities	\$ 36,498,779	\$ 43,245,004	\$ 6,746,225

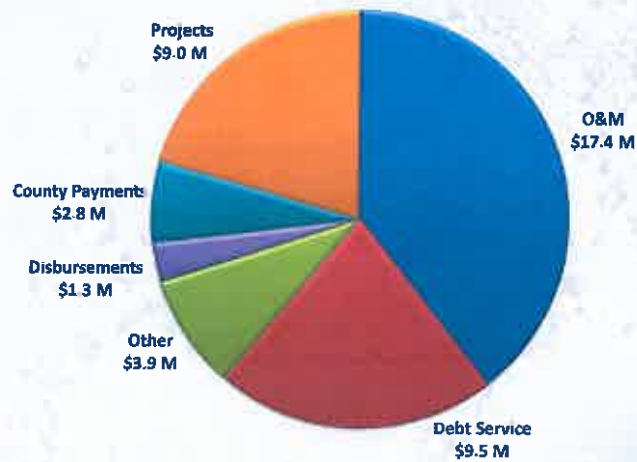
Tentative Budget for FY 2017

Water Allocations [34.7 MGD]

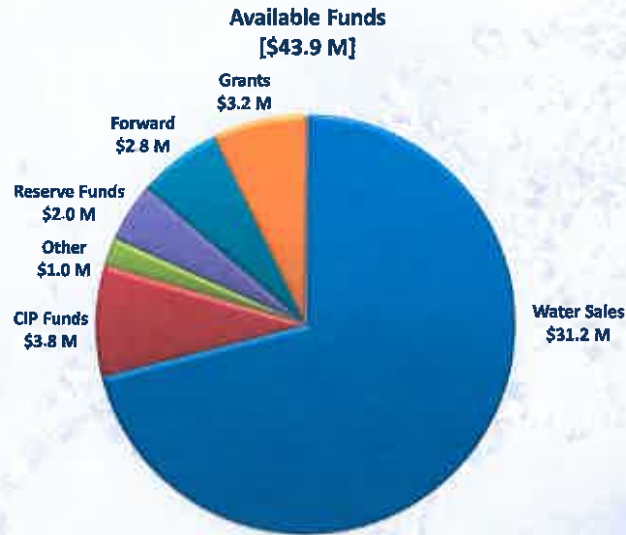


Tentative Budget for FY 2017

Expenditures [\$43.9 M]



Tentative Budget for FY 2017



Tentative Budget for FY 2017

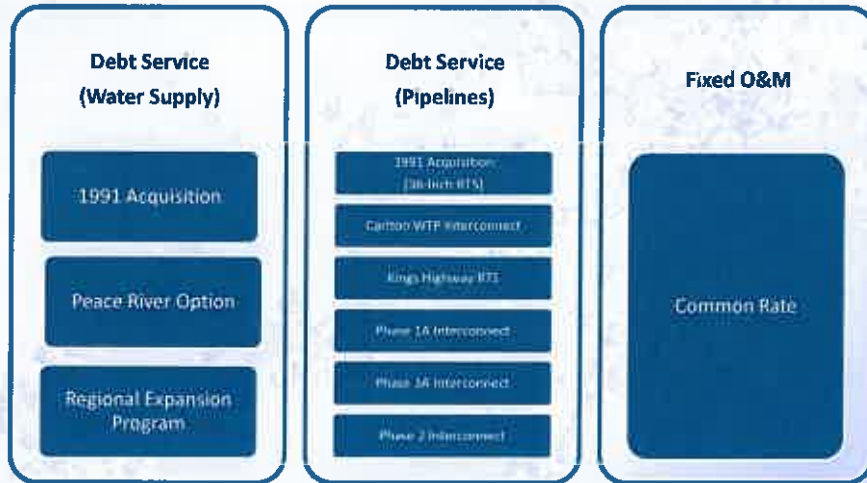
Water Rate is established by resolution of the Authority for the sale of water and comprised of two components:



Conservation Charge for Exceedance applies by for exceeding MWSC water allocation.

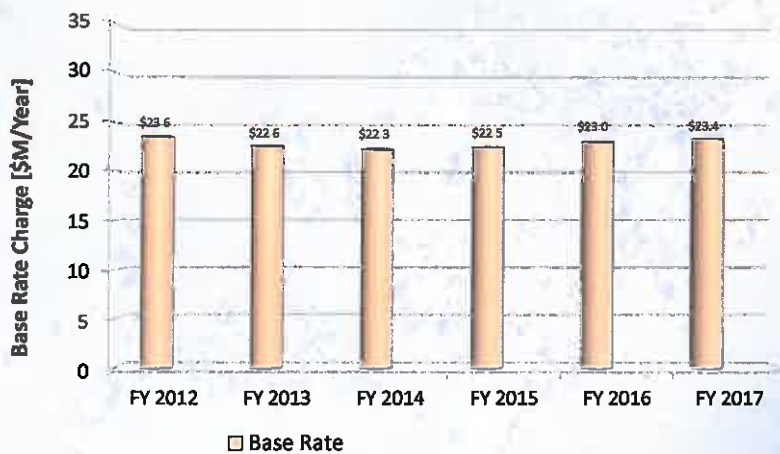
Tentative Budget for FY 2017

Base Rate Components



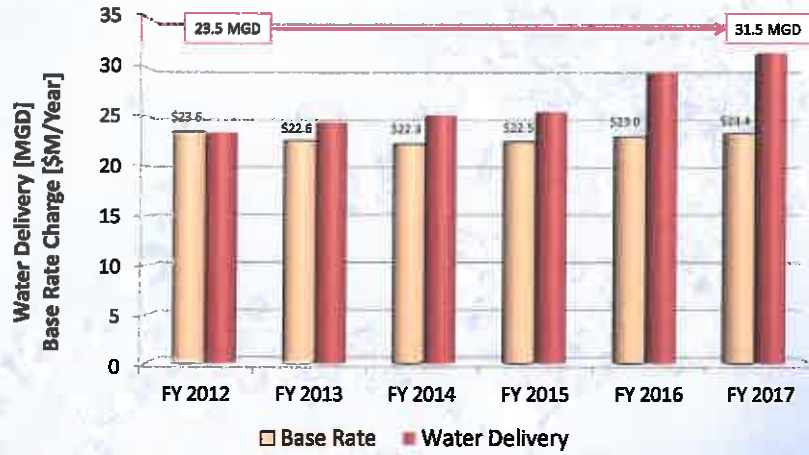
Tentative Budget for FY 2017

Base Rate Charge



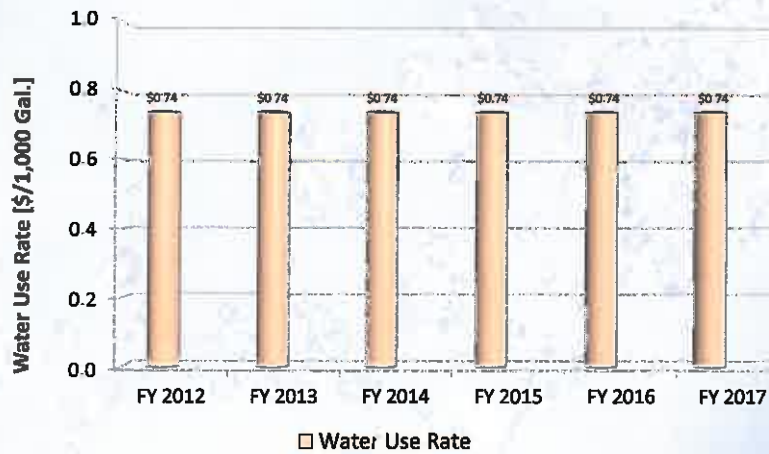
Tentative Budget for FY 2017

Base Rate Charge



Tentative Budget for FY 2017

Water Use Charge



Tentative Budget for FY 2017

Customer Water Rate	FY 2016 Amended Budget	FY 2017 Tentative Budget	Increase/ (Decrease)
<u>Base Rate Charge</u> (\$ for FY)			
• Charlotte Co.	\$ 8,810,112	\$ 8,969,668	\$ 159,556
• DeSoto Co.	\$ 476,158	\$ 482,715	\$ 6,557
• Manatee Co.	\$ 0	\$ 0	\$ 0
• Sarasota Co.	\$ 11,481,807	\$ 11,627,623	\$ 145,816
• North Port	\$ 2,264,442	\$ 2,291,923	\$ 27,481
	\$ 23,032,519	\$ 23,371,923	\$ 339,409
<u>Water Use Charge</u> (\$/1,000 Gal)	\$ 0.74	\$ 0.74	No Change

Tentative Budget for FY 2017

Member Fee	FY 2016 Budget	FY 2017 Tentative Budget	Increase/ (Decrease)
<u>Member Fee</u> (\$ for FY)			
• Charlotte Co.	\$ 66,185	\$ 41,772	\$ 5,587
• DeSoto Co.	\$ 44,443	\$ 47,845	\$ 202
• Manatee Co.	\$ 95,457	\$ 104,596	\$ 9,139
• Sarasota Co.	\$ 103,415	\$ 112,286	\$ 8,871
	\$ 309,500	\$ 336,500	\$ 27,000

Tentative Budget for FY 2017

Member/Customer Planning Assessment	FY 2016 Budget	FY 2017 Tentative Budget	Increase/ (Decrease)
<u>Assessment</u> (\$ for FY)			
• Charlotte Co.	\$ 8,885	\$ 10,595	\$ 1,710
• DeSoto Co.	\$ 1,860	\$ 2,062	\$ 202
• Manatee Co.	\$ 18,342	\$ 22,300	\$ 3,958
• Sarasota Co.	\$ 18,959	\$ 24,401	\$ 5,442
• North Port	<u>\$ 1,954</u>	<u>\$ 642</u>	<u>(\$ 1,312)</u>
	\$ 50,000	\$ 60,000	\$ 10,000

Tentative Budget for FY 2017

Budget Process



Tentative Budget for FY 2017

Questions & Discussion

Tentative Budget for FY 2017

Staff Recommendation

**Motion to approve Tentative Budget for FY 2017
in the amount of \$43,931,504.**

TAB B
FY 2017 Tentative Budget Analysis

**Peace River Manasota Regional Water Supply Authority
FY 2017 Proposed Tentative Budget**

BUDGET COST ANALYSIS			
Enterprise Fund	Approved FY 2016	Tentative FY 2017	Variance +/-
AVAILABLE FUNDS			
Water Sales	\$30,676,319	\$31,156,528	\$480,209
Member Fee	\$309,500	\$336,500	\$27,000
Customer Planning Assessment	\$50,000	\$60,000	\$10,000
Subtotal	\$31,035,819	\$31,553,028	\$517,209
Estimated Unencumbered Funds from Prior Year	\$2,931,317	\$2,836,176	(\$95,141)
Federal Direct Payment	\$576,143	\$578,300	\$2,157
Interest Income	\$40,000	\$40,000	\$0
Transfer in from Renewal & Replacement	\$2,575,000	\$1,943,000	(\$632,000)
Transfer in from CIP	\$0	\$3,791,000	\$3,791,000
Grants	\$0	\$3,190,000	\$3,190,000
Total Sources	\$37,158,279	\$43,931,504	\$6,773,225
EXPENDITURES			
Insurances	\$528,000	\$503,000	(\$25,000)
Personnel	\$4,018,500	\$4,522,000	\$503,500
Utilities	\$2,106,000	\$2,156,000	\$50,000
Operating Supplies	\$115,000	\$128,500	\$13,500
Water Treatment Chemicals	\$5,409,800	\$5,509,600	\$99,800
Repairs & Maintenance	\$1,711,500	\$1,635,200	(\$76,300)
Machinery & Equipment	\$257,500	\$298,500	\$41,000
Contract Services	\$2,405,500	\$2,183,500	(\$222,000)
General Administration	\$391,000	\$420,500	\$29,500
Subtotal	\$16,942,800	\$17,356,800	\$414,000
Debt Service	\$10,896,824	\$10,892,190	(\$4,634)
County Payments	\$2,772,338	\$2,772,338	\$0
Contingencies	\$520,000	\$520,000	\$0
Transfer out to R&R Account	\$2,000,000	\$2,000,000	\$0
Water Purchase	\$20,000	\$20,000	\$0
Projects	\$2,675,000	\$9,024,000	\$6,349,000
Fund Disbursements	\$1,331,317	\$1,346,176	\$14,859
Total Uses	\$37,158,279	\$43,931,504	\$6,773,225
Enterprise Fund			
	Approved FY 2016	Tentative FY 2017	Variance +/-
Water Sales	\$30,676,319	\$31,156,528	\$480,209
Projected Water Delivery [MGD]	29.53	31.52	1.99
Blended Unit Cost [\$/1,000 GAL]	\$2.85	\$2.71	(\$0.14)

**Peace River Manasota Regional Water Supply Authority
FY 2017 Proposed Tentative Budget**

WATER RATE AND CHARGES ANALYSIS			
Fixed Charges	FY 2016 Approved	FY 2017 Tentative	Variance +/-
Charlotte County			
Base Charge	\$8,810,112	\$8,969,668	\$159,556
Member Contribution	\$66,185	\$71,772	\$5,587
Customer Planning Assessment	\$8,885	\$10,595	\$1,710
Subtotal	\$8,885,182	\$9,052,036	\$166,854
DeSoto County			
Base Charge	\$476,158	\$482,715	\$6,557
Member Contribution	\$44,443	\$47,845	\$3,402
Customer Planning Assessment	\$1,860	\$2,062	\$202
Subtotal	\$522,461	\$532,622	\$10,161
Manatee County			
Base Charge	\$0	\$0	\$0
Member Contribution	\$95,457	\$104,596	\$9,139
Customer Planning Assessment	\$18,342	\$22,300	\$3,958
Subtotal	\$113,799	\$126,896	\$13,097
Sarasota County			
Base Charge	\$11,481,807	\$11,627,623	\$145,816
Member Contribution	\$103,415	\$112,286	\$8,871
Customer Planning Assessment	\$18,959	\$24,401	\$5,442
Subtotal	\$11,604,181	\$11,764,310	\$160,129
City of North Port			
Base Charge	\$2,264,442	\$2,291,923	\$27,481
Member Contribution	\$0	\$0	\$0
Customer Planning Assessment	\$1,954	\$642	(\$1,312)
Subtotal	\$2,266,396	\$2,292,564	\$26,168
Enterprise Fund			
Base Charge	\$23,032,519	\$23,371,928	\$339,409
Member Contribution	\$309,500	\$336,500	\$27,000
Customer Planning Assessment	\$50,000	\$60,000	\$10,000
Total	\$23,392,019	\$23,768,428	\$376,409
Variable Charges	FY 2016 Approved	FY 2017 Tentative	Variance +/-
Water Use Rate Charge			
\$/1,000 gallons	\$0.74	\$0.74	\$0.00

TAB C
FY 2017 Proposed Tentative Budget



Peace River Manasota

Regional Water Supply Authority

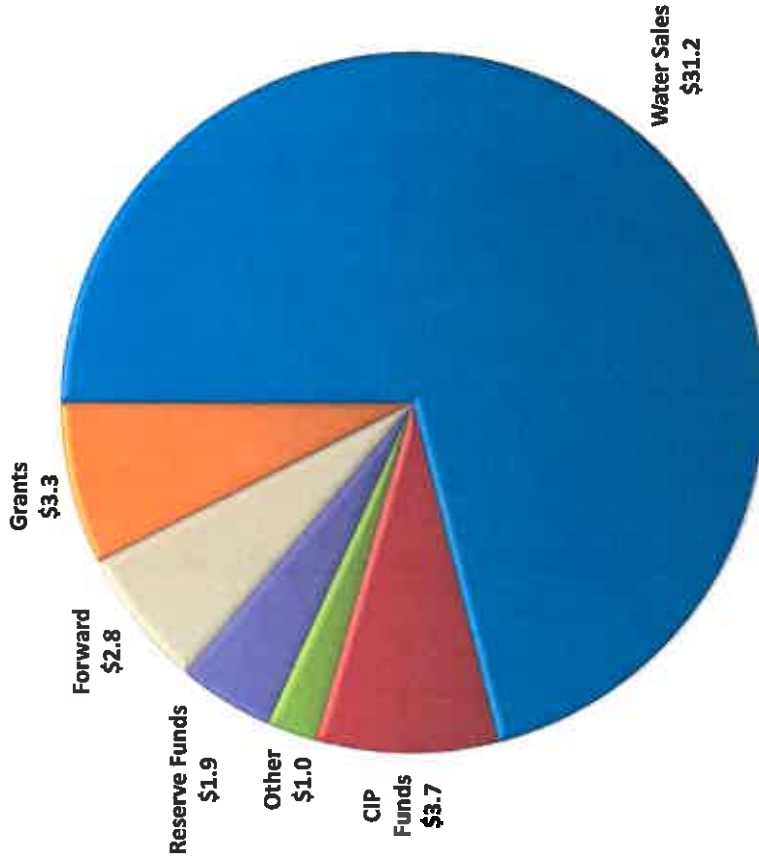
Celebrating 25 Years of Service
1991 - 2016

PROPOSED TENTATIVE BUDGET for FY 2017

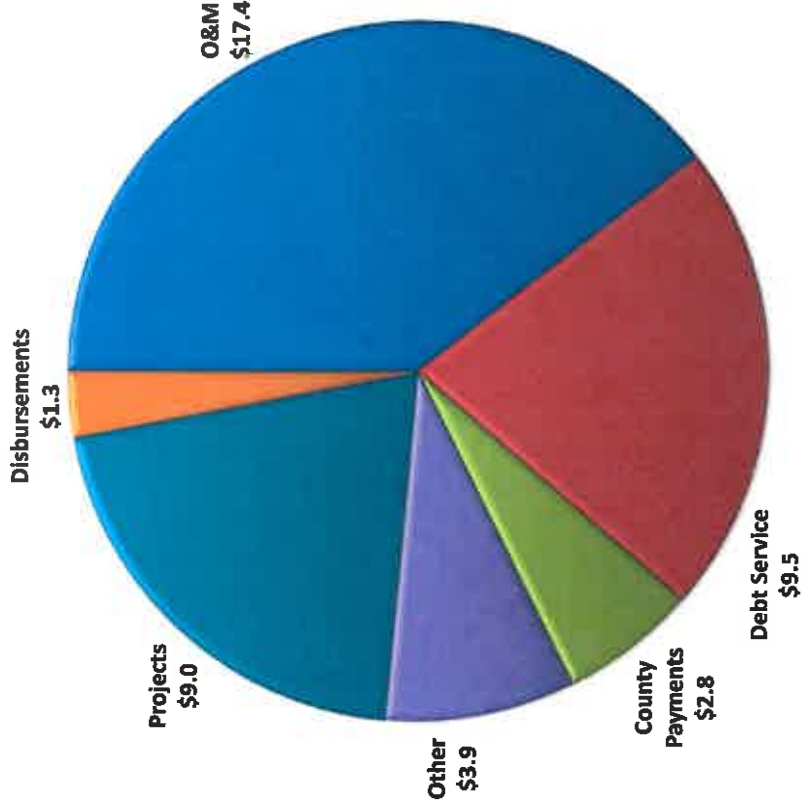
[Draft: April 6, 2016]

Peace River Manasota Regional Water Supply Authority
 FY 2017 Proposed Tentative Budget

AVAILABLE FUNDS
\$43.9 M



EXPENDITURES
\$43.9 M



**Peace River Manasota Regional Water Supply Authority
FY 2017 Proposed Tentative Budget**

AVAILABLE FUNDS	Administrative Office	Facilities	Total Enterprise Fund
Revenue			
Water Sales		31,156,528	31,156,528
Member Fee	336,500		336,500
Planning Assessment		60,000	60,000
Anticipated interest		40,000	40,000
Federal Direct Payment [2010B Bond Series]		578,300	578,300
Subtotal	336,500	31,834,828	32,171,328
Grants			
State Grant Funds		2,490,000	2,490,000
SWFWM Grant Funds		800,000	800,000
Subtotal		3,290,000	3,290,000
Reserve Accounts			
Transfer from R&R Reserve Account		1,943,000	1,943,000
Subtotal		1,943,000	1,943,000
CIP Fund			
CIP Project Funds		2,191,000	2,191,000
Punta Gorda Payment		1,500,000	1,500,000
Subtotal		3,691,000	3,691,000
Funds Brought Forward			
Carry Forward from FY2016	350,000	1,140,000	1,490,000
Funds Brought Forward for Disbursement		1,346,176	1,346,176
Subtotal	350,000	2,486,176	2,836,176
Total Funds Available	686,500	43,245,004	43,931,504

Peace River Manasota Regional Water Supply Authority
 FY 2017 Proposed Tentative Budget

EXPENDITURES	Administrative Office	Facilities	Total Enterprise Fund
OPERATION & MAINTENANCE			
Insurances			
Property/Liability/Workmen's Compensation		475,000	475,000
Auto		22,000	22,000
Public Officials Liability	6,000		6,000
Subtotal	6,000	497,000	503,000
Personnel			
Administration	300,000	440,000	740,000
Facility Operations/Maintenance		2,280,000	2,280,000
Subtotal	300,000	2,720,000	3,020,000
Benefits			
FICA Taxes	22,000	195,000	217,000
Fla. Retirement System	45,000	230,000	275,000
Health Insurance	65,000	945,000	1,010,000
Subtotal	132,000	1,370,000	1,502,000
Utilities			
Electric Power	5,000	2,050,000	2,055,000
Diesel Fuel		20,000	20,000
Vehicle Fuel	5,000	40,000	45,000
Telephone	1,000	35,000	36,000
Subtotal	11,000	2,145,000	2,156,000
Operating Supplies			
General Operations	3,500	40,000	43,500
Laboratory Supplies		85,000	85,000
Subtotal	3,500	125,000	128,500
Water Treatment Chemicals			
Aluminum Sulfate		1,616,200	1,616,200
Sodium Hydroxide		1,021,700	1,021,700
Carbon		1,750,000	1,750,000
Coagulant Aid		316,000	316,000
Sodium Hypochlorite		627,000	627,000
Aqua Ammonia		87,200	87,200
Copper Sulfate		91,500	91,500
Subtotal		5,509,600	5,509,600

**Peace River Manasota Regional Water Supply Authority
FY 2017 Proposed Tentative Budget**

EXPENDITURES	Administrative Office	Facilities	Total Enterprise Fund
Repairs & Maintenance			
Water Treatment Facilities		594,100	594,100
Water Resources		513,300	513,300
Land Management		401,600	401,600
Regional Transmission System		81,700	81,700
Vehicle Fleet Maintenance	3,000	41,500	44,500
	3,000	1,632,200	1,635,200
Subtotal			
Machinery & Equipment			
Machinery & Equipment	5,000	293,500	298,500
Contract Services			
Annual Audit	4,000	40,000	44,000
Engineering Services - General		300,000	300,000
Hydrogeological Services		200,000	200,000
Environmental Services		50,000	50,000
Rate Consulting Services	0	30,000	30,000
Information/Technology Services	12,000	82,000	94,000
Reservoir Permit Monitoring		275,000	275,000
Equipment Rental	7,000	50,000	57,000
Legal Services	24,000	250,000	274,000
Legislative Monitoring Services		50,000	50,000
Off-Site Treatment Residual Hauling and Disposal		225,000	225,000
Outside Lab Services - Drinking Water/ASR/EPA		85,000	85,000
Watershed Programs/Monitoring/Protection [HBMP, MFL, Stewardship]		470,000	470,000
Charlotte Harbor NEP		3,500	3,500
Uniforms		15,000	15,000
Contract Labor	3,000	8,000	11,000
	50,000	2,133,500	2,183,500
Subtotal			

**Peace River Manasota Regional Water Supply Authority
FY 2017 Proposed Tentative Budget**

EXPENDITURES	Administrative Office	Facilities	Total Enterprise Fund
General Administration			
Office Rental	75,000	75,000	150,000
Office Maintenance	6,500	2,000	8,500
Advertising	2,500	6,000	8,500
Software	2,500	25,000	27,500
Office Supplies	5,000	25,000	30,000
Postage/Shipping	2,000	7,500	9,500
Books, Dues, Subs & Memberships	4,000	15,000	19,000
Training	4,000	4,000	8,000
Professional Development/Cont. Education	4,500	10,000	14,500
Mileage/Travel Reimbursement	10,000	20,000	30,000
Public Outreach/Education Programs/Website	40,000	40,000	80,000
Misc. Fees [permits, registrations, licenses, certifications, bank charges]	0	35,000	35,000
Subtotal	156,000	264,500	420,500
Total - Operations & Maintenance	666,500	16,690,300	17,356,800

Peace River Manasota Regional Water Supply Authority
 FY 2017 Proposed Tentative Budget

EXPENDITURES	Administrative Office	Facilities	Total Enterprise Fund
NON-OPERATION & MAINTENANCE			
Annual Debt Service			
2010A Bond Series		591,300	591,300
2010B Bond Series		1,892,100	1,892,100
2014 Bond Series		4,538,700	4,538,700
2015 Bond Series		2,524,800	2,524,800
Subtotal		9,546,900	9,546,900
County Payments			
Capital Component Charge		1,971,557	1,971,557
DeSoto Payment		796,000	796,000
North Port Payment to Charlotte		4,781	4,781
Subtotal		2,772,338	2,772,338
Other Rate Related Expenditures			
Contribution to R&R Reserve		2,000,000	2,000,000
Contingencies	20,000	500,000	520,000
Water Purchase		20,000	20,000
Debt Service Coverage Fund		1,345,290	1,345,290
Subtotal	20,000	3,865,290	3,885,290
Total Rate Related Expenditures	686,500	32,874,828	33,561,328

**Peace River Manasota Regional Water Supply Authority
FY 2017 Proposed Tentative Budget**

EXPENDITURES	Administrative Office	Facilities	Total Enterprise Fund
NON-RATE RELATED EXPENDITURES			
Projects			
CIP Projects		6,981,000	6,981,000
Renewal & Replacement Projects		1,943,000	1,943,000
Resource/Supply Development Projects		100,000	100,000
Subtotal		9,024,000	9,024,000
Fund Disbursements			
Charlotte County		268,910	268,910
DeSoto County		33,789	33,789
Sarasota County		889,887	889,887
North Port		153,590	153,590
Subtotal		1,346,176	1,346,176
Total Non-Rate Related Expenditures		10,370,176	10,370,176
Total Expenditures	686,500	43,245,004	43,931,504

**Peace River Manasota Regional Water Supply Authority
FY 2017 Proposed Tentative Budget**

DEBT SERVICE

Bond Series	Cost Allocation	Percent Allocation
2010A Bond Series		
REP Facility	\$591,300	
2010B Bond Series		
RTS - Phase 2 Pipeline	\$675,669	35.71%
RTS - Phase 3A Pipeline	\$1,216,431	64.29%
Subtotal	\$1,892,100	100.00%
Total	\$2,483,400	
2014A Bond Series		
REP Facility (includes 20-Inch RTS)	\$1,516,149	86.99%
REP Oversized Payment Bank of America Loan	\$60,653	3.48%
	\$166,098	9.53%
Subtotal	\$1,742,900	100.00%
2014B Bond Series		
REP Facility (includes 20-Inch RTS)	\$2,432,066	86.99%
REP Oversized Payment Bank of America Loan	\$97,294	3.48%
	\$266,440	9.53%
Subtotal	\$2,795,800	100.00%
Total	\$4,538,700	
2015 Bond Series		
PRO Facility	\$1,799,581	71.28%
PRO Oversized Payment	\$154,361	6.11%
42-Inch RTS Pipeline	\$558,738	22.13%
24-Inch RTS Pipeline	\$12,119	0.48%
Total	\$2,524,800	100.00%
Total Debt Service	\$9,546,900	

Peace River Manasota Regional Water Supply Authority
 FY 2017 Proposed Tentative Budget

2010A BOND SERIES
 Customer Allocation

Customer Debt Service Percentages		
Customer	2010A Bond Series REP Facility	
Charlotte County	0.00%	
DeSoto County	1.11%	
Sarasota County	84.79%	
City of North Port	14.10%	
Total	100.00%	

Customer Debt Service Cost		
Customer	Debt Service Cost	2010A Bond Series REP Facility
Charlotte County	\$0	\$0
DeSoto County	\$6,563	\$6,563
Sarasota County	\$501,363	\$501,363
City of North Port	\$83,373	\$83,373
Total	\$591,300	\$591,300

Peace River Manasota Regional Water Supply Authority
 FY 2017 Proposed Tentative Budget

2010B BOND SERIES
 Customer Allocation

Customer Debt Service Percentages			
Customer	2010B Bond Series RTS Phase 2 Pipeline	2010B Bond Series RTS Phase 3A Pipeline	
Charlotte County	0.00%	0.00%	0.00%
DeSoto County	0.00%	0.00%	0.00%
Sarasota County	0.00%	100.00%	100.00%
City of North Port	100.00%	0.00%	0.00%
Total	100.00%	100.00%	100.00%

Customer Debt Service Cost			
Customer	Debt Service Cost	2010B Bond Series RTS Phase 2 Pipeline	2010B Bond Series RTS Phase 3A Pipeline
Charlotte County	\$0	\$0	\$0
DeSoto County	\$0	\$0	\$0
Sarasota County	\$1,216,431	\$0	\$1,216,431
City of North Port	\$675,669	\$675,669	\$0
Total	\$1,892,100	\$675,669	\$1,216,431

Federal Direct Payment [2010B Bond Series]			
Customer	Federal Subsidy	2010B Bond Series RILS Phase 2	2010B Bond Series RILS Phase 3A
Charlotte County	\$0	\$0	\$0
DeSoto County	\$0	\$0	\$0
Sarasota County	(\$371,789)	\$0	(\$371,789)
City of North Port	(\$206,511)	(\$206,511)	\$0
Total	(\$578,300)	(\$206,511)	(\$371,789)

Peace River Manasota Regional Water Supply Authority
 FY 2017 Proposed Tentative Budget

2014 BOND SERIES
 Customer Allocation

Customer Debt Service Percentages				
Customer	REP Facility	REP Oversized Payment	Bank of America Loan	
Charlotte County	27.21%	0.00%	27.21%	
DeSoto County	0.81%	1.10%	0.81%	
Sarasota County	61.72%	85.62%	61.72%	
City of North Port	10.26%	13.28%	10.26%	
Total	100.00%	100.00%	100.00%	

Customer Debt Service Cost				
Customer	Debt Service Cost	REP Facility	REP Oversized Payment	Bank of America Loan
Charlotte County	\$1,192,003	\$1,074,309	\$0	\$117,694
DeSoto County	\$37,222	\$31,981	\$1,737	\$3,504
Sarasota County	\$2,839,035	\$2,436,838	\$135,234	\$266,963
City of North Port	\$470,441	\$405,087	\$20,975	\$44,378
Total	\$4,538,700	\$3,948,215	\$157,947	\$432,538

Peace River Manasota Regional Water Supply Authority
 FY 2017 Proposed Tentative Budget

2015 BOND SERIES
 Customer Allocation

Customer Debt Service Percentages

Customer	PRO Facility	PRO Oversized Payment	42-inch RTS Pipeline	24-inch RTS Pipeline
Charlotte County	33.33%	0.00%	0.00%	0.00%
DeSoto County	8.33%	12.50%	0.00%	100.00%
Sarasota County	58.34%	87.50%	100.00%	0.00%
City of North Port	0.00%	0.00%	0.00%	0.00%
Total	100.00%	100.00%	100.00%	100.00%

Customer Debt Service Cost

Customer	Debt Service Cost	PRO Facility	PRO Oversized Payment	42-inch RTS Pipeline	24-inch RTS Pipeline
Charlotte County	\$599,800	\$599,800	\$0	\$0	\$0
DeSoto County	\$181,319	\$149,905	\$19,295	\$0	\$12,119
Sarasota County	\$1,743,680	\$1,049,876	\$135,066	\$558,738	\$0
City of North Port	\$0	\$0	\$0	\$0	\$0
Total	\$2,524,800	\$1,799,581	\$154,361	\$558,738	\$12,119

Peace River Manasota Regional Water Supply Authority
 FY 2017 Proposed Tentative Budget

CAPITAL COMPONENT CHARGE
 Customer Allocation

Capital Component Charge		
	Capital Component Charge	Percent Allocation
Debt to Charlotte County		
1991 Facility	\$1,664,191	84.41%
36-inch RTS	\$307,366	15.59%
Total	\$1,971,557	100.00%

Cost Allocation Percentages

	1991 Facility	36-inch RTS Pipeline
Charlotte County	89.65%	89.65%
DeSoto County	0.42%	0.42%
Sarasota County	0.00%	0.00%
City of North Port	9.93%	9.93%
Total	100.00%	100.00%

Capital Component Charge Cost

	Capital Component Chare	1991 Facility	36-inch RTS Pipeline
Charlotte County	\$1,767,501	\$1,491,947	\$275,553
DeSoto County	\$8,281	\$6,990	\$1,291
Sarasota County	\$0	\$0	\$0
City of North Port	\$195,776	\$165,254	\$30,521
Total	\$1,971,557	\$1,664,191	\$307,366

Peace River Manasota Regional Water Supply Authority
 FY 2017 Proposed Tentative Budget

RENEWAL AND REPLACEMENT RESERVE ACCOUNT EXPENDITURES

ITEM NO.	RENEWAL & REPLACEMENT PROJECTS	FY 2017
1	Treatment Processes	350,000
2	Reservoirs & Raw Water Pumping	173,000
3	ASR Wells & Monitoring Systems	100,000
4	Roads & Grounds	50,000
5	General Buildings	295,000
6	Transmission Systems and Remote Sites	630,000
7	SCADA, IT & Communications	275,000
8	Security	70,000
TOTAL R & R PROJECTS		1,943,000

Peace River Manasota Regional Water Supply Authority
FY 2017 Proposed Tentative Budget

CAPITAL IMPROVEMENT PROGRAM
Funded CIP Projects

Item	CIP Project	Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future	Total
1	Regional Integrated Loop - Phase 1 [U.S. 17/Shell Creek]	400,000	3,490,000	8,110,000					12,000,000
2	Regional Integrated Loop - Phase 3B [S.R. 681 to Clark Road]	398,000	2,600,000	2,240,000	8,320,000	10,730,000	2,680,000		26,968,000
3	Raw Water ASR	75,000	200,000	150,000	750,000	6,550,000			7,725,000
4	Facilities Improvements - [Maintenance Warehouse]		400,000	565,000					965,000
5	New Transfer Pump Trains 7 & 8		291,000						291,000
6	Regional Integrated Loop - Phase 3D [Fruitville Road to Manatee]		15,383,000						15,383,000
7	Regional Integrated Loop - Phase 4 [Burnt Store Interconnect]		685,000		1,600,000	1,100,000	12,060,000		27,505,000
8	Regional Integrated Loop - Phase 3C [Clark Road to Fruitville Road]				550,000	3,200,000	3,200,000		35,950,000
9	Peace River Facility Phase 2 Capacity Increase [4 MGD]			1,500,000	3,600,000	1,400,000			6,500,000
Total CIP Project Costs		873,000	6,981,000	27,133,000	12,170,000	22,530,000	19,340,000	44,260,000	133,287,000

Item	CIP Project Funding Sources	Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future	Total
1	Regional Integrated Loop - Phase 1 [U.S. 17/Shell Creek]								
	State Grant Funds		1,990,000	2,110,000					4,100,000
	SWFWMD Grant Fund			6,000,000					6,000,000
	Punta Gorda Payment	500,000	1,500,000						2,000,000
2	Regional Integrated Loop - Phase 3B [S.R. 681 to Clark Road]								
	CIP Funds	398,000	1,300,000	1,120,000	4,160,000	5,365,000	1,340,000		13,683,000
	State Grant Funds		500,000						500,000
3	Raw Water ASR		800,000	1,120,000	4,160,000	5,365,000	1,340,000		12,785,000
4	Facilities Improvements - [Maintenance Warehouse]		75,000	200,000	150,000	750,000	6,550,000		7,725,000
5	New Transfer Pump Trains 7 & 8		400,000	565,000					965,000
	CIP Funds		291,000						291,000
6	Regional Integrated Loop - Phase 3D [Fruitville Road to Manatee]			15,383,000					15,383,000
	Source of Funds to be Determined								
7	Regional Integrated Loop - Phase 4 [Burnt Store Interconnect]			685,000	1,600,000	1,100,000	12,060,000		27,505,000
	Source of Funds to be Determined								
8	Regional Integrated Loop - Phase 3C [Clark Road to Fruitville Road]				550,000	3,200,000	3,200,000		35,950,000
	Source of Funds to be Determined								
9	Peace River Facility Phase 2 Capacity Increase [4 MGD]			1,500,000	3,600,000	1,400,000			6,500,000
	Source of Funds to be Determined								
Total CIP Project Funding Sources		973,000	6,981,000	27,133,000	12,170,000	22,530,000	19,340,000	44,260,000	132,887,000

Item	CIP Funding Revenue by Source	Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future	Total
	CIP Fund	473,000	2,191,000	1,835,000	4,910,000	11,915,000	1,340,000		22,664,000
	State Grant Funds		2,490,000	2,110,000					4,600,000
	SWFWMD Grant Fund		800,000	7,120,000	4,160,000	5,365,000	1,340,000		18,785,000
	Punta Gorda Payment	500,000	1,500,000						2,000,000
	Source of Funds to be Determined			16,068,000	3,100,000	5,250,000	16,660,000	44,260,000	85,338,000
Total CIP Funding Revenue by Source		973,000	6,981,000	27,133,000	12,170,000	22,530,000	19,340,000	44,260,000	133,387,000

Peace River Manasota Regional Water Supply Authority
 FY 2017 Proposed Tentative Budget

PLANNING PROJECTS

ITEM NO.	Planning Projects	FY 2017 Expenditure	Funds Brought Forward	Other Funding	FY 2017 Assessment
1	Water Advocacy/One Water Initiative	40,000	20,000		20,000
2	Strategic Plan Implementation	50,000	20,000		30,000
3	Peace River Basin Issues	10,000			10,000
	TOTAL R/S DEVELOPMENT PROJECTS	100,000	40,000		60,000

Peace River Manasota Regional Water Supply Authority
 FY 2017 Proposed Tentative Budget

WATER RATE [Authority Customers]
 10/01/2016 to 09/30/2017

Total Monthly Water Charge to Customers [Charge per Month]	Monthly Charge = Base Rate Charge + (Water Use Charge x Actual Water Delivered)
--	--

	Totals
Base Rate Charge [Annual costs to be allocated]	
Non-Capital Cost Component	
Fixed O & M Cost Component	8,905,700
Contribution to R & R Reserve	2,000,000
Contingencies	500,000
Projected Interest Earned	(40,000)
Funds Brought Forward	(1,100,000)
Sub-Total Non-Capital Cost Component	10,265,700
Water Purchase	20,000
Total Non-Capital Cost Component	\$10,285,700
Debt Service Cost	
2010A Bonds	591,300
2010B Bonds	1,892,100
2014 Bonds	4,538,700
2015 Bonds	2,524,800
Total Debt Service	\$9,546,900
Debt Service Coverage Payments	\$1,345,290
Debt Service Contributions	
Federal Direct Payment [2010B Bonds]	(\$578,300)
County Payments	
Capital Component Charge	1,971,557
DeSoto Payment	796,000
North Port Payment to Charlotte	4,781
Total County Payments	\$2,772,338
Total Base Rate Charge	\$23,371,928

**Peace River Manasota Regional Water Supply Authority
FY 2017 Proposed Tentative Budget**

Annual Base Rate Charge By Customer		Total	Non-Capital Cost Component	2010A Bonds	2010B Bonds	2014 Bonds	2015 Bonds	Debt Service Coverage Payment	Federal Subsidy 2010B Bonds	Capital Component Charge	DeSoto Payment	North Port Payment to Charlotte
Charlotte County	8,969,668	4,772,328	0	0	1,192,003	599,800	268,771	0	1,767,501	369,266	0	
DeSoto County	482,715	200,082	6,563	0	37,222	181,319	33,766	0	8,281	15,482	0	
Sarasota County	11,627,623	4,464,053	501,363	1,216,431	2,839,095	1,743,680	889,308	(371,789)	0	345,541	0	
City of North Port	2,291,923	849,237	83,373	675,669	470,441	0	153,446	(206,511)	195,776	65,711	4,781	
Total	\$23,371,928	\$10,285,700	\$591,300	\$1,892,100	\$4,538,700	\$2,524,800	\$1,345,290	(\$578,300)	\$1,971,557	\$796,000	\$4,781	

Monthly Base Rate Charge By Customer		Total
Charlotte County	747,472	
DeSoto County	40,226	
Sarasota County	968,969	
City of North Port	190,994	
Total	\$1,947,661	

Master Water Supply Contract Water Allocation		Annual Average Daily [MGD]
Charlotte County	16.100	
DeSoto County	0.675	
Sarasota County	15.060	
City of North Port	2.865	
Total	34.700	

Water Use Charge		Total
[Charge per 1,000 gallons]		\$0.74
Water Use Rate Charge		

Peace River Manasota Regional Water Supply Authority
 FY 2017 Proposed Tentative Budget

REDISTRIBUTION POOL
 10/01/2016 to 09/30/2017

Redistribution Pool Water Quantities						
	(1) Water Allocation [MGD]	(2) New Water Supply [MGD]	Total Contracted Allocation [MGD]	(3) Available for Pool [MGD]	Requested from Pool [MGD]	(4) Budget Allocation [MGD]
Charlotte County	16.100	0.000	16.100	2.500	0.000	16.100
DeSoto County	0.675	0.000	0.675	0.000	0.000	0.675
Sarasota County	15.060	0.000	15.060	4.900	0.000	15.060
City of North Port	2.865	0.000	2.865	0.500	0.000	2.865
Total	34.700	0.000	34.700	7.900	0.000	34.700

Redistribution Pool Water Base Rate Charge Adjustment		
	Annual Cost [\$ /Year]	Annual Unit Cost [\$/MGD]
Peace River Facility REP Debt Service	5,130,000	348,980
Non-Capital Component	10,285,700	296,418
DeSoto Payment	796,000	22,939
Redistribution Pool Water Base Rate		\$668,337

- (1) Peace River/Manasota Regional Water Supply Authority Master Water Supply Contract - Exhibit B 'Water Allocations' (Peace River Facility water allocations).
- (2) Peace River/Manasota Regional Water Supply Authority Master Water Supply Contract - Exhibit C 'New Water Supply Demands'.
- (3) Pool water based on Customer submittals (January 2016).
- (4) Total annual average water allocated for FY 2017 budget.

Redistribution Pool Base Rate Charge Adjustment by Customer				
	Annual Base Rate Adjustment		Monthly Base Rate Adjustment	
	To Pool	From Pool	To Pool	From Pool
Charlotte County	0	0	0	0
DeSoto County	0	0	0	0
Sarasota County	0	0	0	0
City of North Port	0	0	0	0
Total	\$0	\$0	\$0	\$0

**Peace River Manasota Regional Water Supply Authority
FY 2017 Proposed Tentative Budget**

**INTERCONNECT WATER CHARGE [GOVERNMENT RATE]
10/01/2016 to 09/30/2017**

Water Charge to Municipalities Interconnected to Regional Transmission System	
[Charge per 1,000 Gallons]	
Water Rate	
[Charge per 1,000 Gallons]	
\$3.30	Water Rate Charge in \$/1,000 gallons metered water delivery for cumulative delivery to all interconnects up to quantity identified as 'Available from Pool' in the Redistribution Pool for the current fiscal year.
\$6.60	Water Rate Charge in \$/1,000 gallons metered water delivery for cumulative delivery to all interconnects in excess of the quantity identified as 'Available from Pool' in the Redistribution Pool for the current fiscal year.

Revenue received from these water sales will, at the discretion of the Authority Board, be applied as a credit toward the obligations of the Authority Customers apportioned to each of their allocations to the 'Available from Pool' in the Redistribution Pool for the current fiscal year. Water rate for emergency use unless Interlocal Agreement provides alternative water rate.

Peace River Manasota Regional Water Supply Authority
 FY 2017 Proposed Tentative Budget

CUSTOMER PLANNING ASSESSMENT
 10/01/2016 to 09/30/2017

Planning Assessments [Annual costs to be allocated]	Distribution (1)			
	Total	Water Advocacy/One Water Initiative	Strategic Plan Implementation	Peace River Basin Issues
Charlotte County	10,595	3,532	5,297	1,766
DeSoto County	2,062	687	1,031	344
Manatee County	22,300	7,433	11,150	3,717
Sarasota County	24,401	8,348	12,521	3,532
City of North Port	642	0	0	642
Total	\$60,000	\$20,000	\$30,000	\$10,000

(1) Reserve Fund Assessments will be invoiced on October 1, 2016.

Water Allocation [Million Gallons Per Year]	Water Allocation	Water Allocation
	[MGD]	[Percentage]
Charlotte County	16.100	46.4%
DeSoto County	0.675	1.9%
Manatee County	0.000	0.0%
Sarasota County	15.060	43.4%
City of North Port	2.865	8.3%
Total	34.700	100.0%

Population	Population	Population
		[Percentage]
Charlotte County	165,880	17.66%
DeSoto County	32,286	3.44%
Manatee County	349,146	37.17%
Sarasota County	331,789	35.32%
City of North Port	60,295	6.42%
Total	939,396	100.00%

**Peace River Manasota Regional Water Supply Authority
FY 2017 Proposed Tentative Budget**

MEMBER FEE
10/01/2016 to 09/30/2017

Contribution Amount to be Derived		Totals	
Administrative Office Authority Support		\$686,500	
Projected Interest Earned		\$0	
Estimated Brought Forward - Undesignated		(\$350,000)	
	Amount to be Derived	\$336,500	
Population Basis			
	*Population 4/1/2015	% of Total Population	
Charlotte County	165,880	17.66%	
DeSoto County	32,286	3.44%	
Manatee County	349,146	37.17%	
Sarasota County	392,084	41.74%	
Total	939,396	100.00%	
Weighted Contribution			
	Base Contribution	Pro Rated Share	
Charlotte County	\$42,063	\$29,710	\$71,772
DeSoto County	\$42,063	\$5,783	\$47,845
Manatee County	\$42,063	\$62,534	\$104,596
Sarasota County	\$42,063	\$70,224	\$112,286
Total Weighted Contribution			\$336,500

Member Contribution Formula:

Base Contribution = 1/2 amount to be derived divided by 4

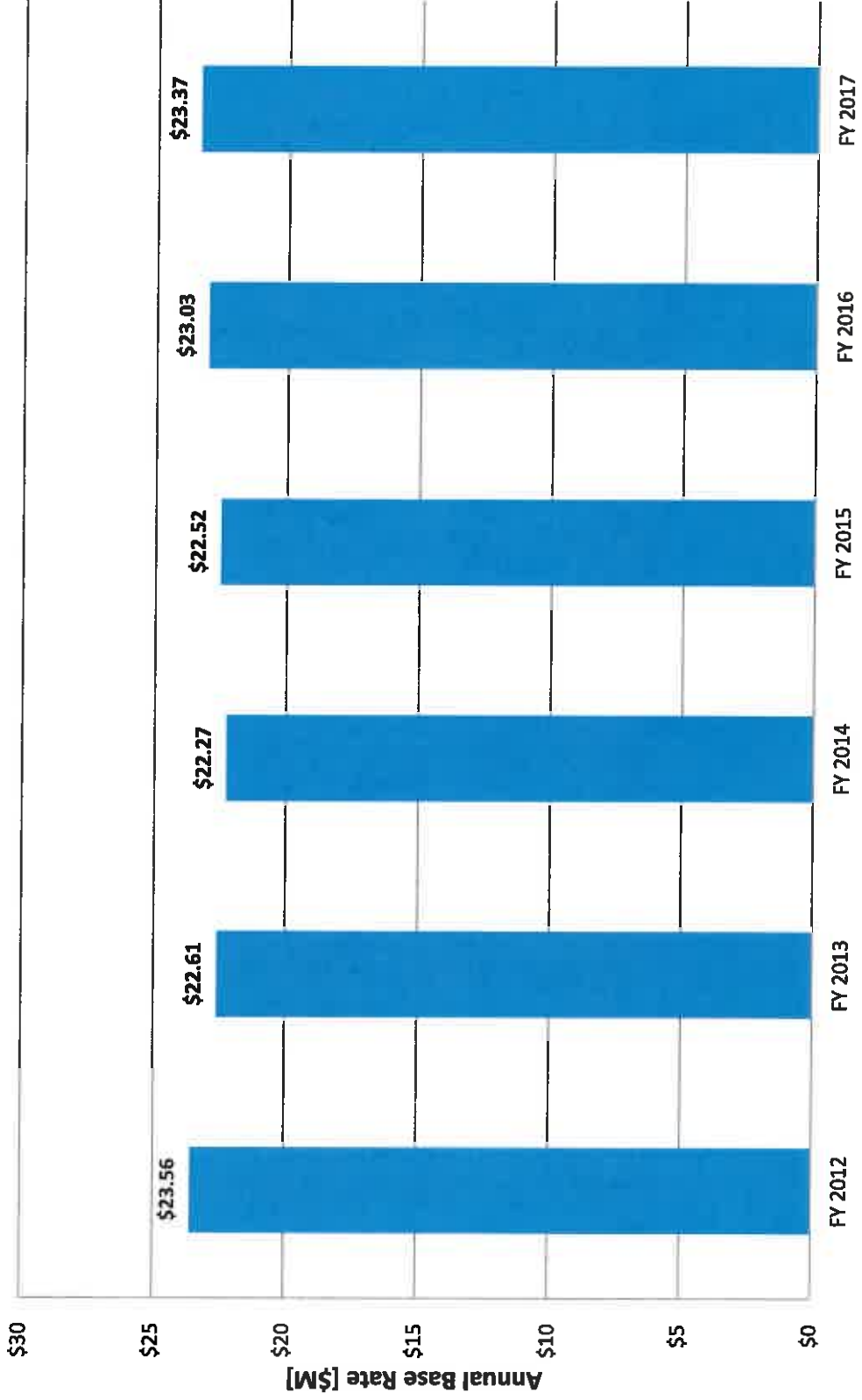
Pro rated share = 1/2 amount to be derived times % of Population

* Source: 'Estimates o Population by County and City in Florida [Bureau of Economic and Business Research; University of Florida, April 1, 2015]

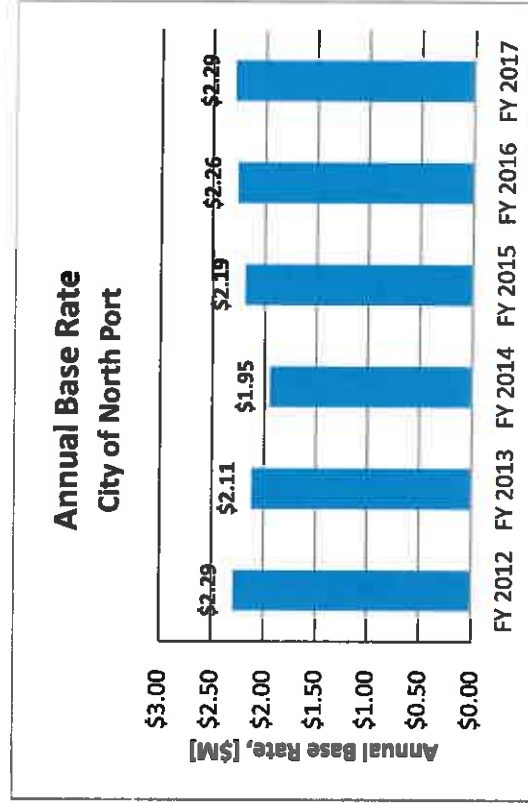
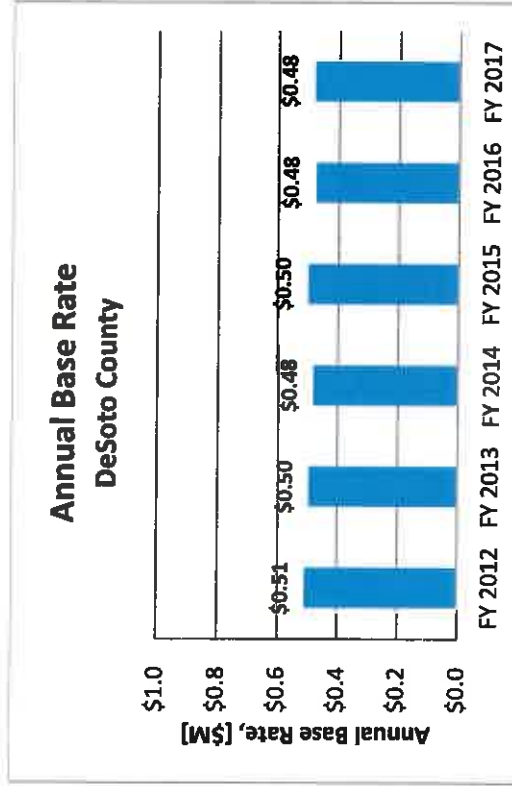
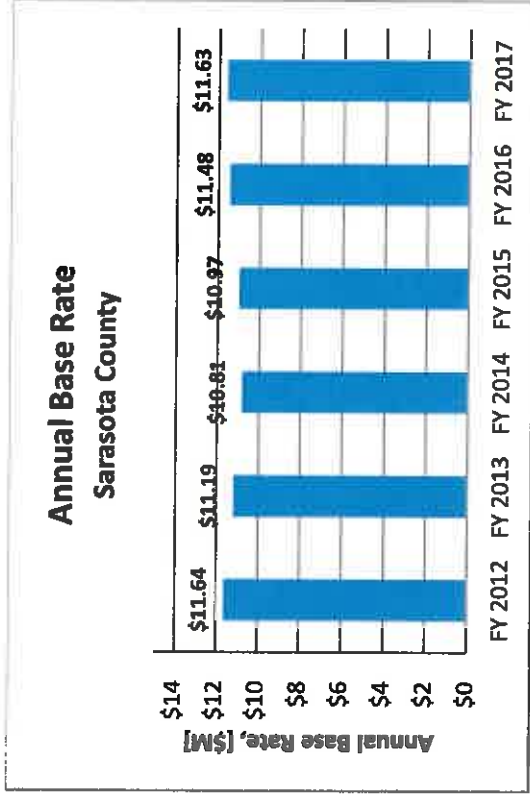
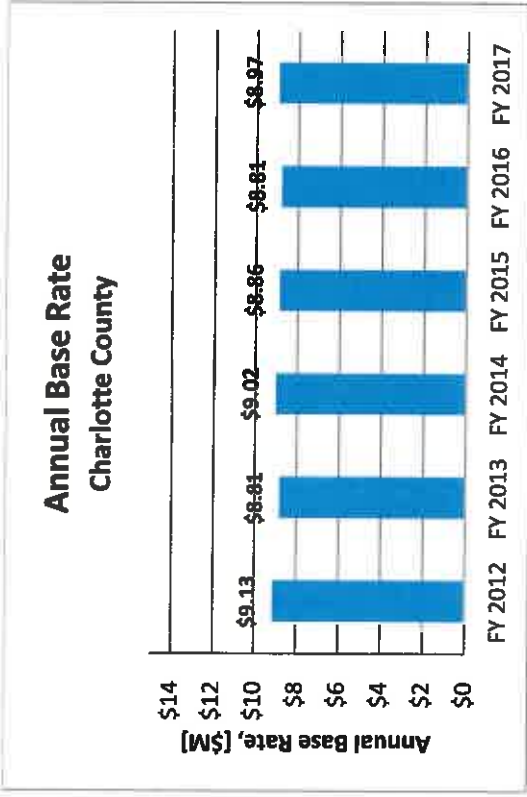
TAB D
Historical Base Rate Charge

FY 2017 Proposed Tentative Budget

**Annual Base Rate
Authority**



FY 2017 Proposed Tentative Budget



PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016

TENTATIVE BUDGET
ITEM 2

**Resolution 2016-01 'Resolution Setting Forth Preliminary
Schedules of Rates, Fees and Charges for FY 2017**

Presenter -

Patrick Lehman, Executive Director

Recommended Action -

Motion to approve Resolution 2016-01 'Resolution Setting Forth Preliminary Schedules of Rates, Fees and Charges for FY 2017'.

Resolution 2016-01 formalizes the Board's adoption of the Tentative Budget for FY 2017, establishes its intent to set rates based upon the tentative budget. A public hearing will be scheduled at which time the Board will adopt the final budget during a regularly scheduled meeting prior to August 15, 2016.

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

Resolution 2016-01

**RESOLUTION SETTING FORTH PRELIMINARY SCHEDULES
OF RATES, FEES AND CHARGES FOR FY 2017**

The Peace River Manasota Regional Water Supply Authority, created pursuant to Chapter 373.1962, Florida Statutes, now found in Section 373.713, Florida Statutes, and Interlocal agreement pursuant to Chapter 163.01, Florida Statutes, in lawful session and in regular order of business properly presented, finds that:

WHEREAS, the Second Amended Interlocal Agreement Creating the Peace River Manasota Regional Water Supply Authority entered into on October 5, 2005 provides that:

'The Authority shall establish a tentative budget no later than May 15, for the ensuing Contract Year. The tentative budget shall include all anticipated expenditures of the Authority for its projects and activities for the ensuing Contract Year, including Operating and Maintenance Cost, Management and Planning Costs, and Debt Service Cost. As part of the budget process, the Authority shall adopt rates, fees, and charges to generate sufficient revenue to pay all budgeted expenditures on a water user basis for Authority Water Supply Facilities. Membership fees and rates shall be established annually and adopted by resolution at the time of budget adoption.' and

WHEREAS, the Authority has entered into the Peace River Manasota Regional Water Supply Authority Master Water Supply Contract with Charlotte County, DeSoto County, Manatee County, Sarasota County, and with the City of North Port on October 5, 2005 for the purpose of supplying water produced by the Authority from the Peace River Facility and new water supply sources; and

WHEREAS, the Master Water Supply Contract provides that:

'In conjunction with the Authority's annual budget development and adoption process, the Authority shall fix a Water Rate consisting of the Base Rate Charge (adjusted as necessary for customer financing), DeSoto Payment, and Water Use Charge to be paid on a monthly basis by the Customers for water furnished by the Authority. The rates are not subject to the supervision or regulation by any other commission, board, bureau, agency or other political subdivision or agency of the county or state.' and

WHEREAS, the Authority Board of Directors adopted the Tentative Budget for FY 2017 at their regularly scheduled meeting on April 6, 2016.

NOW, THEREFORE, BE IT RESOLVED:

Section 1. The Peace River Manasota Regional Water Supply Authority does hereby set forth preliminary schedules establishing rates, fees and charges for the period beginning October 1, 2016 through September 30, 2017 attached hereto as Exhibit A.

Section 2. Conservation Charge for Exceedance - In the event a customer should receive delivery of water in excess of their respective water allocation (as adjusted by New Water Supply Demand and/or Redistribution Pool) provided in the Master Water Supply Contract for the period beginning October 1, 2016 through September 30, 2017, the exceeding customer shall pay an additional charge, Conservation Charge for Exceedance, derived as follows unless the exceedance is the result of an emergency transfer as

determined by the Authority Board, in which case no additional charge shall be placed upon the excess water usage occasioned by the emergency.

Conservation Charge for Exceedance = [Conservation Base Rate Charge] + [Conservation Water Use Rate Charge]

Conservation Base Rate Charge = 2.0 x [Exceeding customer's base rate charge] x [the percent of water delivered in excess of their water allocation]

Conservation Water Use Rate Charge = 2.0 x [Water Use Rate charge per 1,000 gallons] x [times actual water delivered in excess of exceeding customer's water allocation]

The additional revenue received from such exceedance will, at the discretion of the Authority Board, be applied as a credit toward the obligations of the other Customers apportioned according to each of their annual water allocations. Delivery of water shall be as recorded by the Authority's meters at the points of connection between the Authority transmission system and the distribution system of the customer.

Done at Bradenton, Florida this Sixth day of April 2016.

Attest:

Peace River Manasota
Regional Water Supply Authority

Patrick J. Lehman
Executive Director

Commissioner Christopher G. Constance
Chair

Approved as to Form:

Douglas Manson
General Counsel for the Peace River Manasota
Regional Water Supply Authority

**Peace River Manasota Regional Water Supply Authority
FY 2017 Tentative Budget**

**WATER RATE [Authority Customers]
10/01/2016 to 09/30/2017**

Total Monthly Water Charge to Customers	
[Charge per Month]	Monthly Charge = Base Rate Charge + (Water Use Charge x Actual Water Delivered)
Base Rate Charge [Annual costs to be allocated]	Totals
Non-Capital Cost Component	8,905,700
Fixed O & M Cost Component	2,000,000
Contribution to R & R Reserve	500,000
Contingencies	(40,000)
Projected Interest Earned	(1,100,000)
Funds Brought Forward	10,265,700
Sub-Total Non-Capital Cost Component	20,000
Water Purchase	20,000
Total Non-Capital Cost Component	\$10,285,700
Debt Service Cost	591,300
2010A Bonds	1,892,100
2010B Bonds	4,538,700
2014 Bonds	2,524,800
2015 Bonds	\$9,546,900
Total Debt Service	\$1,345,290
Debt Service Coverage Payments	(\$578,300)
Debt Service Contributions	1,971,557
Federal Direct Payment [2010B Bonds]	796,000
County Payments	4,781
Capital Component Charge	\$2,772,338
DeSoto Payment	
North Port Payment to Charlotte	
Total County Payments	\$23,371,928
Total Base Rate Charge	

**Peace River Manasota Regional Water Supply Authority
FY 2017 Tentative Budget**

Annual Base Rate Charge By Customer		Non-Capital Cost Component	2010A Bonds	2010B Bonds	2014 Bonds	2015 Bonds	Debt Service Coverage Payment	Federal Subsidy 2010B Bonds	Capital Component Charge	DeSoto Payment	North Port Payment to Charlotte
	Total										
Charlotte County	8,969,668	4,772,328	0	0	1,192,003	599,800	268,771	0	1,767,501	369,266	0
DeSoto County	482,715	200,082	6,563	0	37,222	181,319	33,766	0	8,281	15,482	0
Sarasota County	11,627,623	4,464,053	501,363	1,216,431	2,839,035	1,743,680	889,308	(371,789)	0	345,541	0
City of North Port	2,291,923	849,237	83,373	675,669	470,441	0	153,446	(206,511)	195,776	65,711	4,781
Total	\$23,371,928	\$10,285,700	\$591,300	\$1,892,100	\$4,538,700	\$2,524,800	\$1,345,290	(\$578,300)	\$1,971,557	\$796,000	\$4,781

Monthly Base Rate Charge By Customer	
Charlotte County	747,472
DeSoto County	40,226
Sarasota County	968,969
City of North Port	190,994
Total	\$1,947,661

Master Water Supply Contract Water Allocation	
Million Gallons Per Day [MGD]	
	Annual Average Daily [MGD]
Charlotte County	16.100
DeSoto County	0.675
Sarasota County	15.060
City of North Port	2.865
Total	34.700

Water Use Charge	
[Charge per 1,000 gallons]	
	Total
Water Use Rate Charge	\$0.74

Peace River Manasota Regional Water Supply Authority
FY 2017 Tentative Budget

REDISTRIBUTION POOL
 10/01/2016 to 09/30/2017

Redistribution Pool Water Quantities						
	(1) Water Allocation [MGD]	(2) New Water Supply [MGD]	Total Contracted Allocation [MGD]	(3) Available for Pool [MGD]	Requested from Pool [MGD]	(4) Budget Allocation [MGD]
Charlotte County	16.100	0.000	16.100	2.500	0.000	16.100
DeSoto County	0.675	0.000	0.675	0.000	0.000	0.675
Sarasota County	15.060	0.000	15.060	4.900	0.000	15.060
City of North Port	2.865	0.000	2.865	0.500	0.000	2.865
Total	34.700	0.000	34.700	7.900	0.000	34.700

Redistribution Pool Water Base Rate Charge Adjustment		
	Annual Cost [\$ /Year]	Annual Unit Cost [\$/MGD]
Peace River Facility REP Debt Service	5,130,000	348,980
Non-Capital Component	10,285,700	296,418
DeSoto Payment	796,000	22,939
Redistribution Pool Water Base Rate		\$668,337

- (1) Peace River/Manasota Regional Water Supply Authority Master Water Supply Contract - Exhibit B 'Water Allocations' (Peace River Facility water allocations).
- (2) Peace River/Manasota Regional Water Supply Authority Master Water Supply Contract - Exhibit C 'New Water Supply Demands'.
- (3) Pool water based on Customer submittals (January 2016).
- (4) Total annual average water allocated for FY 2017 budget.

Redistribution Pool Base Rate Charge Adjustment by Customer				
	Annual Base Rate Adjustment		Monthly Base Rate Adjustment	
	To Pool	From Pool	To Pool	From Pool
Charlotte County	0	0	0	0
DeSoto County	0	0	0	0
Sarasota County	0	0	0	0
City of North Port	0	0	0	0
Total	\$0	\$0	\$0	\$0

**Peace River Manasota Regional Water Supply Authority
FY 2017 Tentative Budget**

**INTERCONNECT WATER CHARGE [GOVERNMENT RATE]
10/01/2016 to 09/30/2017**

Water Charge to Municipalities Interconnected to Regional Transmission System	
[Charge per 1,000 Gallons]	
Water Rate	
[Charge per 1,000 Gallons]	
	Water Rate Charge in \$/1,000 gallons metered water delivery for cumulative delivery to all interconnects up to quantity identified as 'Available from Pool' in the Redistribution Pool for the current fiscal year.
\$3.30	
	Water Rate Charge in \$/1,000 gallons metered water delivery for cumulative delivery to all interconnects in excess of the quantity identified as 'Available from Pool' in the Redistribution Pool for the current fiscal year.
\$6.60	

Revenue received from these water sales will, at the discretion of the Authority Board, be applied as a credit toward the obligations of the Authority Customers apportioned to each of their allocations to the 'Available from Pool' in the Redistribution Pool for the current fiscal year. Water rate for emergency use unless Interlocal Agreement provides alternative water rate.

Peace River Manasota Regional Water Supply Authority
FY 2017 Tentative Budget

CUSTOMER PLANNING ASSESSMENT
 10/01/2016 to 09/30/2017

Planning Assessments [Annual costs to be allocated]	Distribution (1)			
	Total	Water Advocacy/One Water Initiative	Strategic Plan Implementation	Peace River Basin Issues
Charlotte County	10,595	3,532	5,297	1,766
DeSoto County	2,062	687	1,031	344
Manatee County	22,300	7,433	11,150	3,717
Sarasota County	24,401	8,348	12,521	3,532
City of North Port	642	0	0	642
Total	\$60,000	\$20,000	\$30,000	\$10,000

(1) Reserve Fund Assessments will be invoiced on October 1, 2016.

Water Allocation [Million Gallons Per Year]	Water Allocation	
	[MGD]	[Percentage]
Charlotte County	16.100	46.4%
DeSoto County	0.675	1.9%
Manatee County	0.000	0.0%
Sarasota County	15.060	43.4%
City of North Port	2.865	8.3%
Total	34.700	100.0%

Population	Population	
	Population	Population [Percentage]
Charlotte County	165,880	17.66%
DeSoto County	32,286	3.44%
Manatee County	349,146	37.17%
Sarasota County	331,789	35.32%
City of North Port	60,295	6.42%
Total	939,396	100.00%

**Peace River Manasota Regional Water Supply Authority
FY 2017 Tentative Budget**

MEMBER FEE
10/01/2016 to 09/30/2017

Contribution Amount to be Derived		Totals	
Administrative Office Authority Support		\$686,500	
Projected Interest Earned		\$0	
Estimated Brought Forward - Undesignated		(\$350,000)	
	Amount to be Derived	\$336,500	
Population Basis			
	* Population 4/1/2015		% of Total Population
Charlotte County	165,880		17.66%
DeSoto County	32,286		3.44%
Manatee County	349,146		37.17%
Sarasota County	392,084		41.74%
Total	939,396		100.00%
Weighted Contribution			
	Base Contribution		Pro Rated Share
Charlotte County	\$42,063	\$29,710	\$71,772
DeSoto County	\$42,063	\$5,783	\$47,845
Manatee County	\$42,063	\$62,534	\$104,596
Sarasota County	\$42,063	\$70,224	\$112,286
Total Weighted Contribution			\$336,500

Member Contribution Formula:

Base Contribution = 1/2 amount to be derived divided by 4

Pro rated share = 1/2 amount to be derived times % of Population

* Source: 'Estimates o Population by County and City in Florida [Bureau of Economic and Business Research; University of Florida, April 1, 2015]

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016

CONSENT AGENDA
ITEM 1

Minutes of January 28, 2016 Board of Directors Meeting

Recommended Action -

Motion to approve minutes of January 28, 2016 Board of Directors meeting.

Draft minutes of the January 28, 2016 Board of Directors meeting are provided for Board approval.

Budget Action – None

Minutes of Board of Directors Meeting
PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
Peace River Facility, Water Quality & Training Facility
8998 SW County Road 769, Arcadia, Florida

January 28, 2016

Board Members Present:

Commissioner John R. Chappie, Manatee County, Chair
Commissioner Christopher G. Constance, Charlotte County, Vice Chair
Commissioner Alan Maio, Sarasota County
Commissioner Elton A. Langford, DeSoto County

Staff Present:

Patrick Lehman, Executive Director
Doug Manson, General Counsel
Mike Coates, Deputy Director
Kevin Morris, Science and Technology Officer
Richard Anderson, System Operations Manager
Ann Lee, Finance/Administration Manager
Linda Stewart, Executive Secretary

Others Present:

A list of others present who signed the attendance roster for this meeting is filed with the permanent records of the Authority. Commissioner Chappie recognized Charlotte County Commissioners Ken Doherty and Bill Truex along with former Charlotte County Commissioner Dick Loftus.

CALL TO ORDER

INVOCATION

PLEDGE OF ALLEGIANCE

PUBLIC COMMENTS

There were no public comments.

HOST COUNTY ADMINISTRATOR REMARKS

Mr. Lehman welcomed everyone to the new Water Quality and Training Facility. He said many times governing boards do not have the chance to see the outcome of their investment. Today the Authority Board will have the opportunity to tour the new building and the 1991 Rebuild facilities and will see first-hand how their money has been invested for the good of the public.

ELECTION OF OFFICERS

Commissioner Maio nominated Commissioner Constance for Chair. Nomination was approved unanimously.

Commissioner Constance nominated Commissioner Maio for Vice-Chair. Nomination was approved unanimously.

CONSENT AGENDA

Commissioner Constance thanked Mr. Lehman for providing the additional back-up information he requested for Item 4 [Extension of Agreement for General Land Management Services]. Commissioner Constance said he felt it appropriate the contract be extended as recommended by staff so the Board can have the opportunity to review the proposed revisions to the Procurement Policy covering acquisition of these and similar services which is scheduled to be discussed as part of the regular agenda.

Referring to Item 6a ‘Year-End Financial Status Report for FY 2015’ Commissioner Constance asked why the decrease in gross revenues from \$10,447,585 in FY 2014 to \$9,237,175 in FY 2015.

Ms. Lee explained the majority of the revenue decrease was from the refunding of the 2005A bonds.

1. **Minutes of December 2, 2015 Board of Directors meeting**
2. **Peace River Facility Property Insurance Renewal with Starr Tech/ACE American for an annual premium of \$234,370 for the upcoming year March 1, 2016 – March 1, 2017**
3. **Award Contract to Crom Engineering and Construction Services for ‘Plant 2 Concrete Coatings Restoration Project’ in the amount of \$615,850 [which includes an embedded amount of \$75,000 Owner’s allowance]**
4. **Extension of Agreement for General Land Management Services with Natural Resources LLC**
5. **Piggy-Back on Charlotte County Contract with Page Mechanical Group, Inc. for HVAC Services**
6. **Receive and File ‘Year-End Financial Status Report for FY 2015’ and ‘Semi-Annual Investment Report’ [September 30, 2015]**
7. **Disbursement of Funds to Authority Customers for FY 2015 Debt Service Coverage Payments as shown below:**

Customer	Fund Disbursement
Charlotte County	\$261,659
DeSoto County	\$36,372
Sarasota County	\$885,340
City of North Port	\$147,946
Total	\$1,331,317

Motion was made by Commissioner Langford, seconded by Commissioner Chappie, to approve the consent agenda for January 28, 2016. Motion was approved unanimously.

REGULAR AGENDA

1. **Water Supply Conditions – Staff Report
Presented by Richard Anderson, System Operations Manager**

Mr. Anderson said rainfall in the Peace River basin averaged 4.5 inches through January 18th and another 1.5 inches was received in the last ten days. As of January 18th, the river flow was approximated 1,000

cubic feet per second (cfs). Because of the additional rains since then, today it is about 4,000 cfs. Surface water storage is topped off at 6.8 BG for both reservoirs and there is 5.9 BG in the ASR system. The water quality and water quantity is excellent.

Mr. Anderson said the Authority and its customers maintain close to 103 MGD of finished water supply capacity. For the month of December, the Authority produced about 27.99 MGD and the member utilities produced 41.32 MGD for a total regional use of 69.31 MGD. Regional utilization for the month of December was 66.02 MGD or 60% of the region's capacity.

Mr. Anderson also reviewed the current demand and supply conditions for each of the members/customers for the month of December and first quarter FY 2016 as well as their historical annual average usage for the last six years. Regionally we are up approximately 1 MG in the first quarter 2016 compared to 2015 average.

Mr. Anderson referred to the SWFWMD demand projections for the southern region taken from their 2016 regional water supply plan that includes Authority customers and non-Authority customers in the region. For the time period beginning in 2010 SWFWMD numbers show 91.0 MGD compared to 68.0 MGD for the Authority customers. The Authority members account for about 75% of the region's demand.

Commissioner Maio said he asked the Sarasota County utility staff to make an informational sheet with all of this information for distribution in the county and to his fellow commissioners. He said the public is hearing about droughts all over the US, bad infrastructure, the infamous Flint Michigan debacle, and they really need to know the absolute fantastic shape we are in thanks to the Authority.

**2. Receive and File 'Peace River Manasota Regional Water Supply Authority FY 2015 Financial Statements and Independent Audit Report'
Presented by Ann Lee, Finance/Administration Manager and Joe Welch, Purvis Gray & Company**

Mr. Welch reviewed the results of the annual audit of the Authority's financial records completed by Purvis Gray & Company. Mr. Welch said the report was in draft form because of the implementation of the new Governmental Accounting Standards Board Statement No. 68 [GASB 68] which relates to pensions. The Authority participates in a Florida Retirement System [FRS] multi-employer plan and according to the new ruling is required to show its share of the unfunded liability of FRS on its balance sheet. This information was supposed to be available from the FRS this month, however it may not be available until the end of February or beginning of March. Consequently, the audit report reflects the 2014 FRS numbers and when the 2015 numbers are available the report will be updated with the current numbers and can be finalized. In the meantime the Board was requested to accept the report pending the changes related to GASB 68. Mr. Welch noted the Authority's member counties are in a similar situation with their audits.

Regarding the audit itself, Mr. Welch said there were no new findings. There was one finding the prior year that was resolved. The audit also included a special single audit of the state of Florida \$1.5M grant that went toward the 1991 Peace River Facility Rebuild. On the financial side, Mr. Welch brought the Board's attention to two items. 1) The balance sheet [page 10] shows the Authority continues to be in sound financial condition and 2) the income statement [page 11] shows a loss. Mr. Welch explained there has always been a loss because the Authority does not fund depreciation on an annual basis through rates but funds depreciation through debt service and pays the principal through the rates. This generally amounts to \$11M which is 3% of \$360M assets.

Finally, Mr. Welch said there were no matters involving the internal control over financial reporting or significant deficiencies in operation that would be considered a material weakness.

Mr. Welch said staff did an excellent job preparing for the audit and Ms. Lee assisted in preparing drafts of this report and took over maintenance of the depreciation schedule.

Commissioner Constance referred to the unrestricted net position amount of \$6,493,065 [page 10] and asked how that relates to reserves.

Mr. Welch responded that the reserves are mostly in the restricted net position amount [\$19,738,780].

Motion was made by Commissioner Maio, seconded by Commissioner Chappie, to receive and file 'Peace River Manasota Regional Water Supply Authority FY 2015 Financial Statements and Independent Audit Report' as submitted by Purvis Gray & Company, pending the changes related to GASB 68 and the final review by an independent auditor. Motion was approved unanimously.

3. Procurement Policy Revision to Chapter 5, Section 5.4 'Acquisition of Professional Architectural, Engineering, Landscape Architectural, or Surveying and Mapping Services Presented by Mike Coates, Deputy Director

Mr. Coates said at the December meeting the Board requested the Authority's procurement policy relating to professional services revised to make it more similar to the members' policies for procurement of these services. Staff obtained the procurement policies of the members and interviewed the utility staffs and/or purchasing/procurement staffs to identify and clarify applicable policy. Mr. Coates said the review focused on four questions: (1) do you use a professional services evaluation committee [PSEC], (2) what criteria do you use in the evaluation of submittals, (3) do you conduct interviews as part of that process and (4) what is the approval process specifically for a ranked short list?

Mr. Coates presented a summary comparison of this information along with what is being proposed for the Authority's revised policy. He said the proposed policy is what is typical of what the members do, but nobody conducts this procedure exactly the same. For example, everybody uses a PSEC and most have three to five members on that PSEC and most use either a procurement official, executive or county manager to establish that PSEC and that is what is reflected in the proposed revision. Some conduct interviews all of the time and others leave it to the PSEC to decide whether they should interview and leaving it to the discretion of the PSEC is what is reflected in the proposed revision. In terms of the consultant selection, this is a ranking that would be handed down by the PSEC and for most that ranking is approved at the administrative level by the procurement official or by the county administrator. At this point negotiation of the contract, scope and fee with the top ranked firm would begin and the contract, scope and fee is then brought to the Board for approval and that is what is reflected in the proposed revision.

Mr. Coates stepped through the proposed process which would begin with the establishment of the PSEC by the Executive Director and that would be done in advance of the advertisement for procurement services. There would be a separate PSEC for each procurement event with three to five voting members. Typically, the voting members would be a combination of Authority staff and customer staff. Others might be appointed if there were a project for example in one of the cities. We would then advertise for services and that process is laid out in the Florida Statutes including the information that is required such as where the project is located, how long the project is estimated to take, evaluation criteria, how many pages are to be submitted, etc. That is very similar to the current policy.

The Authority's Purchasing/Finance Department would receive the submittals and review them for conformance and the conforming submittals would be sent to the PSEC. All of the submittals would also be provided to the member utility directors [as is done now] and they would provide feedback to the PSEC chair. There would be an advertised meeting for the PSEC to discuss and evaluate the submittals and develop a ranked short list. PSEC meetings would follow the Florida Sunshine requirements.

Optionally, the PSEC could decide to interview if the votes are close or if they have questions and those interviews would be conducted in compliance with the Florida Sunshine requirements. Following that, the recommendation for a ranked short list would be provided to the Executive Director. Assuming the Executive Director approves the ranking, he would appoint a negotiation committee or he would conduct the negotiations. Assuming those negotiations are favorable the proposed contract, scope and fee would be provided to the Purchasing/Finance Department for development of a recommendation to the Board.

If the Board does not approve the contract, they can kick it back; if the Board does not like the ranked short list, we can go through the selection process again. Mr. Coates reiterated that the proposed policy is similar to what most of the members do but not exactly the same because nobody conducts this procedure exactly the same.

Mr. Coates responded to the Board's questions and clarified they had a clear understanding of the current policy and the revised policy being proposed.

Commissioner Constance said he would prefer the Board end up with a tab sheet that ranks all of the submittals for their review. The Board can then approve the ranking and direct staff to start negotiations with the top ranked firm or not approve the ranking. He said the process is more transparent and makes more sense. If the proposed process has to do with timing since the Board only meets every two months then staff should start the process earlier. He said it is better policy in his opinion.

Commissioner Maio asked if the revised policy is in accordance with the Competitive Consultant Negotiation Act and Mr. Coates said yes.

Commissioner Chappie said he was fine with the revision being proposed and made the motion for approval as presented.

Commissioner Langford said he would second the motion with the caveat that if the revised policy does not work satisfactorily or slows down the process then the policy can be re-visited.

Motion was made by Commissioner Chappie, seconded by Commissioner Langford, to approve Authority Procurement Policy Revision to Chapter, Section 5.4 'Acquisition of Professional Architectural, Engineering, Landscape Architectural, or Surveying and Mapping Services with the caveat to revisit the policy if not working satisfactorily. Motion was approved unanimously.

**4. Regional Integrated Loop System Phase 1 Interconnect [U.S. 17 to Punta Gorda]
Presented by Patrick Lehman, Executive Director and Ford Ritz, Project Engineer**

Mr. Lehman said we are finally reaching the end of a long road after many months of negotiations between multiple agencies. The stumbling block has been funding. The Board has stated it likes the pipeline but would not fund the pipeline and that is the message he and Mr. Manson and others carried to the negotiations. The pieces are coming together and the funding issues have been resolved. Mr. Lehman was happy to say the SWFWMD Governing Board unanimously approved the funding for both the Phase 1 Interconnect and the City of Punta Gorda's reverse osmosis [RO] project at their January 19, 2016

meeting. Mr. Lehman briefly reviewed the particulars of both projects.

Mr. Lehman said the estimated cost for the Phase 1 Interconnect is \$12M. This project received state appropriation of \$4M [through joint appropriation with the City]; the City has agreed to provide \$2M; and SWFWMD approved \$6M for the total cost of \$12M. Mr. Lehman explained because this project is an immediate benefit to DeSoto County which is a REDI [Rural Economic Development Initiative] county SWFWMD policy says up to 75% of eligible costs can be funded and that is what they did.

The SWFWMD stipulated that any cost savings would be applied to the SWFWMD contribution. Another condition is that the Authority would pursue reuse, water quality, storm water, and conservation projects in an equal amount of the SWFWMD funding of \$6M. That money would come from a specific member and is returned to that specific member. The Authority will provide an accounting to SWFWMD on an annual basis. The funding is consistent with SWFWMD policy and SWFWMD staff was directed to provide the cooperative funding agreement to the Authority as quickly as possible.

Mr. Lehman said the City estimated the cost of the RO project to be \$32M. The City received state appropriation of \$900,000. In accordance with SWFWMD policy state dollars are deducted so the amount is reduced to \$31.3M and divided in half so SWFWMD approved \$15.65M for this project. The City is on a similar timeframe of receiving the SWFWMD cooperative funding agreement. The host county approvals required by the MWSC are anticipated now that the funding agreements are in place. In addition, the Authority entered into an operational agreement with the City in 2013 which needs to be amended to include the Phase 1 Interconnect and delivery point which Laura Donaldson discussed in more detail during the General Counsel's Report.

Since the Board does not meet again until April 6, the consensus of the Board was to have a special meeting to consider the SWFWMD cooperative funding agreement and to defer today's requested Board action to approve the Contract for Professional Engineering Services for Design and Construction Management/Inspection with King Engineering Associates, Inc. and Work Order No. 1 'Phase 1 Interconnect Preliminary Design Services' until the special meeting. Mr. Lehman said deferring approval of the contract and work order would not present an issue for the engineer. It is anticipated everything will be in place by late February to schedule the special meeting.

**5. Regional Integrated Loop System – Phase 3B Interconnect [S.R. 681 to Clark Road]
Presented by Mike Coates, Deputy Director**

a. Authorize Funds from Sarasota County "Project Savings" for Preliminary Design Services.

Mr. Coates said at the December 2, 2015 meeting the Board approved a scope and fee with King Engineering for preliminary design of the Phase 3B Interconnect facilities in the amount of \$397,958. Authorization to proceed on that work was pending approval by Sarasota County for use of funds from the County's Project Savings Account with the Authority. Mr. Coates said Sarasota County approved the use of the funds at their Board meeting on Tuesday. [The letter from the Sarasota County Board Chairman, Commissioner Maio, was distributed to the Board.] Staff requested authorization to use the project savings funds the County has in the amount of the work order.

Motion was made by Commissioner Langford, seconded by Commissioner Maio, to authorize use of up to \$397,958 from Sarasota County "Project Savings" to fund the Preliminary Design on the Phase 3B Interconnect. Motion was approved unanimously.

b. Submit Out-of-Cycle Funding Request to SWFWMD for Phase 3B Preliminary Design Services

Mr. Coates said in September 2015 the Authority submitted a FY 2017 cooperative funding application to SWFWMD for the Phase 3B Regional Interconnect Project. SWFWMD has indicated if we want 2016 funding we need to make a separate request for out-of-cycle funding. Staff requested Board authorization to submit an out-of-cycle request to SWFWMD for FY 2016 funding of 50% of the contracted \$397,958 preliminary design cost for the Phase 3B Interconnect.

Motion was made by Commissioner Langford, seconded by Commissioner Maio, to authorize submittal of an out-of-cycle request to SWFWMD for FY 2016 funding of 50% of the contracted \$397,958 Preliminary Design cost for Phase 3B Interconnect. Motion was approved unanimously.

**6. SWFWMD FY 2017 Cooperative Funding Applications Ranking
Presented by Mike Coates, Deputy Director**

Mr. Coates said at the August 5, 2015 meeting the Board adopted the ranking of the projects as shown below for application to SWFWMD for FY 2017 cooperative funding with a provision for re-evaluation of the ranking as more information became available on each project.

1. Phase 3B Interconnect (S.R. 681 to Clark Road)
2. Phase 3D Interconnect (Fruitville Road to Manatee)
3. Phase 4 Interconnect (Burnt Store WTP to Phase 1A)

Mr. Coates said the Phase 3B Interconnect is moving along quickly as previously discussed; the Phase 3D Interconnect is part of the Lorraine Road improvement and the developer is going to start construction in March; and negotiations are ongoing with the developer and the County on the Phase 4 Interconnect. Mr. Coates said based on the information available today staff did not recommend re-ranking and it was the pleasure of the Board if they wished to re-rank.

Commissioner Constance said he brought up the Phase 4 Interconnect in October when originally talking about the ranking and at that time Charlotte County thought the developer would be further along by now. While the developer is going to proceed, Commissioner Constance said he thought at the moment the ranking was appropriate and by looking at the other Board members he recognized their concurrence.

**7. Budget Process for FY 2017
Presented by Patrick Lehman, Executive Director**

Mr. Lehman said the budget abides by the mission of the Authority and the vision of the Authority. Mr. Lehman recognized the Peace Rive Facility as an award winning agency and has been selected to receive the Florida Department of Environmental Protection Plant Operations Excellence Award in recognition of outstanding treatment plant operation, maintenance and compliance for the second year in a row and the Board should be proud of this achievement. He also noted Charlotte County will receive this award in a different size category.

Mr. Lehman said the tentative budget will be presented for adoption at the April 6, 2016 board meeting. There are a number of board meetings, professional staff and administrator meetings throughout the budget review process to provide opportunity for comment prior to presenting the final budget for adoption at the August 3, 2016 meeting. The budget process is a transparent process and the information is posted on the website for public comment as well throughout the review process.

Historically over the last five years the operational budget has been consistent and Mr. Lehman said it is expected to remain steady. There is no scheduled CIP this year but planned CIP for next year. Water deliveries have gradually increased. The contractual delivery is 34.7 MGD.

Commissioner Constance asked Mr. Lehman to briefly explain the bump in operations.

Mr. Lehman said in 2014 the policy on the 15% debt service coverage was implemented. In addition, the bonds were refinanced at a savings.

The budget is prepared in accordance with a number of governing documents and policies including the bond documents. The Authority is in the AA category with all three rating agencies and it is critical the Authority maintain that good standing and build upon that.

Mr. Lehman said the budget must meet certain principles which are summarized below:

- MWSC contractual obligations [based on 34.7 MGD],
- Customer water demand projection for FY 2017,
- Plan for short-term and long-term water demands,
- Invest to maintain infrastructure for future generations,
- Maintain financial stability and bond ratings, and
- Maintain reasonable water rates for the near-term and into the future.

The Authority is an enterprise fund divided into two categories: (1) Administrative Office which is the administrative staff of the Authority and (2) Facilities which includes O&M, Technical Services and Construction Service.

The 34.7 MGD water allocation is contractually divided between the customers as follows:

- Charlotte County 16.1 MGD
- Sarasota County 15.0 MGD
- DeSoto County 0.7 MGD
- City of North Port 2.9 MGD

Mr. Lehman reviewed the budget considerations for 2017 as summarized below:

- Operating Costs
 - ✓ No significant increase identified to-date
- Staffing
 - ✓ Personnel compensation [increase comparable to members]
 - ✓ Evaluating two new staff positions [increase from 45 to 47 budgeted positions]
- Budget Issues for Discussion
 - ✓ Comply with MWSC
 - Exhibit B 'Water Allocation'
 - Exhibit C 'New Water Supply Demands'
 - ✓ Prioritize R&R funding to maintain infrastructure
 - ✓ Provide CIP funding for future projects

Mr. Lehman reviewed the breakdown of the expenditures and revenues. He explained how the water rate is established which consists of a base rate charge [water allocation] plus the water use charge [actual

metered use]. Historically the base rate charge has been fairly constant. The water use charge has remained the same at \$0.74/1,000 gallons for the last five years.

Mr. Lehman reiterated that staff will be meeting with the member utility staffs, administrators, BOCCs, other agencies including SWFWMD and the public culminating with the final budget presented in Public Hearing for Board consideration and adoption at the August 3, 2016.

8. Strategic Plan Implementation Process Presented by John Shearer, Shearer Consulting

Mr. Shearer said he is facilitating the process to implement the strategic plan the Board adopted. Mr. Shearer said the strategic plan is very aspirational and far reaching and as such there are no specifics in it. There is a vision; a mission; and core values. There are 28 other utilities within the general four-county area and the intent of this process will open up opportunities for them to also participate as well as any other interested parties.

To get the process started, there was a kickoff meeting with the county administrators and professional staffs. Along with the Executive Director as Chair this group will be considered the Oversight Committee. As part of the initial discussion, everybody had the opportunity to vent their concerns and their issues. Some are minor and some are significant and need clarification and it is anticipated this process will do that. Robert Beltran, Executive Director of SWFWMD, also participated in the kick-off meeting and part of the discussion was the differences in the way SWFWMD does water supply projections and the way the Authority does water supply projections. Mr. Shearer showed a chart that listed the projected 2035 water demands in the region taken from the SWFWMD 2015 regional water supply plan that was shared with the group and the Authority projections are higher. Ultimately the intent would be for the projections to become better aligned.

Going forward, the Oversight Committee will create 'core value' teams grouped according to the core values set forth in the strategic plan. Each core value team will be led by a senior Authority staff and comprised of the members. The initial activity of each core value team will be to develop a scope of work to fulfill the core values. Each team will identify options for consideration and review and bring it back through the Oversight Committee and Mr. Lehman prior to presentation to the Board for their comment. All meetings will follow the requirements of the Florida Sunshine.

Mr. Shearer anticipates implementation will be in place by the end of this calendar year. Mr. Shearer said he will spend time with each of the Board members as appropriate and will be updating the Board throughout the process as appropriate. Mr. Shearer said this process has been done around the state and has been successful.

Commissioner Maio said Sarasota County is in a mode where they can't build houses quick enough and hopes we look at varied sources for projections because many times state projections are very conservative.

Mr. Shearer said one of the projections used by SWFWMD is taken from the Bureau of Economic Business Research from the University of Florida. The SWFWMD projections are conservative and lower than the Authority's projections. Although it is a 20 year look ahead they true it up every five years. Mr. Shearer said it is his experience beyond five years it starts to diverse significantly. They say it self-corrects every five years. The more dialogue he has with people who do water supply planning everybody games the system to their advantage and so that is one of the reasons SWFWMD tends to be very conservative. The process needs to be transparent and clear on the projections and open lines of

communication. Mr. Beltran expressed his desire to work with the members and any of the other utilities in this area to better align this process.

Commissioner Constance asked Mr. Lehman if an unlimited supply of water was available at the PRF, what is the limiting step to get the water out to the customers.

Mr. Lehman said the first limiting step is storage.

Commissioner Constance said if you had unlimited storage, what is the next problem.

Mr. Lehman said it would be the treatment component because for transmission you can add re-pumping stations to increase flow capacity.

Commissioner Constance said as far as the pipeline infrastructure, do we have sort of an unlimited capacity to get the water distributed.

Mr. Lehman said he would not say unlimited but we have the ability to increase. For instance, when we constructed the 23-mile pipeline to Sarasota County's Carlton WTP we put tee connections in the midpoint so we could add a re-pump station to increase the delivery at some point in the future.

9. Legislative Update

Presented by Patrick Lehman, Executive Director

Mr. Lehman said both the House and the Senate passed the comprehensive water policy legislation and it has been signed by the Governor. This legislation includes provisions to codify the Central Florida Water Initiative, create a springs protection act, set up a pilot program for alternative water supply and establish a new classification for surface waters used for potable water supply. Mr. Lehman said whenever a new statute is created, especially involving the central Florida initiative, that at some point it is going to trickle down to the local level so staff is keeping a vigilant eye on this. Representative Albritton and Senator Detert are sponsoring the Authority's funding request for the three pipeline projects. Mr. Lehman said he and Mr. Manson will be in Tallahassee during Florida Association of Counties and if any Board members would like to meet with Diane Salz to let him know and he will make the arrangements.

GENERAL COUNSEL'S REPORT

1. First Amendment to Water Systems Interconnect and Water Transfer Contract between the Peace River Manasota Regional Water Supply Authority and the City of Punta Gorda

Ms. Donaldson said the Authority and the City entered into the Interlocal Agreement for the Phase 1 Regional Interconnect on December 2, 2015 which provides for a new pipeline project between the parties. Section 10 of the Interlocal Agreement requires the parties amend the Water Systems Interconnect and Water Transfer Contract [effective September 3, 2013] within ninety days to include the Interconnect and Delivery Point. Ms. Donaldson said although the amendment seems to be lengthy bottom line all we are doing is taking the Exhibit 1 from the interlocal agreement and adding it to Exhibit 1 of the prior agreement.

Motion was made by Commissioner Langford, seconded by Commissioner Chappie, to approve 'First Amendment to Water System Interconnect and Water Contract between the Peace River Manasota Regional Water Supply Authority and the City of Punta Gorda. Motion was approved unanimously.

EXECUTIVE DIRECTOR'S REPORT

Mr. Lehman said as he previously mentioned the Florida Department of Environmental Protection is awarding the 2015 Plant Operations Excellence Award to the Peace River Facility. He recognized the operations and maintenance staff for this prestigious accomplishment. He also recognized Charlotte County for winning the award in a different size category.

Mr. Lehman said the SWFWMD Governing Board will meet on February 23 at their Sarasota Service Office.

Lastly, Mr. Lehman discussed the Orange Hammock Ranch which abuts the RV Griffin Reserve. Mr. Lehman said this goes back to the old 'Isles of Athena' and there was a lot of work done in the 2006 timeframe however the developer went bankrupt. Now it is being looked at by the Conservation Foundation of the Gulf Coast for the permanent conservation of the entire acreage. Mr. Lehman said he was meeting with Christine Johnson, who is President of the Foundation. She wants to find out more about the Authority and we have lots of information to share regarding the property from past reports and want to make sure we work together. Mr. Lehman asked Commissioner Maio if he would like to add to the discussion.

Commissioner Maio said this 5,774 acre tract is in Sarasota County and was annexed by the City of North Port. He has been working on this personally for years long before he was elected and has been on the site many times. It completes a link between the Myakka River and the Peace River and has various environmental attributes. The City of North Port voted unanimously to ask SWFWMD and the state and Florida Forever for funds to buy it in combination perhaps with Sarasota County. Both the County and the City commissions voted unanimously to send a letter of support for this project and he hoped the Authority would also support this project.

Motion was made by Commission Chappie, seconded by Commissioner Constance, to send a letter of support. Motion was approved unanimously.

ROUTINE STATUS REPORTS

Routine status reports are provided for informational purposes and no presentation is made.

1. Hydrologic Conditions Report
2. Check Registers for November 2015 and December 2015
3. Peace River Basin Report

Commissioner Constance thanked staff for providing the check register alphabetically and by highest amount to lowest in addition to the traditional chronological order. He brought the Board's attention to the charges from Mr. Manson's firm which when annualized would exceed the contract amount of \$180,000. He said he appreciates Mr. Manson's firm working for the Authority but if he cannot get his charges in line with the agreed upon amount we are going to have to put this out for RFP. He asked Mr. Lehman how is this working.

Mr. Lehman said he has had discussions with Mr. Manson with regards to the contract which provides an annual amount of \$180,000, there is no set monthly amount. Mr. Lehman said there was a lot of work done on the RTD arbitration and that settlement agreement resulted in a cost savings to the Authority. Some of Mr. Manson's costs should come from the construction account and some from liquidated

damages. Mr. Manson also put a lot of time and effort into the SWFWMD funding agreement for the Phase 1 Interconnect. Mr. Manson will come back with those specifics at the next Board meeting if that is appropriate.

Ms. Donaldson said she spoke with Mr. Manson yesterday and he is more than willing to talk to the Board members individually as well.

Commissioner Constance said he will welcome the discussion. He can understand where there might be one month where he might work more but would hope then the next month the bill will be less and not always pushing the top of the range because bottom line we have to watch out for the rate payers.

FACILITY TOUR

Commissioner Constance asked if the Board is doing the facility tour and then coming back and finishing the meeting or finishing the meeting and then going on the tour.

Ms. Donaldson said if the Board is going to ask questions that could reasonably come back in front of the Board for action at some point in the future, she would recommend doing the tour while we are still in the public meeting. If the Board is not going to have any conversations among themselves then we can adjourn the meeting and take the tour. However, she does not want to have a situation where we inadvertently violate the Sunshine based on conversations or questions raised by the Board.

Commissioner Chappie said he would rather play it safe and then come back and adjourn.

Commissioner Constance said at this point [11:12 a.m.] we are going to break from this room; we will stay in the meeting and go on the tour and come back and do Board member and public comment at the end.

The Board returned at 11:45 a.m. from completing the facility tour.

BOARD MEMBER COMMENTS

Commissioner Langford said it was brought to his attention at the last administrators meeting the DeSoto County administrator was the only administrator there. He said although all the four counties were represented by staff if you are going to call it an administrators meeting he felt the administrators need to attend otherwise call it a staff meeting and let the administrators stay home. He said he was not in favor of the administrator meetings to begin with and still is not in favor but if they are going to continue then the administrators should attend.

Commissioner Constance said he will try very hard to make Charlotte County's administrator attend and hopefully the others understand that it is important. It is a high level meeting. It is not a staff meeting. And I get exactly what you are saying. If in a pinch an administrator cannot make it they can at least call in to be present by phone. More importantly, if there is a last minute scheduling issue with several administrators then postpone the meeting until everybody can be there. I think we have a very good understanding. I don't want that to go away but I do understand why Commissioner Langford brought that forward and we will address it.

PUBLIC COMMENTS

There were no public comments.

SCHEDULE OF FUTURE MEETINGS

Commissioner Constance reiterated the special meeting to be scheduled the end of February or early March to act on the Phase 1 Interconnect.

Next Authority Board Meeting

Wednesday, April 6, 2016 @ 9:30 a.m.
Manatee County Administrative Center
Commission Chambers, First Floor
1112 Manatee Avenue West, Bradenton, Florida

Future Authority Board Meetings

June 1, 2016 @ 9:30 a.m. – DeSoto County Administration Building, Arcadia, Florida
August 3, 2016 @ 9:30 a.m. – Charlotte County Administration Center, Port Charlotte, Florida
October 5, 2016 @ 9:30 a.m. – Sarasota County Administration Center, Sarasota, Florida
December 7, 2016 @ 9:30 a.m. – Manatee County Administrative Center, Bradenton, Florida

Adjournment

There being no further business to come before the Board, the meeting adjourned at 11:47 a.m.

Commissioner Christopher G. Constance
Chair

**PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016**

**CONSENT AGENDA
ITEM 2**

Minutes of February 25, 2016 Board of Directors Meeting

Recommended Action -

Motion to approve minutes of February 25, 2016 Board of Directors meeting.

Draft minutes of the February 25, 2016 Board of Directors meeting are provided for Board approval.

Budget Action – None

Minutes of Board of Directors Meeting
PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
Southwest Florida Water Management District
Sarasota Service Office, 6750 Fruitville Road, Sarasota, Florida

February 25, 2016

Board Members Present:

Commissioner Christopher G. Constance, Charlotte County, Chair
Commissioner Alan Maio, Sarasota County, Vice Chair
Commissioner John R. Chappie, Manatee County
Commissioner James Selph, DeSoto County [Alternate]

Staff Present:

Mike Coates, Deputy Director
Doug Manson, General Counsel
Kevin Morris, Science and Technology Officer
Ann Lee, Finance/Administration Manager
Linda Stewart, Executive Secretary

Others Present:

A list of others present who signed the attendance roster for this meeting is filed with the permanent records of the Authority.

CALL TO ORDER

INVOCATION

PLEDGE OF ALLEGIANCE

PUBLIC COMMENTS

There were no public comments.

AGENDA

**1. Regional Integrated Loop System Phase 1 Interconnect [U.S. 17 to Punta Gorda]
Presented by Mike Coates, Deputy Director and Doug Manson, General Counsel**

Mr. Coates presented a location map showing the Phase 1 pipeline route and the Punta Gorda RO project. Mr. Coates said this item includes four documents for Board consideration.

a. Interlocal Agreement with DeSoto County for Phase 1 Interconnect

Mr. Manson said the Interlocal Agreement formally establishes DeSoto County's sponsorship and provides host county consent for the Phase 1 Interconnect in DeSoto County.

Motion was made by Commissioner Chappie, seconded by Commissioner Maio, to approve Interlocal Agreement between Peace River Manasota Regional Water Supply Authority and DeSoto County for Phase 1 Regional Interconnect. Motion was approved unanimously.

b. SWFWMD Funding Agreement

Mr. Manson said the SWFWMD Governing Board approved the \$6M cooperative funding request at their January 19, 2016 meeting. What is unique about the Authority's project is the SWFWMD Governing Board approved 75% funding of eligible costs due to the DeSoto County REDI [Rural Economic Development Initiative] status. Mr. Manson said there was a lot of hard work by a lot of people at SWFWMD, Punta Gorda and all the member governments and he appreciated their efforts.

Motion was made by Commissioner Selph, seconded by Commissioner Maio, to approve and authorize Executive Director to execute Cooperative Funding Agreement (2) between Southwest Florida Water Management District and Peace River Manasota Regional Water Supply Authority for Phase 1 Regional Interconnect (N416). Motion was approved unanimously.

c. Contract for Professional Services

Mr. Coates said this is the Authority's standard contract for professional engineering and design services and provides the legal framework under which work orders for engineering services will be issued for the Phase 1 Interconnect. The design engineer is King Engineering Associates, Inc.

Motion was made by Commissioner Chappie, seconded by Commissioner Selph, to approve and authorize Executive Director to execute Contract for Professional Engineering Services for Design and Construction Management/Inspection for Regional Integrated Loop System Phase 1 Interconnect with King Engineering Associates, Inc. Motion was approved unanimously.

d. Work Order No. 1 'Phase 1 Interconnect Preliminary Design Services'

Mr. Coates said Work Order No. 1 for preliminary design services on the Phase 1 Interconnect includes route study and recommendation, connection points, sizing of pipes, permitting requirements and project cost estimates. The cost is \$278,760 and includes a \$20,000 owner's allowance for out-of-scope work if required. Mr. Coates said staff believes this is a reasonable price for these services and is in the range of preliminary design services that we have seen on past pipeline projects.

Motion was made by Commissioner Maio, seconded by Commissioner Chappie, to approve and authorize Executive Director to execute Work Order No. 1 'Phase 1 Interconnect Preliminary Design Services' with King Engineering Associates, Inc. for an amount not to exceed \$278,760. Motion was approved unanimously.

BOARD MEMBER COMMENTS

Commissioner Selph said he was glad to sit in for Commissioner Langford. He said to me we are light years ahead of the rest of the state in water and are the envy of the state. He commended everyone from the Board to the Authority staff and SWFWMD staff that has been involved in this. He said I think it is amazing.

Commissioner Maio said he was glad to finally see all of the pieces come together.

Commissioner Chappie said this is another important step in the regional system and agrees we are the envy of the rest of the state. He said it works here probably better than any place else around and that is why we have a sustainable water supply and reasonably priced and we are constantly working on it. We have a crack 'A' team at the Authority and crack 'A' teams at the four counties. It is great to be a

member of this Board and it serves such a great importance for all four of our counties because if you don't have water you are not going to grow as a community, you are not going to be that quality community where people want to live and want their kids to live. It is the backbone of what you have to have to have a sustainable community and we are working on that as a region and that is not always an easy task but we work it out and we move forward.

Commissioner Constance said I agree and you are right. If your community does not have a water solution it can become very expensive and that really limits your economic development. Commissioner Constance thanked Commissioner Selph for attending and my fellow Board members for attending this adhoc meeting but it was that important that we get it done. He appreciated staff doing all of the hard work. He said on Tuesday Charlotte County BOCC passed on their consent agenda the ability to go ahead and put the line in to Charlotte County so we are good to go.

PUBLIC COMMENTS

There were no public comments.

SCHEDULE OF FUTURE MEETINGS

Next Authority Board Meeting

Wednesday, April 6, 2016 @ 9:30 a.m.
Manatee County Administrative Center
Commission Chambers, First Floor
1112 Manatee Avenue West, Bradenton, Florida

Future Authority Board Meetings

June 1, 2016 @ 9:30 a.m. – DeSoto County Administration Building, Arcadia, Florida
August 3, 2016 @ 9:30 a.m. – Charlotte County Administration Center, Port Charlotte, Florida
October 5, 2016 @ 9:30 a.m. – Sarasota County Administration Center, Sarasota, Florida
December 7, 2016 @ 9:30 a.m. – Manatee County Administrative Center, Bradenton, Florida

Adjournment

There being no further business to come before the Board, the meeting adjourned at 4:11 p.m.

Commissioner Christopher G. Constance
Chair

**PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016**

**CONSENT AGENDA
ITEM 3**

Reschedule August 3, 2016 Board of Directors' Meeting

Recommended Action -

Motion to approve revised Board of Directors' meeting schedule for calendar year 2016.

There has been a request to reschedule the August 3, 2016 Board of Directors meeting to July 28, 2016 [time and venue remain the same].

Upon approval, the Authority's revised Board Meeting schedule will be sent to each county clerk and county commission chairman. Courtesy copies will also be provided to the Southwest Florida Water Management District and to the City of North Port. The meeting schedule is also posted on the Authority's website at www.regionalwater.org.

Peace River Manasota
Regional Water Supply Authority

**BOARD OF DIRECTORS MEETING SCHEDULE
FOR CALENDAR YEAR 2016**

DATE	TIME	LOCATION
Thursday JAN 28, 2016	9:30 A.M.	Peace River Facility Water Quality & Training Facility 8998 SW County Road 769, Arcadia, FL
Wednesday APR 6, 2016	9:30 A.M.	Manatee County Administrative Center Commission Chambers, First Floor 1112 Manatee Avenue West, Bradenton, FL
Wednesday JUN 1, 2016	9:30 A.M.	DeSoto County Administration Building Commission Chambers, First Floor 201 East Oak Street, Arcadia, FL
Wednesday Thursday AUG 3/July 28, 2016	9:30 A.M.	Charlotte County Administration Center Commission Chambers, Room 119 18500 Murdock Circle, Port Charlotte, FL
Wednesday OCT 5, 2016	9:30 A.M.	Sarasota County Administration Center Commission Chambers, First Floor 1660 Ringling Boulevard, Sarasota, FL
Wednesday DEC 7, 2016	9:30 A.M.	Manatee County Administrative Center Commission Chambers, First Floor 1112 Manatee Avenue West, Bradenton, FL

Board meeting dates and times are subject to change. Please visit www.regionalwater.org for up-to-date information.

**PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016**

**CONSENT AGENDA
ITEM 4**

**Resolution 2016-02
'Recognition of the Month of April as Water Conservation Month'**

Recommended Action -

Motion to approve Resolution 2016-02 'Recognition of the Month of April as Water Conservation Month'.

By adoption of this resolution, the Authority will be joining with the State of Florida, water management districts, local governments and water-related organizations in recognizing the importance of water conservation in sustaining the water resource.

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

Resolution 2016-02

**RECOGNITION OF THE MONTH OF APRIL
AS WATER CONSERVATION MONTH**

The Peace River Manasota Regional Water Supply Authority, created pursuant to Chapter 373.1962, Florida Statutes, now found in Section 373.713, Florida Statutes, and Interlocal agreement pursuant to Chapter 163.01, Florida Statutes, in lawful session and in regular order of business properly presented, finds that:

WHEREAS, water is a basic and essential need and critical issue facing Florida as it strives to maintain economic prosperity through residential growth, tourism, agriculture and construction; and,

WHEREAS, demands on natural supplies of fresh water to meet the needs of a growing population and the needs of the environment, agriculture and industry will continue to increase; and,

WHEREAS, the State of Florida, Southwest Florida Water Management District, Authority and local governments are working together to increase awareness about the importance of water conservation; and,

WHEREAS, the State of Florida has designated April, typically a dry month when water demands are most acute, Florida's Water Conservation Month, to educate citizens about how they can help save Florida's precious water resources; and,

WHEREAS, the Authority and its member counties encourage and support water conservation and efficiency through various educational programs and special events; and,

WHEREAS, every business, industry, school and citizen can make a difference when it comes to water conservation and thus promote a healthy economy and community.

NOW, THEREFORE, BE IT RESOLVED, by the Peace River Manasota Regional Water Supply Authority Board of Directors that the month of April is proclaimed as 'Water Conservation Month' and is calling upon each citizen and business to help protect our precious resource by practicing water saving measures and becoming more water efficient.

Done at Bradenton, Florida this Sixth day of April 2016.

Attest:

**Peace River Manasota
Regional Water Supply Authority**

Patrick J. Lehman
Executive Director

Commissioner Christopher G. Constance
Chair

Approved as to Form:

Douglas Manson
General Counsel for Peace River Manasota
Regional Water Supply Authority

**PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016**

**CONSENT AGENDA
ITEM 5**

Resolution No. 2016-03 'Recognition of National Drinking Water Week'

Recommended Action -

Motion to approve Resolution 2016-03 'Recognition of National Drinking Water Week'.

The importance of water is too often overlooked. Safe drinking water is the lifeblood of our communities yet few people understand the true value of what comes from their tap. The Authority is pleased to take this opportunity with the American Water Works Association to remind everyone that a reliable water system is essential to their everyday life by proclaiming May 1-7, 2016 as 'National Drinking Water Week'.

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

Resolution 2016-03

RECOGNITION OF NATIONAL DRINKING WATER WEEK

The Peace River Manasota Regional Water Supply Authority, created pursuant to Chapter 373.1962, Florida Statutes (subsequently reenacted as Section 373.713), and interlocal agreement pursuant to Chapter 163.01, *et seq.*, Florida Statutes, in lawful session and in regular order of business properly presented, finds that:

WHEREAS, water is our most valuable natural resource; and,

WHEREAS, drinking water is a basic and essential need for the health, safety and welfare of the public; and,

WHEREAS, our standard of living and economic prosperity depends upon a safe and reliable water supply that is sustainable and protective of our natural resources; and,

WHEREAS, a reliable, sustainable, safe and affordable drinking water supply is critical in supporting our economic growth and quality of life now and for future generations; and,

WHEREAS, all citizens of our communities are called upon to be good stewards in protecting our source waters from pollution, to practice water conservation, and to get involved in local water issues.

NOW, THEREFORE, BE IT RESOLVED, by the Authority Board of the Peace River Manasota Regional Water Supply Authority that May 1-7, 2016 is proclaimed as 'National Drinking Water Week'.

Done at Bradenton, Florida this Sixth day of April 2016.

Attest:

Peace River Manasota
Regional Water Supply Authority

Patrick J. Lehman, P. E.
Executive Director

Commissioner Christopher G. Constance
Chair

Approved as to Form:

Douglas Manson
General Counsel for the Peace River Manasota
Regional Water Supply Authority

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016

CONSENT AGENDA
ITEM 6

Award Contracts for Purchase of Water Treatment Chemicals

Recommended Action -

Motion to award and authorize Executive Director to execute Contracts for Purchase of Water Treatment Chemicals with the recommended lowest responsible and responsive bidders listed below.

Water treatment chemicals were bid in accordance with the Authority's Procurement Policy and staff recommends award of contracts to the lowest responsible and responsive bidders as listed below. Contracts will be effective through March 31, 2017 and are eligible for up to two one-year extensions upon mutual consent of the parties.

Supporting materials including Notice of Award, bid tabulation, sample contract and PAC performance testing report are attached.

Funds for these purchases are available in the FY 2016 Budget.

Bid Item	Chemical	Recommended Bidder	Unit Cost
No. 1	Ammonium Hydroxide 19% Solution	Airgas Specialty Products, Inc.	\$0.5054 per gallon
No. 2 *	Powdered Activated Carbon	Cabot Norit Americas	Hydro Darco S \$1,100 per ton
No. 3	Sodium Hypochlorite 12% Solution	Allied Universal Corporation	\$0.468 per gallon

*Low bidder determined to be the most cost effective based on 3rd party performance testing.

Budget Action – None

TAB A
Notice of Award

NOTICE OF AWARD
Water Treatment Chemicals
(Bid Opening Date: March 8, 2016)

Recommended Action - Award Purchase Contracts for Water Treatment Chemicals to the recommended lowest responsible and responsive bidders.

Water treatment chemicals were bid in accordance with the Authority's Procurement Policy. Bids were opened on March 8, 2016.

Staff recommends the Authority Board of Directors award contracts to the lowest responsible and responsive bidders as listed below at the Authority Board meeting on April 6, 2016. Bid tabulation is attached.

*Bid Item No. 2 Powdered Activated Carbon requires performance testing to determine the effective cost based on specific performance factors for the Peace River Facility. This testing has been completed. Test results and performance evaluation is attached.

Bid Item	Chemical	Recommended Bidder	Unit Cost
No. 1	Ammonium Hydroxide 19% Solution	Airgas Specialty Products, Inc.	\$0.5054 per gallon
No. 2*	Powdered Activated Carbon	Cabot Norit Americas	Hydro Darco S \$1,100 per ton
No. 3	Sodium Hypochlorite 12% Solution	Allied Universal Corporation	\$0.468 per gallon

Failure to file a protest within the time prescribed in section 120.57(3), Florida Statutes, or failure to post the bond or other security required by law within the time allowed for filing a bond shall constitute a waiver of proceedings under chapter 120, Florida Statutes.

Posted: March 23, 2016

TAB B
Bid Tab

**PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
 BID TABULATION for WATER TREATMENT CHEMICALS
 BID OPENING: MARCH 8, 2016 @ 2:00 p.m.**

COMPANY	Item 1 Aqua Ammonia	Item 2 Powdered Activated Carbon	Item 3 Sodium Hypochlorite
Airgas Specialty	\$0.5054/gallon		
Allied Universal			\$0.468/gallon
Cabot Norit Americas		[Product Hydro Darco M] \$1,200/ton [Product Hydro Darco S] \$1,100/ton [Product Hydro Darco W] \$1,000/ton [Product Norit PAC 20] \$1,600/ton	
Calgon Carbon		[Product WPH1000] \$1,900/ton [Product WPH-W900] \$2,020/ton [Product Pulsorb WP260-90] \$2,420/ton	
Carbon Purification		[Product Carb Pure 500] \$1,140/ton [Product Carb Pure 800] \$1,660/ton	
Jacobi Carbons, Inc.		[Product AquaSorb CB1-MW] \$2,360/ton	
Odyssey Manufacturing			\$0.485/gallon
Standard Purification		[Product WaterCarb 800] \$1,194/ton [Product NuChar SA] \$1,765/ton	
Tanner Industries	\$0.6610/gallon		
Thatcher Company		[Product Biogenic PAC 500] \$1,820/ton	

TAB C
Current Cost Comparison

Recommended Water Treatment Chemical Vendor and Pricing

Bid Item	Chemical	Recommended Bidder	Unit Cost
No. 1	Ammonium Hydroxide 19% Solution	Airgas Specialty Products, Inc.	\$0.5054 per gallon
No. 2 *	Powdered Activated Carbon	Cabot Norit Americas	Hydro Darco S \$1,100 per ton
No. 3	Sodium Hypochlorite 12% Solution	Allied Universal Corporation	\$0.468 per gallon

Current Water Treatment Chemical Vendor and Pricing

Bid Item	Chemical	Supplier	Unit Cost
No. 1	Ammonium Hydroxide 19% Solution	Airgas Specialty Products, Inc.	\$0.7105 per gallon
No. 2*	Powdered Activated Carbon	Calgon Carbon	HPW-1000 \$2,000 per ton
No. 3	Sodium Hypochlorite 12% Solution	Allied Universal Corporation	\$0.552 per gallon

*Bid Item No. 2 Powdered Activated Carbon requires performance testing to determine the effective cost based on specific performance factors for the Peace River Facility. This testing has been completed. Test results and performance evaluation is attached.

TAB D
Carbon Testing Performance Factors

Peace River Facility Chemical Bids
Carbon Testing Performance Factors
March 2016

Carbon Name	SAMPLE CODE (see note a)	PAC Dose (see note b) (mg/l)	Bid cost per ton (\$)	Performance Factor (see note c)	Effective Cost (\$)	Rank (see note d)	Sievs Test (%<400)	Iodine Value
Thatcher Company - Biogenic PAC 500	A	70	\$1,820	2.44	\$4,440.80	*	96.61	558
Carbon Purification - Carb Pure 500	B	70	\$1,140	2.44	\$2,781.60	*	77.19	488
Carbon Purification - Carb Pure 800	C	38.75	\$1,660	1.35	\$2,241.00	3	78.16	866
Standard Purification WaterCarb 800	D	57.75	\$1,194	2.01	\$2,399.94	5	86.72	776
Standard Purification NuChar SA	E	60	\$1,765	2.09	\$3,688.85	8	53.67	1044
Cabot Hydro Darco M	F	52.95	\$1,200	1.84	\$2,208.00	2	85.4	595
Cabot Hydro Darco S	G	54.45	\$1,100	1.90	\$2,090.00	1	77.95	574
Cabot Hydro Darco W	H	70	\$1,000	2.44	\$2,440.00	*	82.63	416
Cabot Norit PAC 20	I	70	\$1,600	2.44	\$3,904.00	*	84.91	751
Jacobi AquaSorb CBI-MW	J	28.7	\$2,360	1	\$2,360.00	4	80.29	1206
Calgon WPH1000	K	70	\$1,900	2.44	\$4,636.00	*	79.55	1050
Calgon WPH-W900	L	42.1	\$2,020	1.47	\$2,969.40	6	74.85	747
Calgon Pulsorb WP260-90	M	40.6	\$2,420	1.41	\$3,412.20	7	75.11	1002

Notes

- a) Samples were sent as blind samples to the lab, only the Authority was aware of their true identities.
- b) Samples analyzed by Engineering Performance Solutions, Inc. of Jacksonville, Florida in a matrix of raw Peace River water spiked with synthetic organic taste and odor compounds. Dose indicated was the dose required to reduce the taste and odor compounds to target levels in an established timeframe.
- c) Performance factor is established to be 1.0 for the lowest dose that achieved the desired performance metric. This is the baseline dose for comparison and becomes the denominator in the quotient that then defines every other sample identified as: Performance Factor X = (Dose X)/(Baseline Dose)
- d) *Indicates - Failed to achieve 70% removal at 70 mg\l dose rate.

**POWDERED ACTIVATED CARBON PERFORMANCE
FACTORS FOR THE PEACE RIVER REGIONAL
WATER SUPPLY FACILITY**

As commissioned by:
Peace River/Manasota Regional Water Supply Authority

Purchase Order Number: 22273
Ref: Powdered Activated Carbon Testing 2016.

Prepared by:
Engineering Performance Solutions, LLC
3161 St. Johns Bluff Rd. Suite 3
Jacksonville, FL 32246
Phone: 904-645-7775

Report #: 19.337.0316.Report – Peace River Performance Factors

03.22.2016

Table of Contents

List of Figures.....	4
List of Tables.....	4
SCOPE.....	5
BACKGROUND	5
METHOD.....	6
RESULTS.....	7
CONCLUSIONS	10
REFERENCES.....	13
APPENDIX A.....	14
APPENDIX B.....	18

LIST OF FIGURES

FIGURE 1. GEOSMIN DOSE REMOVAL CURVE	8
FIGURE 2. MIB DOSE REMOVAL CURVE.....	9
FIGURE 3. EXAMPLE OF PERFORMANCE FACTOR CALCULATION AT 70% MIB REMOVAL ...	11

LIST OF TABLES

TABLE 1. PERFORMANCE FACTORS REQUIRED TO MEET 70% MIB REMOVAL	11
--	-----------

SCOPE

Engineering Performance Solutions (EPS) specializes in assisting water utilities with the selection of their treatment chemicals in addition to conducting routine water quality monitoring. One particular specialty lies in the analyses of taste- and odor-causing compounds and in this case specifically, 2-methylisoborneol (MIB) and geosmin. Activated carbon (i.e., PAC and GAC) is commonly used among water treatment facilities to remove these displeasing compounds. Although, PAC and GAC are often purchased based on indices such as iodine number, phenol value, molasses number, and tannin value, these properties however have not correlated well with performance. Therefore, this necessitates that activated carbons be selected based on testing versus specifications. These results are received through performance based testing, which is developed specifically for each utility.

With agreement between the Peace River Manasota Regional Water Supply Authority (Authority) and EPS, a proposal was authorized by the Authority on 03/08/16 to perform the following:

Evaluation of Carbons and Design of Performance Factors - The scope of the project, as defined by the Authority, was to analyze 13 PACs provided by the Authority under simulated full-scale conditions at the Peace River Water Treatment Plant. The PAC profiling work was to include both MIB and geosmin 4-point dose removal curves and resulting performance factors

BACKGROUND

The occurrence of tastes and odors in drinking water is a serious problem for water utilities in the United States and throughout the world. According to a taste and odor survey by the American Water Works Association, of 377 water utilities questioned, 43% reported both taste and odor episodes exceeding one week and 16% had serious odor problems that occurred seasonally (Suffet et al., 1996). These offensive tastes and odors in potable water may arise in the raw water supply, during the treatment process (i.e., chlorination), or from microbial growth in the distribution system. The focus of this work was on compounds that manifest tastes and odors in raw water supplies; specifically 1,2,7,7-tetramethyl-bicyclo-heptan-2-ol (2-methylisoborneol or MIB) and trans-1,10-dimethyl-trans-9-decalol (geosmin), which impart an earthy/musty odor (Herzing et al., 1977; Lalezary et al., 1986b; Pendleton et al., 1997).

Many water utilities rely on conventional water treatment methods, such as coagulation-sedimentation and rapid sand filtration, to contend with tastes and odors. However, conventional treatment and other common treatment technologies, such as air stripping and oxidation, are ineffective for removing MIB and geosmin

(Lalezary et al., 1984; Lalezary et al., 1986a). Chlorine oxidation was shown to be unsuccessful in removing MIB and geosmin by Lalezary et al. (1986b). In addition, chlorine can temporarily mask the musty/earthy odors, and, in some cases, enhance them and subsequently manifest them back in the distribution system when the chlorine residual dissipates.

Many researchers have studied methods besides conventional treatment for the removal of tastes and odors. A common method found for successfully removing these tastes and odors to acceptable concentrations is the application of activated carbon (Herzing et al., 1977; Lalezary et al., 1986a; Vik et al., 1988; Chen et al., 1997; Pendleton et al., 1997; Gillogly et al., 1998). Carbon is very effective for removing these compounds due to its high specific surface area (500 – 1800 m²/g), large adsorption capacity, high degree of surface reactivity, and porosity.

The Peace River facility currently utilizes PAC to combat taste and odors and seeks to enhance their dosage requirements by using the PAC performance based testing conducted by EPS. This surface water treatment facility receives water from the nearby Peace River, which is fed by upstream lakes (i.e., Lake Hancock and several water bodies from the Polk County area). The Authority currently has two manmade unlined off stream reservoirs (approximately 30 - 35 ft. deep) which allows for settling of the Peace River water prior to delivery into the Authority's treatment system.

METHOD

Dosing regimen of the powdered activated carbon, plant flow, chemical additions and other specifications were originally collected during a prior site visit to the Peace River Facility, as well as phone conversations and email correspondence from last year's project. Updated information for this year's project was collected via phone conversations and mail between EPS personnel and the Authority's Land and Services Manager Mr. Samuel Stone.

In conducting these experiments, raw water from Reservoir 2 was collected from the effluent flume in an attempt to provide a more representative raw water sample. This sample was later chilled and shipped to EPS via overnight delivery. The water was received the next morning (03.10.2016), and was refrigerated at 4 °C. Just prior to conducting the analyses the raw water was returned to room temperature. Geosmin and MIB standards from the chemical supplier Supelco (Bellefonte, PA: part numbers 47522-U and 47523-U) were used to achieve the MIB and geosmin concentrations of interest within the raw water.

The resulting design for the project was as follows:

1. Due to the lack of historical MIB and geosmin occurrence data of the Authority's raw water source, an estimate had to be made of the concentrations that could potentially be experienced. Authority representatives thought it best to evaluate concentrations based on historical data seen at the nearby Manatee County Water Treatment Facility. It was communicated by the Authority for this report to mimic the higher concentrations as seen by Manatee County (60 ng/L of MIB and 30 ng/L of geosmin). Both MIB and geosmin were dosed collectively for each jar test for two reasons: (1) to simulate competition between the compounds and (2) to mimic full-scale interactions where the two typically coexist in the environment. The initial concentrations of these compounds will not impact the dose removal curve of the PAC studies, as the generation of these curves is independent of starting concentration (Gilligly et al, 1998).
2. The occasional caustic soda addition prior to PAC addition had no significant discernable impact on percent removal of MIB and geosmin by PAC in previous studies; therefore it was not included in this study.
3. The jar tests were run with a contact time of 20 minutes. The procedure for the jar tests is part of the AWWA PAC Standard (AWWA B600).
4. In each scenario for the Peace River facility, PAC doses of 10, 30, 50, and 70 mg/L along with a blank (i.e., no PAC added), were used to generate dose removal curves for MIB and geosmin. All samples were measured in duplicate via Solid Phase Microextraction (SPME)/Gas Chromatography/Mass Spectrometer (GC/MS) using method 6040 D of the Standard Methods for the Examination of Water and Wastewater 22nd Edition. The averaged detailed results used to generate the dose removal curves contained herein can be found in the attached quality assurance/quality control (QA/QC) report in Appendix A.

RESULTS

Figures 1 and 2 shown below represent the graphical results of the 13 PACs (labeled A to M) for percent removal of geosmin and MIB, respectively (Appendix B contains these very same figures only detailed and enlarged).

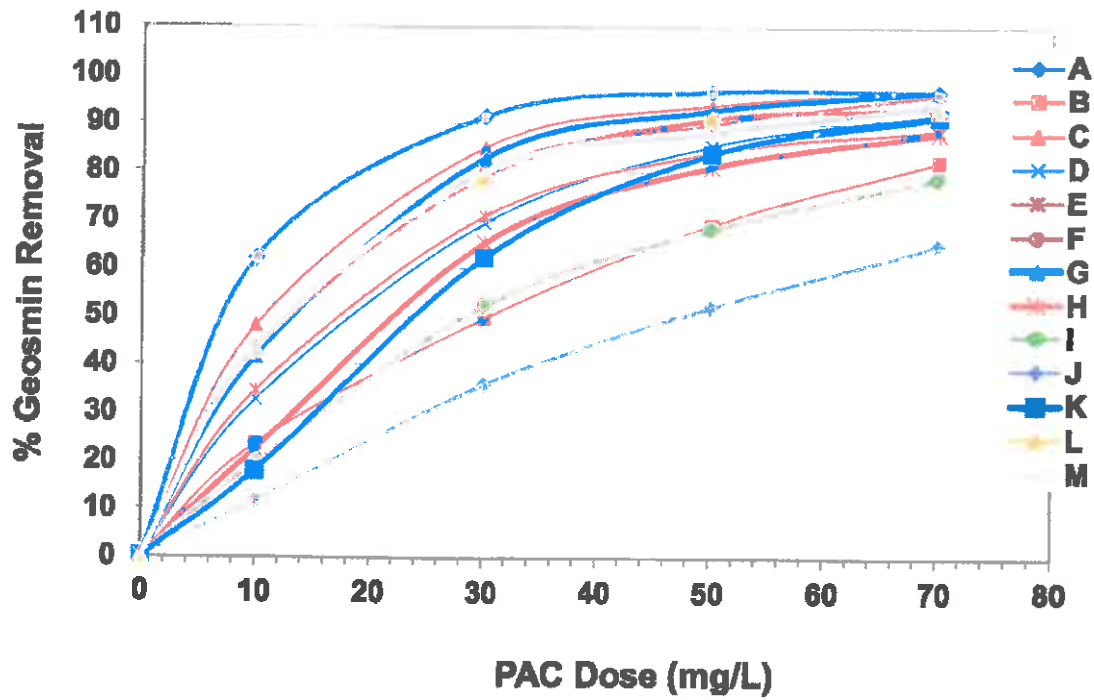
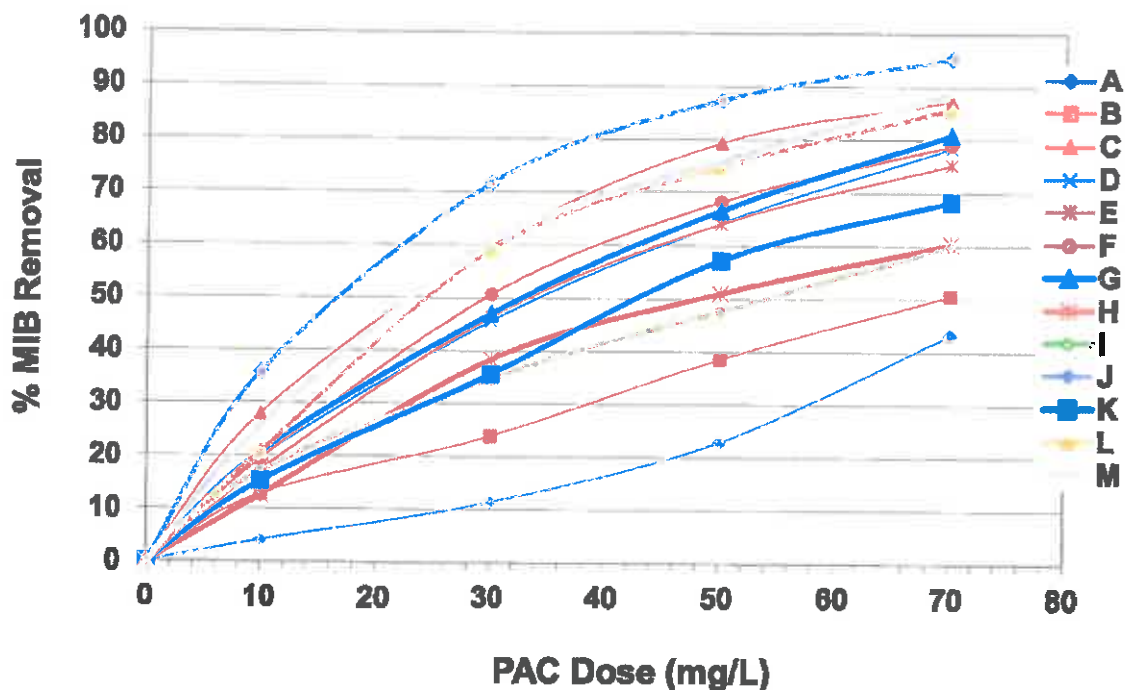


Figure 1. Peace River/Manasota Regional Water Supply Facility Geosmin Dose Removal Curve



**Figure 2. Peace River/Manasota Regional Water Supply Facility
MIB Dose Removal Curve**

DISCUSSION

Figure 1 depicts geosmin dose removal curves for 13 PACs provided by the Authority. For the same PAC dose, the spread of performance for the 13 PACs were very diverse. Only 1 of the carbons did not reach 70% removal at doses less than 70 mg/L. This high success rate is not uncommon since geosmin is typically more easily removed from conventional water treatment practices versus its counterpart, MIB.

Figure 2 represents MIB dose removal curves with the same 13 PACs provided by the Authority. In this case, the curves were just as diverse as in Figure 1, and the PAC dose required to remove MIB is clearly higher. In the case of geosmin, all but one of the carbons achieved 70% removal at carbon doses below 70 mg/L, whereas with MIB, only 8 of the carbons was able to remove 70% at this dose.

The performance factor ranking utilized the following scenario and is discussed further in the Conclusions:

1. MIB was chosen as the primary factor over geosmin due to its persistence in the effluent versus its counterpart.
2. 70% removal of MIB was sufficient to capture the majority of the MIB with typical PAC dosages.

CONCLUSIONS

Thirteen PACs were compared for their ability to remove MIB and geosmin (spiked to approximately 60 ng/L and 30 ng/L respectively) from Reservoir 2 raw water collected on 03.09.16. PAC doses were chosen with a contact time of 20 minutes based on previous studies (Report # 19.1.0603.Final-Amended). Dose removal curves were generated for MIB and geosmin with the Authority's raw water. With this data, performance factors were then generated to compare the PACs. These performance factors could then be used to determine a weighted PAC cost that incorporates performance and cost of the carbon.

The calculation for the performance factors are as follows:

1. The performance factor for each PAC was determined by using 70% MIB removal as the target. For instance, if the Facility required the influent concentration of 30 ng/L to be reduced to 9 ng/L which is below the OTC (Odor Threshold Concentration), this would require 70% removal.
2. Based on the figure attached in the report, construct a horizontal line across the figure at 70% removal until it intersects each PAC (Figure 3 provides an approximation of the method). At the intersection construct a vertical line down to the x-axis. Each vertical line will provide the PAC dose required to remove 70% of the MIB. EPS increased the precision of this method by adjusting the x-axis values in Microsoft Excel and the results are shown in Table 1 below.
3. Divide the dose for each PAC that achieves the target removal (i.e., 70%) by the smallest dose of the PAC that achieves the target removal. This determines the relative performance factors. For example,
 - $J = 28.70/28.70 = 1.00$
 - $C = 38.75/28.70 = 1.35$
4. Finally, by multiplying the performance factor by the cost submitted by each carbon vendor, the best PAC based on performance and cost can be chosen.

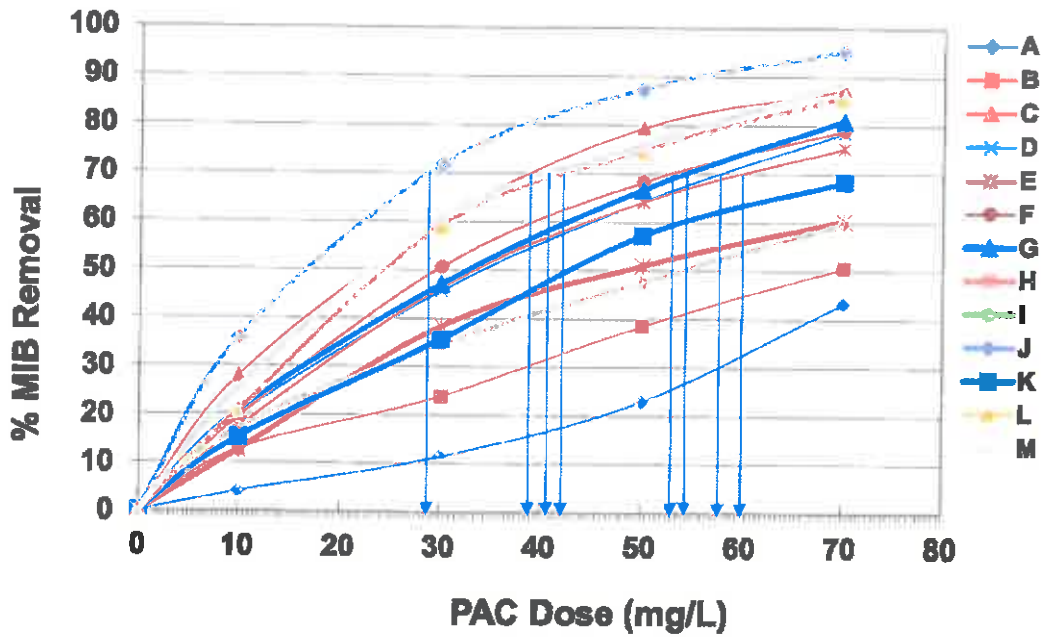


Figure 3. Example of Performance Factor Calculation at 70% MIB Removal for Peace River

Table 1. Performance Factors Required to Meet 70% MIB Removal

PAC	PAC Dose (mg/L)	Performance Factor
A	NA	NA
B	NA	NA
C	38.75	1.35
D	57.75	2.01
E	60.00	2.09
F	52.95	1.84
G	54.45	1.90
H	NA	NA
I	NA	NA
J	28.70	1.00
K	NA	NA
L	42.10	1.46
M	40.60	1.41

Note that changes in raw water quality (e.g., seasonal changes) or activated carbon quality could influence the results presented. Finally, the trends and performance depicted here are specific to the Peace River Facility only.

REFERENCES

- Chen G, Dussert BW, Suffet IH, 1997. Evaluation of Granular Activated Carbons for Removal of Methylisoborneol to Below Odor Threshold Concentration in Drinking Water. *Water Research*, 31:5:1155-1163.
- Gillogly TET, Snoeyink VL, Elarde JR, Wilson CM, Royal EP, 1998. ¹⁴C-MIB Adsorption on PAC in Natural Water. *JAWWA*, 90:1:98-108.
- Herzing DR, Snoeyink VL, Wood NF, 1977. Activated Carbon Adsorption of the Odorous Compounds 2-Methylisoborneol and Geosmin. *JAWWA*, 69:4:223.
- Lalezary S, Pirbazari M, McGuire MJ, Kranser SW, 1984. Air Stripping of Taste and Odor Compounds From Water. *JAWWA*, 76:3:83-87.
- Lalezary S, Pirbazari M, McGuire MJ, 1986a. Evaluating Activated Carbons for Removing Low Concentrations of Taste- and Odor-Producing Organics. *JAWWA*, 79:11:76.
- Lalezary S, Pirbazari M, McGuire MJ, 1986b. Oxidation of Five Earthy-Musty and Odor Compounds. *JAWWA*, 78:3:62.
- Pendleton P, Wong SH, Schumann R, Levay G, Denoyel R, Rouquerol J, 1997. Properties of Activated Carbon Controlling 2-Methylisoborneol Adsorption. *Carbon*, 35:8:1141-1149.
- Suffet IH, Corado A, Chou D, Butterworth S, 1996. AWWA Taste and Odor Survey. *JAWWA*, 88:4:168-180.
- Vik EA, Storhaug R, Naes H, Utkilen HC, 1988. Pilot Scale Studies of Geosmin and 2-Methylisoborneol Removal. *Water Science and Technology*, 20:8/9:229-236.

APPENDIX A

QA/QC Report

A		MIB				Geosmin				
Concentration (mg/L)	Amount 1	Amount 2	Average (ng/L)	% RSD	MIB % Removal	Amount 1	Amount 2	Average (ng/L)	% RSD	Geosmin % Removal
0	66.34	63.15	64.7	3.5	0	31.34	28.33	29.8	7.1	0
10	64.46	59.74	62.1	5.4	4.1	25.79	27.01	26.4	3.3	11.5
30	59.50	55.18	57.3	5.3	11.4	19.73	18.59	19.2	4.2	35.8
50	52.38	47.47	49.9	6.9	22.9	14.85	13.85	14.4	4.9	51.9
70	35.78	37.74	38.8	3.8	43.2	10.30	10.78	10.5	3.2	64.7
B		MIB				Geosmin				
Concentration (mg/L)	Amount 1	Amount 2	Average (ng/L)	% RSD	MIB % Removal	Amount 1	Amount 2	Average (ng/L)	% RSD	Geosmin % Removal
0	66.34	63.15	64.7	3.5	0	31.34	28.33	29.8	7.1	0
10	54.21	58.70	56.5	5.6	12.8	23.04	22.62	22.8	1.3	23.5
30	50.36	48.10	49.2	3.2	24.0	15.57	14.54	15.1	4.8	49.5
50	41.95	37.65	39.8	7.6	38.5	9.29	9.20	9.2	0.7	69.0
70	31.14	32.80	32.0	3.7	50.6	5.38	5.23	5.3	2.0	82.2
C		MIB				Geosmin				
Concentration (mg/L)	Amount 1	Amount 2	Average (ng/L)	% RSD	MIB % Removal	Amount 1	Amount 2	Average (ng/L)	% RSD	Geosmin % Removal
0	64.97	66.95	66.0	2.1	0	30.17	30.78	30.5	1.4	0
10	47.58	47.39	47.5	0.3	28.0	15.92	15.74	15.8	0.8	48.1
30	26.32	26.33	26.3	0.0	60.1	4.59	4.50	4.5	1.4	85.1
50	13.87	13.41	13.6	2.4	79.3	2.59	2.89	2.7	7.7	91.0
70	8.67	8.18	8.4	4.1	87.2	0.99	0.99	1.0	0.0	96.8
D		MIB				Geosmin				
Concentration (mg/L)	Amount 1	Amount 2	Average (ng/L)	% RSD	MIB % Removal	Amount 1	Amount 2	Average (ng/L)	% RSD	Geosmin % Removal
0	64.97	66.95	66.0	2.1	0	30.17	30.78	30.5	1.4	0
10	54.01	52.05	53.0	2.6	19.6	20.34	20.75	20.5	1.4	32.6
30	34.84	36.94	35.9	4.1	45.6	9.44	9.26	9.4	1.4	69.3
50	24.00	23.26	23.6	2.2	64.2	4.46	4.45	4.5	0.2	85.4
70	14.51	14.01	14.3	2.5	78.4	2.53	2.30	2.4	6.7	92.1

E	MIB					Geosmin				
Concentration (mg/L)	Amount 1	Amount 2	Average (ng/L)	% RSD	MIB % Removal	Amount 1	Amount 2	Average (ng/L)	% RSD	Geosmin % Removal
0	65.03	65.14	65.1	0.1	0	25.95	27.00	26.5	2.8	0
10	54.41	53.19	53.8	1.6	17.3	17.23	17.43	17.3	0.8	34.5
30	33.87	35.92	34.9	4.2	46.4	7.67	7.78	7.7	1.0	70.8
50	22.87	23.92	23.4	3.2	64.1	4.28	4.19	4.2	1.5	84.0
70	16.47	15.77	16.1	3.1	75.2	3.14	2.82	3.0	7.6	88.7
F	MIB					Geosmin				
Concentration (mg/L)	Amount 1	Amount 2	Average (ng/L)	% RSD	MIB % Removal	Amount 1	Amount 2	Average (ng/L)	% RSD	Geosmin % Removal
0	65.03	65.14	65.1	0.1	0	25.95	27.00	26.5	2.8	0
10	52.12	52.77	52.4	0.9	19.4	15.41	15.45	15.4	0.2	41.7
30	31.44	32.81	32.1	3.0	50.6	5.26	5.22	5.2	0.5	80.2
50	20.91	20.51	20.7	1.4	68.2	2.67	2.65	2.7	0.5	90.0
70	14.59	12.88	13.7	8.8	78.9	0.99	0.99	1.0	0.0	96.3
G	MIB					Geosmin				
Concentration (mg/L)	Amount 1	Amount 2	Average (ng/L)	% RSD	MIB % Removal	Amount 1	Amount 2	Average (ng/L)	% RSD	Geosmin % Removal
0	62.60	66.89	64.7	4.7	0	29.92	31.75	30.8	4.2	0
10	50.05	52.70	51.4	3.6	20.6	18.45	17.63	18.0	3.2	41.5
30	33.33	35.25	34.3	4.0	47.0	5.12	5.44	5.3	4.3	82.9
50	22.43	20.88	21.7	5.1	66.5	2.20	2.28	2.2	2.5	92.7
70	12.88	11.87	12.4	5.8	80.9	2.27	3.43	2.9	28.8	90.8
H	MIB					Geosmin				
Concentration (mg/L)	Amount 1	Amount 2	Average (ng/L)	% RSD	MIB % Removal	Amount 1	Amount 2	Average (ng/L)	% RSD	Geosmin % Removal
0	62.60	66.89	64.7	4.7	0	29.92	31.75	30.8	4.2	0
10	56.78	56.43	56.6	0.4	12.6	24.22	23.72	24.0	1.5	22.3
30	41.32	38.47	39.9	5.1	38.4	11.04	10.38	10.7	4.4	65.3
50	31.99	31.52	31.8	1.0	50.9	5.87	5.84	5.9	0.4	81.0
70	25.05	26.29	25.7	3.4	60.4	3.70	3.64	3.7	1.2	88.1

I	MIB					Geosmin				
Concentration (mg/L)	Amount 1	Amount 2	Average (ng/L)	% RSD	MIB % Removal	Amount 1	Amount 2	Average (ng/L)	% RSD	Geosmin % Removal
0	62.60	66.89	64.7	4.7	0	29.92	31.75	30.8	4.2	0
10	54.20	53.18	53.7	1.3	17.1	26.23	23.57	24.9	7.6	19.2
30	42.56	42.10	42.3	0.8	34.6	15.21	14.30	14.8	4.4	52.1
50	33.62	34.30	34.0	1.4	47.5	9.74	9.89	9.8	1.1	68.2
70	25.64	26.45	26.0	2.2	59.8	6.38	6.80	6.6	4.5	78.6
J	MIB					Geosmin				
Concentration (mg/L)	Amount 1	Amount 2	Average (ng/L)	% RSD	MIB % Removal	Amount 1	Amount 2	Average (ng/L)	% RSD	Geosmin % Removal
0	66.49	63.19	64.8	3.6	0	30.21	28.78	29.5	3.4	0
10	41.55	41.64	41.6	0.2	35.8	11.00	11.44	11.2	2.8	62.0
30	17.94	18.80	18.4	3.3	71.7	2.47	2.56	2.5	2.5	91.5
50	8.56	7.92	8.2	5.5	87.3	0.99	0.99	1.0	0.0	96.6
70	2.84	3.39	3.1	12.6	95.2	0.99	0.99	1.0	0.0	96.6
K	MIB					Geosmin				
Concentration (mg/L)	Amount 1	Amount 2	Average (ng/L)	% RSD	MIB % Removal	Amount 1	Amount 2	Average (ng/L)	% RSD	Geosmin % Removal
0	64.32	65.51	64.9	1.3	0	29.69	30.92	30.3	2.9	0
10	56.66	53.43	55.0	4.1	15.2	23.63	26.23	24.9	7.4	17.7
30	41.66	41.92	41.8	0.4	35.6	11.98	10.96	11.5	6.3	62.2
50	28.06	27.58	27.8	1.2	57.1	5.13	4.76	4.9	5.3	83.7
70	21.76	19.36	20.6	8.3	68.3	2.77	2.41	2.6	9.8	91.5
L	MIB					Geosmin				
Concentration (mg/L)	Amount 1	Amount 2	Average (ng/L)	% RSD	MIB % Removal	Amount 1	Amount 2	Average (ng/L)	% RSD	Geosmin % Removal
0	67.43	66.48	67.0	1.0	0	31.71	32.23	32.0	1.2	0
10	53.78	52.28	53.0	2.0	20.8	18.11	18.26	18.2	0.6	43.1
30	26.21	28.53	27.4	6.0	59.1	6.57	6.79	6.7	2.3	79.1
50	16.27	17.57	16.9	5.4	74.7	2.80	2.99	2.9	4.6	90.9
70	9.71	9.32	9.5	2.8	85.8	2.21	2.18	2.2	1.0	93.1
M	MIB					Geosmin				
Concentration (mg/L)	Amount 1	Amount 2	Average (ng/L)	% RSD	MIB % Removal	Amount 1	Amount 2	Average (ng/L)	% RSD	Geosmin % Removal
0	67.43	66.48	67.0	1.0	0	31.71	32.23	32.0	1.2	0
10	47.39	52.56	50.0	7.3	25.4	18.43	17.71	18.1	2.8	43.5
30	26.18	26.57	26.4	1.0	60.6	6.21	6.51	6.4	3.3	80.1
50	16.77	15.71	16.2	4.6	75.7	3.79	3.81	3.8	0.4	88.1
70	7.70	7.60	7.7	0.9	88.6	2.00	1.94	2.0	2.2	93.8

References

Analyte	Method Reporting Limit	Target	Found	% Recovery	Control Limit
MIB (ng/L)	1.0 ng/L	5.00	4.86	97	80-120%
Geosmin (ng/L)	1.0 ng/L	5.00	4.90	98	80-120%

Analyte	Method Reporting Limit	Target	Found	% Recovery	Control Limit
MIB (ng/L)	1.0 ng/L	10.00	9.49	95	80-120%
Geosmin (ng/L)	1.0 ng/L	10.00	9.59	96	80-120%

Analyte	Method Reporting Limit	Target	Found	% Recovery	Control Limit
MIB (ng/L)	1.0 ng/L	25.00	24.91	99	80-120%
Geosmin (ng/L)	1.0 ng/L	25.00	24.66	98	80-120%

Analyte	Method Reporting Limit	Target	Found	% Recovery	Control Limit
MIB (ng/L)	1.0 ng/L	50.00	50.16	100	80-120%
Geosmin (ng/L)	1.0 ng/L	50.00	50.26	101	80-120%

Method Blanks

Analyte	Method Detection Limit	Blank Concentration
MIB (ng/L)	1.0 ng/L	<1.0
Geosmin (ng/L)	1.0 ng/L	<1.0

<Below the reporting limit

APPENDIX B

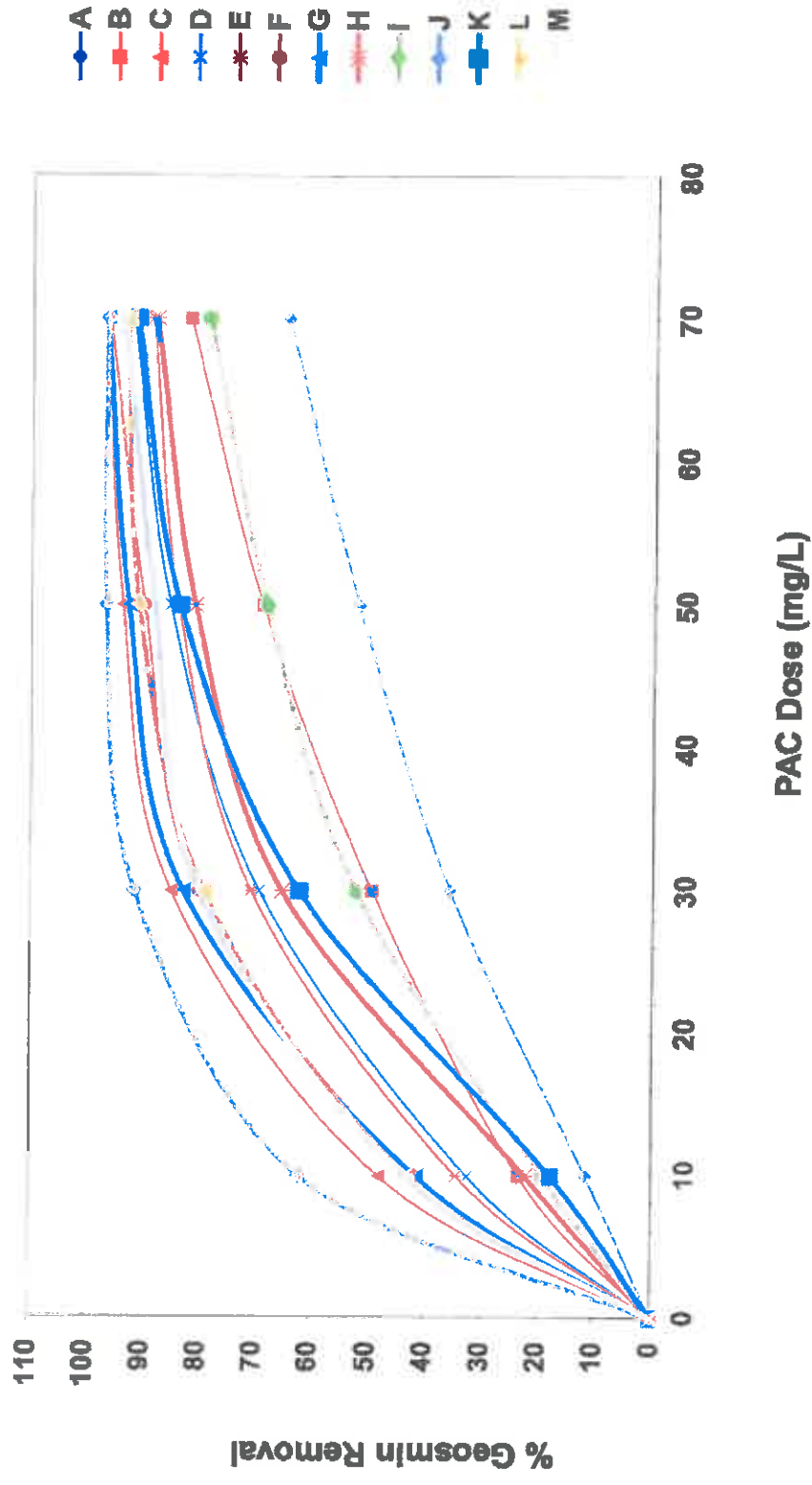


Figure 1. Peace River/Manasota Regional Water Supply Facility Geosmin Dose Removal Curve

APPENDIX B, continued

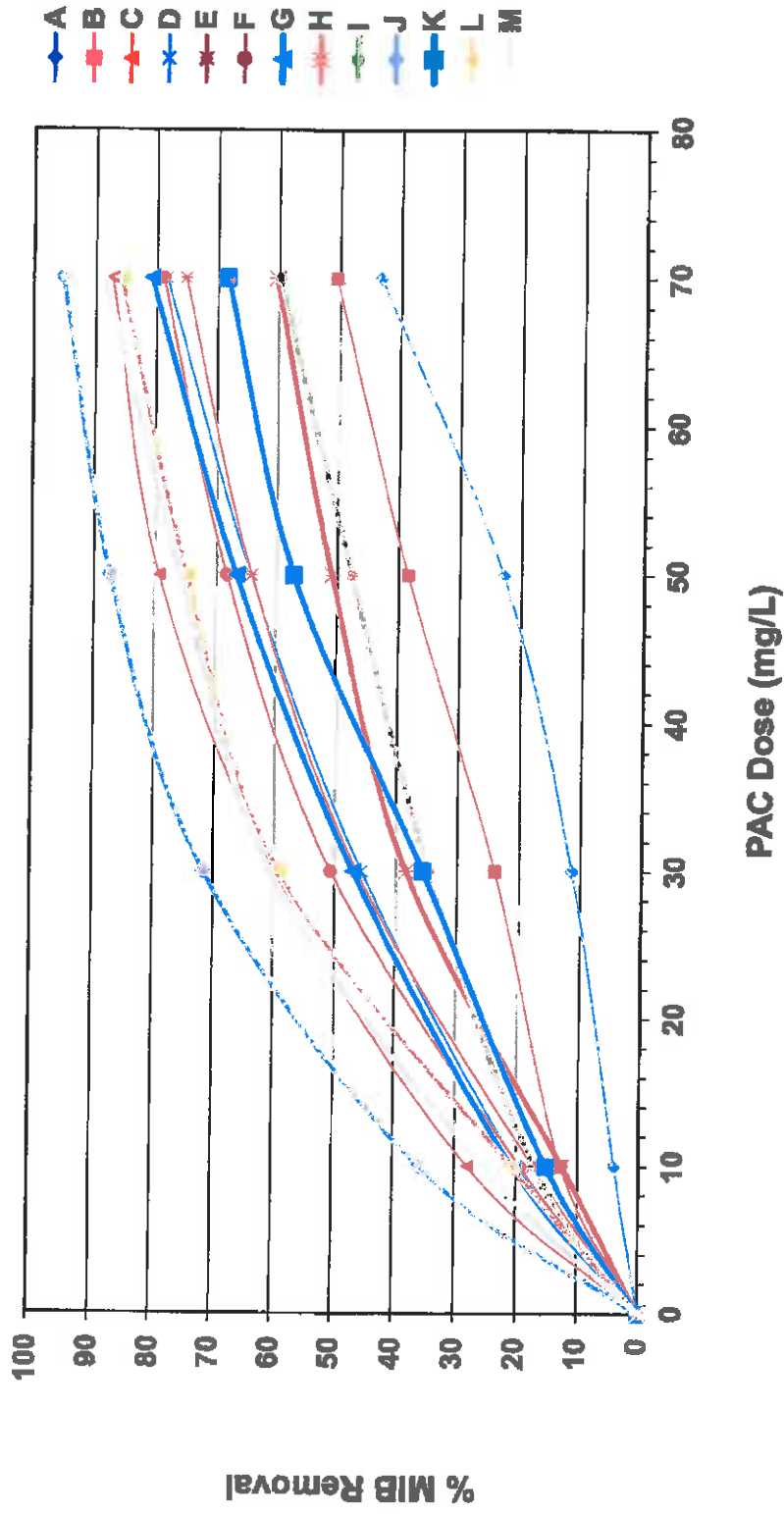


Figure 2. Peace River/Manasota Regional Water Supply Facility MIB Dose Removal Curve

TAB E
Contract

**CONTRACT FOR PURCHASE OF GOODS
WATER TREATMENT CHEMICALS**

This Contract for Purchase of Goods, Water Treatment Chemicals, hereinafter referred to as the "Agreement", is made and entered into on _____, 2016, between PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY, 9415 Town Center Parkway, Lakewood Ranch, Florida 34202, hereinafter referred to as "Authority", and _____ hereinafter referred to as "Seller".

WHEREAS the Authority desires to engage the Seller to provide water treatment chemicals for the Peace River Regional Water Supply Facility, hereinafter referred to as the "Peace River Facility" on an as-needed basis for a fixed price; and

WHEREAS the Seller desires to supply water treatment chemicals as described herein, and has the experience, personnel and resources to provide these chemicals in a timely manner.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter contained, the parties agree as follows:

ARTICLE 1. INTEGRATED AGREEMENT

The terms of this Agreement are intended by the parties as a final expression of their agreement with respect to its terms and as a complete and exclusive statement of its terms. The recitations are incorporated herein by reference.

ARTICLE 2. DESCRIPTION OF GOODS

The Seller undertakes to transfer ownership, sell and deliver possession to the Authority, and the Authority shall pay for, buy and accept the following water treatment chemicals:

These chemicals are to be furnished as described in Exhibit B Invitation to Bid, and hereinafter referred to as the "goods" or "chemicals".

ARTICLE 3. TIME AND PLACE OF DELIVERY

Delivery of the goods shall occur within five (5) business days of being requested by the Authority except for powder activated carbon which shall be delivered within ten (10) business days upon receipt of request for goods by the Authority.

The goods shall be delivered to and unloaded at the Peace River Facility, 8998 SW County Road 769, Arcadia, Florida 34269. Time is of the essence and the Seller shall be held strictly to the delivery date from the receipt of the purchase order. Chemicals not delivered by the date specified shall justify the Authority's option to terminate the contract. All deliveries shall be made between the hours of 8:00 am and 3:00 pm, Monday through Friday, excluding holidays, unless otherwise agreed to by the Authority.

Prior to bidding, the Seller shall have visited each delivery point to confirm that its equipment is compatible with the Authority's unloading and storage facilities at no inconvenience to the Authority. Certified weight or volume (as applicable to unit costs) tickets are required with each delivery. The Seller shall provide a separate delivery ticket for each delivery and shall obtain an authorized signature from the Authority. At least one copy of the delivery ticket and corresponding weight or volume (as applicable to unit costs) ticket shall be provided to the Authority with each delivery.

Each individual purchase shall be assigned a Purchase Order. Separate invoicing shall be required for each delivery, showing the Purchase Order number. Seller shall also comply with all requirements of the Safety Measures attached hereto as Exhibit E.

ARTICLE 4. PRICE

The unit prices, FOB destination quoted by the Seller in its Bid Form, and attached as Exhibit A, shall be considered firm throughout the TERM of the contract. The prices quoted shall be used for payment and shall include payment in full for all transportation, labor, equipment and other costs used in delivering all goods to the point of delivery. There shall be no cost adjustments.

Storage tanks, where required, for goods offered under this Agreement shall be furnished by the supplier(s) at the Authority's option on loan, and at no cost to the Authority. Estimated quantities are not guaranteed. The Authority is not obligated to make any minimum quantity purchases from the Seller during the contract term.

ARTICLE 5. CANCELLATION

Failure by the Seller to comply with terms of this Agreement shall be deemed a breach of contract claim against Seller and shall, at the Authority's sole and absolute discretion, result in the cancellation of this Agreement.

ARTICLE 6. COMPENSATION

The Seller shall prepare and submit to the Authority invoices for goods delivered. The Executive Director shall approve payment after verifying delivery is in compliance with all requirements of this Agreement. Payment shall be made in accordance with the Florida Prompt Payment Act.

ARTICLE 7. SELLER'S ASSIGNMENT OF PAYMENT

The Seller may not assign the right to receive payment from the Authority.

ARTICLE 8. EXPRESS WARRANTY

In addition to any implied warranties of the Uniform Commercial Code, the Seller warrants to the Authority that the goods being sold under this agreement shall strictly meet the specifications in Exhibit D.

ARTICLE 9. RIGHT OF INSPECTION

The Authority shall have the right to inspect the goods at the time and place of delivery, before payment or acceptance.

ARTICLE 10. ALLOCATION OF RISK OF LOSS

Any risk or loss associated with the goods remains with the Seller until the time of acceptance of the goods by the Authority at the place of delivery.

ARTICLE 11. REJECTION OF NONCONFORMING GOODS

Rejection of goods for failure to conform to the requirements of this Agreement must be made within thirty (30) days after their delivery and inspection. The Authority shall send written notification of the rejection to the Seller. The notice must state the basis of the alleged nonconformity of the goods and describe the portion of the shipment being rejected.

On receipt of notification of rejection, the Seller shall immediately arrange for the return shipment of the goods at the Seller's expense. The Seller shall ship replacement conforming goods within 10 business days of the notice of rejection unless the Authority notifies the Seller to forgo the shipment before that date.

ARTICLE 12. ADDITIONAL REMEDIES OF THE AUTHORITY

In addition to any of the remedies provided under the Uniform Commercial Code, if the Seller is unable to provide services because of breakdown, product scheduling, lack of product or equipment, then the Authority may, on an order basis, go to the next qualified bidder.

ARTICLE 13. EXCLUSIVE REMEDIES OF THE SELLER

The exclusive remedies of the Seller under this Agreement are to have any goods not paid for returned to the Seller, or to receive, on demand, the purchase price for any goods not paid for in accordance with the terms of this Agreement and not returned within sixty (60) days of the demand.

ARTICLE 14. WAIVER

No claim or right arising out of a breach of this Agreement can be discharged by the Authority in whole or in part by a waiver or renunciation of the claim or right unless the waiver or renunciation is supported by consideration, is in writing, and is signed by the Executive Director or appointed designee.

ARTICLE 15. SELLER'S DELEGATION

The Seller may not delegate its performance in the delivery of goods under this Agreement without the prior written consent of the Authority. Written consent shall be in Authority's sole discretion, and if granted shall be given once the Authority has received satisfactory assurances that the quality of goods being substituted shall be equivalent to that of the contract goods, that all terms of the Contract Documents are complied with, and that the delegation shall not otherwise adversely affect the Authority's rights and obligations with regard to other sellers.

ARTICLE 16. SELLER'S INSURANCE REQUIREMENTS

The Seller shall, at all times during the term of this Agreement, secure and maintain the following forms and amounts of insurance coverage during the life of this Agreement:

- *Worker's Compensation and Employer's Liability Insurance.* The Seller shall secure and maintain Worker's Compensation insurance for all employees employed including supervision, administration and management personnel. All such insurance shall comply with Florida Workers' Compensation Law. Coverage shall include a waiver or subrogation clause in favor of the Authority. Seller shall also be protected against claims for injury, disease, or death of employees which, for any reason, may not fall within the provisions of a workers' compensation law.

The liability limits shall be not less than:

Workers' compensation	Statutory
Employers' liability	\$100,000 each occurrence \$500,000 Disease-Policy Limit \$100,000 Disease – Each Employee

- *Business Automobile and Public Liability Insurance.* The Seller shall secure and maintain Business Automobile and Public Liability insurance that shall be occurrence type, written in comprehensive form, and shall include Seller's owned, non-owned and hired motor vehicle coverage. Seller shall secure and maintain other Public Liability insurance against all other Bodily Injury, Property Damage and Personal exposures. Additionally Seller shall be required to carry Public Liability coverage including: (1) On and Off Premises Operation Liability; (2) Personal Injury Liability Insurance; and (3) Independent Contractor Liability. All liability insurance

shall be written on an occurrence basis and shall not be written on a claim-made basis.

The liability limits shall be not less than:

Business Automobile & Public Liability Insurance	\$1,000,000 combined single limit for each occurrence
---	--

- *Commercial General Liability Insurance.* Seller shall secure and maintain Commercial General Liability Insurance that shall be occurrence type, written in comprehensive form, and shall protect Seller, and Authority as additional insureds, against claims arising from injuries, sickness, disease, or death of any person or damage to property arising out of performance of the Work. This policy must include a pollution liability coverage. The policy shall also include a per project aggregate limit endorsement, personal injury liability coverage, contractual liability coverage and products liability coverage, and coverage for blasting, explosion, collapse of buildings, and damage to underground property.

The liability limits shall be not less than:

Bodily injury and property damage	\$1,000,000 combined single limit for each occurrence
--------------------------------------	--

All insurance policies, except the Workers' Compensation policy, shall list the Authority as an Additional Insured. Seller shall provide Authority with Certificates of Insurance for all policies at least 10 business days before commencing work. Failure of Seller to maintain said insurance coverage shall be deemed a breach of the terms of the Agreement and may, at Authority's sole and absolute discretion, result in the immediate termination of this Agreement. Failure of Authority to demand such certificates or other evidence of Seller's full compliance with these insurance requirements or failure of

Authority to identify a deficiency in compliance from the evidence provided shall not be construed as a waiver of Seller's obligation to maintain such insurance.

ARTICLE 17. CONTRACT TERM

Term of this contract is for one (1) year commencing on _____, 2016 through _____, 2017 and may be extended for two (2) one (1) year periods upon mutual written agreement of both parties.

Written agreement for each contract extension shall be approved no later than January 15 for the ensuing contract year. All terms including ARTICLE 4. PRICES shall remain the same.

ARTICLE 18. CONTRACT DOCUMENT

The Contract Documents which comprise the contract between the Authority and the Seller are attached hereto and made a part hereof and consists of the following:

- This Agreement;
- Bid Form, attached as Exhibit A;
- Invitation to Bid, attached as Exhibit B;
- Instruction to Bidders, attached as Exhibit C
- Technical Specifications, including the Minimum Specifications for Water Treatment Chemicals, attached as Exhibit D;
- Safety Measures, attached as Exhibit E; and
- Any written amendments or modification to this Agreement.

ARTICLE 19. TERMINATION

This Agreement may be terminated by the Authority, without cause, upon seven (7) days written notice.

ARTICLE 20. GOVERNING LAW

This Agreement shall be governed by and construed in accordance with the Uniform Commercial Code - Sales. Wherever the term "Uniform Commercial Code" is used, it shall be construed as meaning the Uniform Commercial Code as adopted in the State of Florida, as effective and in force on the date of this Agreement.

Should litigation be necessary to enforce any term or provision of this Agreement, or to collect any portion of the amount payable under this Agreement, then all litigation and collection expenses, witness fees, court costs and reasonable attorneys' fees shall be paid to the prevailing party. The venue of any litigation resulting out of this Agreement shall be in the county or circuit court, whichever is applicable, in and for Manatee County, Florida.

ARTICLE 21. PARTIES BOUND

This Agreement shall be binding on and inure to the benefit of its parties and their partners, successors, assigns and legal representatives when permitted by this Agreement.

ARTICLE 22. NON-EXCLUSIVITY

This is not an exclusive contract. The Authority has the right to contract with other suppliers for the purchase of water treatment chemicals described in Exhibit B from one or more suppliers.

ARTICLE 23. MODIFICATION

This Agreement may be modified only in writing and signed by both parties or their duly authorized agents.

ARTICLE 24. INDEMNIFICATION

The Seller shall indemnify and save the Authority, its agents, servants and employees harmless from and against any claim, costs, including its attorney's fees, or cause of action of whatsoever kind or nature caused by negligent error, omission or act of the Seller, its agents, servants or employees in the performance of this Agreement.

ARTICLE 25. INDEPENDENT CONTRACTOR

The Seller expressly warrants that it will not represent at any time or in any manner that the Seller or any of its agents, servants or employees are agents, servants or employees of the Authority. It is understood and agreed that the Seller is, and shall at all times remain as to the Authority, a wholly independent contractor and that the Seller's obligations to the Authority are solely as prescribed by this Agreement. It shall be the responsibility of the Seller to assure compliance with Local, State or Federal laws and regulations or other requirements as each may apply to the sale, delivery and goods purchased pursuant to this Agreement.

ARTICLE 26. SEVERABILITY

In the event any one or more of the provisions contained in this Agreement shall for any reason be held invalid, illegal, or unenforceable in any respect, the invalidity, illegality, or unenforceability shall not affect any other provision and this Agreement shall be construed as if the invalid, illegal, or unenforceable provision had never been contained in it.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date and year first written above.

ATTEST:

**Peace River Manasota
Regional Water Supply Authority**

Patrick J. Lehman, Executive Director

WITNESS

SELLER:

By: _____

By: _____

Print Name & Title

APPROVED AS TO FORM:

Douglas Manson, General Counsel
Peace River Manasota
Regional Water Supply Authority

**PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 06, 2016**

**CONSENT AGENDA
ITEM 7**

Award Contract for Sludge Loading and Hauling Services

Recommended Action -

Motion to award and authorize Executive Director to execute Contract for Sludge Loading and Hauling Services to the lowest responsible and responsive bidder, D. M. Construction Corporation, in the amount of \$7.45 per ton.

Bids were requested for the sludge loading and hauling of dewatered sludge from the Peace River Facility in accordance with the Authority's Procurement Policy. Three bids were timely received, and opened on March 15, 2016. Staff recommends award of the Contract for Sludge Loading and Hauling Services to the recommended lowest responsible and responsive bidder, D. M. Construction Corporation, in the amount of \$7.45 per ton. This represents a \$0.34 increase over our current vendor price of \$7.11 which has been in effect since 2013. Supporting materials including notice of award/bid tab and Contract are attached.

Funds for these purchases are available in the FY 2016 budget.

Budget Action – None

TAB A
Notice of Award
Bid Tab

**NOTICE OF AWARD [Revised March 22, 2016]
Sludge Loading and Hauling
Bids Due March 15, 2016**

Recommended Action - Award Contract for Sludge Loading and Hauling to the recommended lowest responsible and responsive bidder, D. M. Construction Corporation, in the amount of \$7.45 per ton.

Bids were requested for the sludge loading and hauling contract in accordance with the Authority's Procurement Policy.

Staff recommends the Authority Board of Directors award contract for sludge loading and hauling to the lowest responsible and responsive bidder, D. M. Construction Corporation, in the amount of \$7.45 per ton at the Authority's Board meeting on April 6, 2016. Bid tabulation is below.

BID TAB

COMPANY (alphabetically listed)	BID AMOUNT
D. M. Construction Corporation	\$7.45/TON
Delta Pioneer Inc.	\$10.97/TON
U. S. Water Services Corporation*	\$6.59/TON*

***U. S. Water Services Corporation withdrew their bid effective March 22, 2016.**

Failure to file a protest within the time prescribed in section 120.57(3), Florida Statutes, or failure to post the bond or other security required by law within the time allowed for filing a bond shall constitute a waiver of proceedings under chapter 120, Florida Statutes.

Posted: March 23, 2016

TAB B
Contract

CONTRACT

THIS CONTRACT ("Agreement") is made and entered into this __ day of May, 2016 by and between PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY ("Owner"), 9415 Town Center Parkway, Lakewood Ranch, Florida, 34202 and _____ ("Contractor"), whose address is _____ for the project (the "Project") known as Sludge Loading and Hauling Services that will be conducted at the Owner's Peace River Water Supply Facility on SW County Road 769, Arcadia Florida 34269 (the "Site").

In consideration of the mutual promises and agreements set forth below, the parties hereto agree as follows:

1. SCOPE OF WORK. Contractor shall furnish all labor, materials, tools, equipment and supervision necessary for and incidental to the proper execution and completion of the Project as further defined in the Technical Specifications & Conditions for Sludge Loading and Hauling Services, which are incorporated herein and attached as Exhibit "A" ("Work") and perform in accordance with the terms and conditions of this Agreement, the Technical Specifications and Conditions, the Owner's Request for Bids, including all Addenda, and the Contractor's response to Owner's Request for Bids, which are both incorporated herein by reference.

The proposed Work is generally described as follows:

The Work is to remove dewatered sludge from the Site and haul it offsite to the Charlotte County Landfill. Contractor will be paid on a unit cost basis for the tonnage loaded and hauled offsite. The official weigh station tickets from the landfill will be the basis for payment. Contractor will provide and pay for all materials, labor, and other items necessary to complete the work and provide all services that may become necessary to execute, complete and deliver the work specified herein. All Work is to be performed in accordance with these specifications, schedules, and industry standards.

2. CONTRACT PRICE. Owner shall pay Contractor, for performance and completion of the Work, on a unit cost basis of a total of \$_____ per ton ("Contract Price") for Work. There

shall be no fuel escalation adjustment provision, i.e., the Contract Price must be firm for duration of the Contract and any agreed upon extension.

3. PAYMENTS TO CONTRACTOR. Payment shall be made to the Contractor within forty-five (45) days of receipt of an invoice with adequate supporting documentation to satisfy auditing purposes. Invoices shall be submitted to the Owner on a monthly basis at the following address:

Peace River Manasota Regional Water Supply Authority
9415 Town Center Parkway
Lakewood Ranch, Florida 34202

Failure of the Contractor to submit invoices to the Owner in the manner provided herein shall relieve the Owner of its obligation to pay within the aforementioned timeframe. Owner will pay the Contract Price to Contractor on a monthly basis in accordance Florida's Prompt Payment Act.

3.1 Proper Invoice. All invoices must include the following information: (1) Contractor's name, address and phone number (include remit address, if different than principal address in the introductory paragraph of this Agreement); (2) Contractor's invoice number and date of invoice; (3) Dates of service; (4) Copies of Charlotte County Landfill weigh station tickets; and (5) Supporting documentation necessary to satisfy auditing purposes, for cost and Project completion. Invoices that do not conform to this paragraph and other requirements of this Agreement will not be considered a proper invoice. Compensation shall not be provided for any missing weigh station ticket. It is Contractor's responsibility to present an invoice package that is whole and complete. Charlotte County bills tipping fees directly to Owner; therefore, disposal costs or disposal fees shall not be included in any invoice.

3.2 Improper Invoice Received. If an invoice does not meet the requirements of this Agreement, the Owner will reject the invoice in writing within twenty (20) business days after receipt of the invoice, specifying the deficiency and the action necessary to make the invoice proper. If a corrected invoice is provided to the Owner, the corrected invoice will be paid or rejected within ten (10) business days after the date the corrected invoice is stamped as received by the Owner. If the Contractor declines to modify the invoice, the Contractor must notify the Owner's Project

Manager in writing within five (5) business days of receipt of notice of rejection that the Contractor will not modify the invoice and state the reason(s) therefore. Within five (5) business days of receipt of such notice, if not informally resolved through discussion with the Owner Project Manager, the dispute will be forwarded to the Owner Executive Director, and a final determination will be issued by the Owner in accordance with paragraph 3.3.

3.3 In the event any dispute or disagreement arises during the course of the Project, the Contractor will continue to perform the Work in accordance with the Contract Documents. The Contractor is under a duty to seek clarification and resolution of any issue, discrepancy, or dispute by providing the details and basis of the dispute to the Owner's Project Manager no later than ten (10) days after the precipitating event. If not resolved by the Project Manager, within ten (10) days of receipt of notice, the dispute will be forwarded to the Owner's Executive Director. The Owner's Executive Director will issue the Owner's final determination. The Contractor's continuation of the Work as required under this provision shall not constitute a waiver of any legal remedy available to the Contractor concerning the dispute.

3.4 Final Invoice. The final invoice shall be submitted no later than forty-five (45) days after the completion date. Final invoices that are submitted after the requisite date will be subject to a penalty of ten percent (10%) of the invoice. This penalty may be waived by the Owner in its sole judgment and discretion, upon a showing of special circumstances that prevent the timely submittal of the final invoice. Contractor shall request approval for delayed submittal of the final invoice not later than ten (10) days prior to the due date and state the basis for the delay.

4. SCOPE EXCLUSIONS. Not applicable.

5. COMMENCEMENT AND COMPLETION. Contractor shall commence performing the Work upon the effective date of this Agreement and Contractor shall continue to execute the Work in accordance with the Contract for a term of twelve (12) months from the Effective Date. This Contract may be renewed for two (2) additional (1) year terms for a total of three years. Renewal under the same terms and conditions of the Contract, including the Contract Price, must be agreed to by both parties in writing.

6. CHANGES IN THE WORK. Owner may, without invalidating this Agreement, order changes in the Work consisting of additions, deletions or modifications. Contractor shall not be

entitled to any additional compensation or extension of the deadline for completion of the Work unless the change is authorized by a written change order signed by Owner. The additional compensation and extension of deadlines for completion, if any, agreed upon in such written change orders shall constitute an accord and satisfaction of all claims of the Contractor relating to the subject matter of the change order.

7. **CONTRACTOR REPRESENTATIONS.** Contractor represents and warrants to Owner that:

a. Contractor holds all contractor and other licenses which are required in order to perform the Work under this Agreement;

b. Contractor shall supervise and direct the Work using Contractor's best skill and attention and Contractor represents and warrants to Owner that its Work shall be of the highest quality; and

c. Contractor has sufficient equipment and personnel resources to accomplish the Work.

8. **WARRANTY.** Not applicable.

9. **WAIVER.** Any failure of Owner to insist upon strict compliance with any of the terms or conditions hereof shall not be deemed a waiver or relinquishment of the right to subsequently insist upon strict compliance with the same or any other term or condition, or constitute a waiver or relinquishment of any similar right or power hereunder at any subsequent time.

10. **DEFAULT AND TERMINATION.** If Contractor defaults or fails or neglects to carry out the Work in accordance with this Agreement or otherwise fails to perform any provision of this Agreement, Owner shall provide verbal notice of the default to the Contractor, and will use its best efforts to provide written notice. In the event the Contractor fails to cure the default within twenty-four (24) hours from the verbal notice, or as otherwise specified by the Owner, unless otherwise specified in writing by Owner, Owner shall have the right to:

a. terminate the Contractor without further notice;

- b. re-bidding the Contract or complete any of the remaining items of Work through any other appropriate method and back charge Contractor for all costs incurred; and
- c. exercise all other rights and remedies available at law or in equity.

11. **WARRANTIES.** By execution of this Agreement, Contractor represents that Contractor has visited the site and has become familiar with the Project and the local conditions under which the Work is to be performed.

12. **SITE CONDITIONS.** Contractor shall keep the premises and surrounding areas free from accumulation of waste materials and rubbish caused by operations under this Agreement. Upon the completion of the Work, Contractor shall remove from and about the Project all waste materials, rubbish, Contractor's tools, construction equipment, machinery and surplus materials. The only exception to this is that the Contractor will be allowed to store large earthmoving equipment onsite to minimize the costs associated with remobilizing such equipment with each hauling event. However, equipment being stored onsite must be the same equipment being used for the Work. Contractor is prohibited from using Authority property as a storage lot for unused equipment.

13. **TIME.** Time is of the essence of this Agreement. By executing this Agreement, Contractor confirms that the completion time set forth in paragraph 5 provides a reasonable period of time for Contractor's performance of the Work.

14. **WITHHOLDING OF PAYMENTS.** The Owner may, in addition to other remedies available at law or equity, retain such monies from amounts due Contractor as may be necessary to satisfy any claim for damages, penalties, costs and the like asserted by or against the Owner. The Owner may set off any liability or other obligation of the Contractor or its affiliates to the Owner against any payments due the Contractor under any contract with the Owner. Payments to Contractor may be withheld on account of (i) defective work not remedied; (ii) claims filed or asserted by any third parties; (iii) failure of Contractor to make payments due to subcontractors or for labor, materials or equipment; (iv) damage to Owner's property; (v) evidence that the Work will not be completed on or before completion times set forth in paragraph 4 and that the unpaid balance of the Contract Price will not be adequate to cover Owner's actual damages arising out of the anticipated delay; or (vi) failure to perform the Work In accordance with this

Agreement. Amounts withheld under this subparagraph will not be considered due and will not be paid until the ground(s) for withholding payment have been remedied.

15. **LIABILITY AND INDEMNIFICATION.** The Contractor assumes all risks relating to the Project and agrees to be solely liable for, and to indemnify and hold the Owner harmless from all claims, loss, damage and other expenses, including attorneys' fees and costs and attorneys' fees and costs on appeal, arising from the Project; provided, however, that the Contractor shall not indemnify for that portion of any loss or damages proximately caused by the negligent act or omission of the Owner's officers, employees, contractors and agents. This Agreement does not in any way constitute an agency relationship between the Owner and the Contractor. The Contractor agrees to indemnify and hold the Owner harmless from all claims, loss, damage and other expenses, including attorneys' fees and costs and attorneys' fees and costs on appeal, arising from the negligent acts or omissions of the Contractor's officers, employees, contractors and agents related to its performance under this Agreement. Nothing in this Agreement shall be interpreted as a waiver of the Owner's sovereign immunity or an extension of its liability beyond the limits established in Section 768.28, F.S., nor be construed as consent by the Owner to be sued by third parties in any manner arising out of this Agreement. Contractor acknowledges that the first \$100.00 of the Contract Price, and other good and valuable consideration, is sufficient and specifically for the Contractor's indemnification obligations under this paragraph.

16. **SAFETY PRECAUTIONS.** Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance under this Agreement. Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to:

- (i) employees on the Project and other persons who may be affected thereby;
- (ii) the work and materials and equipment to be incorporated therein; and
- (iii) other property at the site or adjacent thereto.

Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on the safety of persons and property and their

protection from damage, injury or loss. Contractor shall promptly remedy damage and loss to property at the site caused in whole or in part by Contractor, or anyone directly or indirectly employed by Contractor or anyone for whose acts Contractor may be liable and for which Contractor is responsible.

17. **INSURANCE.** Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located insurance for protection from claims under workers' or workmen's compensation acts or other employee benefits acts which are applicable, claims for damages because of bodily injury, including death, and from claims for damages, other than to the work itself, to property that may arise out of or result from Contractor's operations under this Agreement, whether such operations be by Contractor or by anyone directly or indirectly employed by Contractor. This workman's compensation insurance shall be written for not less than Three Hundred Thousand and No/100 Dollars (\$300,000.00). Contractual liability insurance applicable to meet Contractor's obligations for Indemnification shall be written for not less than One Million and No/100 Dollars (\$1,000,000.00) and both certificates of insurance shall name Owner, it's officers, agents and employees as additional insured.

Comprehensive Automobile Liability. Coverage must be afforded on a form no more restricted than the latest edition of the Comprehensive Automobile Liability Policy filed by the Insurance Services Office and must include:

- a. \$1,000,000.00 combined single limit per accident for bodily injury and property damage.
- b. Owned Vehicle.
- c. Hired and Non-Owned Vehicles.
- d. Employee Non-Ownership.
- e. Additional Insured. Authority is to be specifically included as additional insured.
- f. Notice of Cancellation and/or Restriction. The policy must be endorsed to provide Authority with thirty (30) days written notice of cancellation and/or restriction.

Certificates of such Insurance shall be delivered to Owner prior to the commencement of the Work.

18. **CORRECTIONS.** Contractor shall promptly correct any Work rejected by Owner as falling to conform to the requirements of this Agreement whether observed before or after completion of any such Work.

19. **GOVERNING LAW.** The laws of the State of Florida shall govern the validity, interpretation, construction and performance of this Agreement and venue for any suit involving this Agreement shall be in Hillsborough County, Florida, if filed in state court and in the Middle District of Florida if filed in federal court.

20. **MODIFICATION.** This Agreement shall not be amended, modified or supplemented except in writing signed by all parties except as provided for in paragraph 6. This Agreement sets forth the entire understanding between the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous, written, oral, expressed or implied, communications, agreements and understandings with respect to the subject matter hereof.

21. **ATTORNEY FEES.** If there is any legal action or proceeding between Owner and Contractor from or based on this Agreement, the unsuccessful party to such action or proceeding shall pay to the prevailing party all costs and expenses, including reasonable attorneys' fees, incurred by such prevailing party in such action or proceeding and in any appeal in connection therewith.

22. **SEVERABILITY.** If any provision or provisions of this Agreement shall be held to be invalid, illegal, or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

23. **SURVIVAL.** The provisions of this Agreement that require performance after the expiration or termination of this Agreement shall remain in force notwithstanding the expiration or termination of this Agreement including paragraphs 6, 10, 14, 15, 19, 21, 22, and 23.

24. **ENTIRE AGREEMENT.** This Agreement and the attached exhibits listed below constitute the entire agreement between the parties and, unless otherwise provided herein, may be amended only in writing, signed by all parties to this Agreement.

25. **DOCUMENTS.** The Contract Documents which comprise the entire agreement between Owner and Contractor concerning the Work consist of the following:

- A. This Agreement.
- B. Technical Specifications and Conditions.
- C. Addenda
- D. Contractor's Bid, including the Contractor's Bid Form.
- E. There are no Contract Documents other than those listed in this paragraph.

In the event of a conflict of contract terminology, priority shall first be given to the language in the body of this Agreement, then to the Technical Specifications and Conditions, then to the Contractor's Bid and then to the Contractor's Bid Form.

Exhibit A: Technical Specifications and Conditions;

Exhibit B: Invitation to Bid; and

Exhibit C: Bid Form.

All the above documents shall be referred to as the "Contract Documents."

26. PUBLIC ENTITY CRIMES. Pursuant to Subsections 287.133(2) and (3), F.S., a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, F.S., for Category Two, for a period of thirty-six (36) months following the date of being placed on the convicted vendor list. The Contractor agrees to include this provision in all contracts issued as a result of this Agreement.

27. INDEPENDENT CONTRACTOR. The Contractor will perform as an Independent Contractor and not as an employee, representative or agent of the Owner.

28. THIRD PARTY BENEFICIARIES. Nothing in this Agreement shall be construed to benefit any person or entity not a party to this Agreement.

29. ASSIGNMENT. Except as otherwise provided in this Agreement, no party may assign any of its rights or delegate any of its obligations under this Agreement without the prior written consent of the other party. Any attempted assignment in violation of this provision is void.

30. TERM. This Agreement shall be effective upon execution by the parties and shall remain in effect through May 1, 2017, unless amended in writing by the parties. The Contractor shall not be eligible for reimbursement for any work that is commenced, or costs that are incurred, prior to the effective date of this Agreement.

31. NOTICES. Each party hereby designates the individual set forth below as its prime contact for matters relating to this Agreement. Notices and reports shall be sent to the attention of each party's prime contact as set forth herein by U.S. mail, postage paid, by nationally recognized overnight courier, or personally to the parties' addresses as set forth below. Notice is effective upon receipt.

Owner: Patrick J. Lehman, Peace River Manasota Regional Water Supply Authority, 9415 Town Center Parkway, Lakewood Ranch, Florida 34240

Contractor: _____

Any changes to the above representatives or addresses must be provided to the other party in writing.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto, or their lawful representatives, have executed this Agreement as of the date and year first written above.

ATTEST:

Peace River Manasota
Regional Water Supply Authority

Patrick J. Lehman, Executive Director

WITNESS

CONTRACTOR:

By: _____

By: _____

Print Name & Title

APPROVED AS TO FORM:

Douglas Manson, General Counsel
Peace River Manasota
Regional Water Supply Authority

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016

CONSENT AGENDA
ITEM 8

**Approve Proposal from Ovivo USA, LLC/TSC Jacobs
for Rebuild and Installation Services of Three Rake Drive Units at the Peace River Facility**

Recommended Action -

Motion to approve Proposal [No. Q02162016A-BS] from Ovivo USA, LLC/TSC Jacobs for Rebuild and Installation Services of Three Rake Drive Units at the Peace River Facility and authorize the Executive Director to execute same for \$240,000 with an additional \$12,000 as a contingency to be used as needed at the Executive Director's discretion.

Treatment Trains 3 & 4 and Thickener No. 1 were constructed in 2000 during the Peace River Option project and have seen 16 years of nearly continuous duty service. During that period, the sedimentation basin and thickener rake drives have accrued over 120,000 runtime hours of operation. Although these units are currently functional, they exhibit the typical wear, corrosion and weathering damage expected for industrial equipment operating in an environment of this sort. Failure of a rake drive can effectively shut down treatment facilities until repairs can be made. Since these devices are custom fabricated, repairs may take 6-12 weeks depending on what the failure is. Taking Trains 3 & 4 out-of-service this Spring for major concrete coatings restoration work provides a convenient opportunity to perform an overhaul on these rake drives.

Ovivo USA, LLC is the original equipment manufacturer of these rake drives and TSC Jacobs is their mechanical contracting partner who performs the field installations. Staff met with representatives from Ovivo USA, LLC and negotiated a scope of work to have the rake drives removed, overhauled and reinstalled. Proposal No. Q02162016A-BS in the amount of \$240,000 [\$80,000 per rake mechanism] for this work is attached. This cost is judged by staff to be a fair price for the work proposed. This work will take 4- 6 weeks to complete.

Staff memorandum on sole-source justification is also attached.

Budget Action: None – Funds contained in FY 2016 R&R Budget for this project.

MEMORANDUM

DATE: April 6, 2016

TO: Patrick J. Lehman, Executive Director

FROM: Kevin Morris, Science and Technology Officer

RE: Sole Source Justification for Rake Drive Refurbishment to Ovivo USA, LLC/TSC Jacobs

Treatment Trains 3 & 4 and Thickener No. 1 were constructed in the year 2000 (Peace River Option project) and have seen over 16 years of nearly continuous duty service. During that period, the sedimentation basin and thickener rake drives have accrued nearly 120,000 runtime hours of operation. Although these units are currently functional, they exhibit the typical wear, corrosion and weathering damage expected for industrial equipment operating in an environment of this sort. Failure of a rake drive can effectively shut down treatment facilities until repairs can be made, which may take 6-12 weeks depending on what the failure is since these devices are custom fabricated for each application. It is generally prudent to perform major preventative maintenance when the opportunity presents itself. So, while Treatment Trains 3 & 4 are out-of-service this Spring for major concrete coatings restoration work, there is an opportunity to perform an overhaul on these three rake drives without incurring additional downtime.

Ovivo USA, LLC. is the residual Original Equipment Manufacturer (OEM) of these rake drives and TSC Jacobs is their mechanical contracting partner who completes the fieldwork. Staff met with representatives from Ovivo USA LLC. and negotiated a scope of work to have the rake drives removed, overhauled and reinstalled. A proposal was received dated February 16, 2016, numbered Q02162016A-BS with a cost of \$240,000, or \$80,000 per rake mechanism. This cost is approximately 40% of the cost paid in 2009 to replace similar rake drives at the facility and is judged by staff to be a fair price for the work proposed. This work will take 4- 6 weeks to complete.

The Authority's Procurement Policy in Section 3.1.5 deals with sole source procurements and states the following: "*A purchase may be made or a contract may be awarded without competition when the Purchasing Director determines in writing, after conducting a good faith review of available sources, that there is only one available source for the required supply, service, or construction item.*" Sedimentation Basin and thickener rake drive mechanisms are highly specialized pieces of equipment and Ovivo USA, LLC is the OEM, owns the patents on the equipment, has expertise with the equipment and has inventory of replacement parts to match this equipment. Staff consider Ovivo USA, LLC exclusive in their ability to pull, refurbish the equipment and reinstall the equipment.

Finally, the cost proposed, \$80,000 per drive, is considered fair pricing for the work planned. Since the catwalks bridge the basins and come together at the drive pedestal, TSC Jacobs will have to construct temporary structural towers to support the catwalks on either side before they can remove the drive mechanism. This cost will include all temporary supports, mobilization and work by a crane as well as the refurbishment effort. There is adequate funding in the R&R Reserve account for this work.

PREPARED FOR

Peace River Water Treatment Plant
Arcadia, FL

AREA REPRESENTATIVE

Austin Moore
TSC Jacobs
(818) 888-5556
Email: austin@tscjacobs.com

PROJECT

Rebuild and Installation Services
of (3) Eimco C40HT Drive Units
(2) 65'-0" Dia. Eimco "C3X" Type Clarifiers Serial #BAP0247-100
(1) 50'-0" Dia. Eimco "CST" Type Thickener Serial #BAP0247-300

PREPARED BY

Ovivo USA, LLC
4246 Riverboat Road – Suite 300
Salt Lake City, Utah 84123-2583
Bill Stewart
Phone: (801) 931-3265
Fax: (801) 931-3080
Email: bill.stewart@ovivowater.com

PROPOSAL

PROJECT SUMMARY:

Ovivo USA, LLC (formerly EIMCO Water Technologies – EWT™) is pleased to offer the following proposal to rebuild (3) two existing C40HT drive units and installation services for the (2) two 65 ft. diameter “C3X” type EIMCO Clarifiers, original serial number: BAP0247-100 and (1) one 50 ft. diameter “CST” type EIMCO Thickener, original serial number: BAP0247-300.

C40HT DRIVE UNIT REBUILD – Consists of:

Disassembly and Inspection includes:

- Completely disassemble drive mechanism into individual parts and components.
- Steam clean and inventory all parts.
- Provide an evaluation report indicating the condition of all parts and sub-components and provide recommendations to determine the scope of the rebuild.

Standard Rebuild includes:

- Blast clean bases, main gear, housings, covers, and end cap. Machined surfaces are protected or are not blasted.
- Replace all wear items i.e. bearings, seals, gaskets, keys, retaining rings, grease fittings, gauges, piping and fasteners.
- Deburr and hand dress teeth of all gearing, pinions, worm gear assemblies, worms and shafts.
- Polish all shafts.
- Replace motor drive assembly consisting of: 3/4 HP 230/460 volt, 60hz, 3 phase TEFC drive motor, gear reducer, sprockets, chain, chain guard (stainless steel).
- Shear pin type drive sprocket for mechanical overload torque protection.
- Drive torque control with micro switches and actuating pin.
- Replace main gear cover (316 Stainless Steel).
- Replace worm gear cover (316 Stainless Steel).
- Completely re-assemble, paint and inspect equipment.
- Freight costs to and from the Plant and Rebuild Facility.
- Warranty parts and workmanship for (2) years.

Non-Standard Rebuild items – not included:

- Replacement of gears, pinions, bases or housings.

Installation services to include:

- (3) two mobilizations and demobilizations
- Crane, mats and related equipment

PROPOSAL

Ovivo USA, LLC

4246 Riverboat Road • Suite 300 • Salt Lake City, Utah 84123-2583 USA
Tel: (801) 931-3000 • Fax: (801) 931-3080
www.ovivowater.com

- 10 hours per day
- Blocking and shoring as required to support existing mechanism during drive installation
- Removal and installation of existing platform
- Removal and installation of drive assembly
- Leveling and alignment of mechanism
- Removal and disposal of construction debris.

Items not included:

- Permits and/or Bonds
- Draining for cleaning of the tank
- Electrical disconnect/installation or alteration of existing electrical supply.
- Finish or touch up painting.
- Lubricants or drive unit oil.
- Any existing clarifier mechanism components not expressly listed above.
- Disposal of any old lubricants/fluids.
- Overtime work hours.

ESTIMATED WEIGHT FOR DRIVE UNIT 2,400 LBS.

SURFACE PREPARATION AND PAINT

Drive unit: Two (2) coats of Tnemec Series N69F @ (3-4 mils DFT each) plus a single top coat of Tnemec Series 73 Endura-Shield @ (2-3 mils DFT) over SSPC-SP-6 metal prep will be applied as a standard.

PRICING SUMMARY:..... \$240,000.00 Total for 3 drive rebuilds and installation services.

Lead time is estimated at 4 to 6 weeks for drive unit delivery.

DELIVERY

Ovivo intends to ship all Products as indicated above after receipt of approved purchase order and approved submittal drawings from Purchaser. However, the date of shipment of the Products represent Ovivo's best estimate, but is not guaranteed, and Ovivo shall not be liable for any damages due to late delivery. The Products shall be delivered to the

PROPOSAL

Ovivo USA, LLC

4246 Riverboat Road • Suite 300 • Salt Lake City, Utah 84123-2583 USA

Tel: (801) 931-3000 • Fax: (801) 931-3080

www.ovivowater.com

delivery point or points in accordance with the delivery terms stated in this proposal. If such delivery is prevented or postponed by reason of Force Majeure, as defined in Ovivo's standard terms and conditions of sale, Ovivo shall be entitled at its option to tender delivery to Purchaser at the point or points of manufacture, and in default of Purchaser's acceptance of delivery, to cause the Products to be stored at such a point or points of manufacture at Purchaser's expense. Such tender, if accepted, or such storage, shall constitute delivery for all purposes of this proposal. If shipment is postponed at request of Purchaser, or due to delay in receipt of shipping instructions, payment of the purchase price shall be due on notice from Ovivo that the Products are ready for shipment. Handling, moving, storage, insurance and other charges thereafter incurred by Ovivo with respect to the Products shall be for the account of Purchaser and shall be paid by Purchaser when invoiced.

PRICING TERMS

All prices quoted are in US Dollars. Prices are good for 60 days. After expiration of the pricing effective period, prices will be subject to review and adjustment. Prices quoted are FOB point of shipment, with freight included to an accessible point nearest the jobsite. Federal, state or local sales, use or other taxes are not included in the sales price.

PAYMENT TERMS

Payment terms are: One hundred percent (100%) payment due within thirty (30) days after Purchaser's receipt of invoice. Invoice will be submitted after all materials have been received at the job site or they have been successfully installed by an Ovivo contractor and the field service check-out and start-up procedure is finalized. Credit is subject to acceptance by the Ovivo Credit Department. Purchaser shall remit payment for proper invoices received from Ovivo in accordance with the payment terms stated above even if the Purchaser has not been paid by the Purchaser's customer (the "Owner"), if Purchaser is not the end-user of the Products. Payments are due within thirty (30) days after Purchaser's receipt of invoice. Overdue and unpaid invoices are subject to a service charge of 2% per month until paid.

If Purchaser requests or causes cancellation, suspension or delay of Ovivo's work, Purchaser shall accept transfer of title and pay Ovivo all appropriate charges incurred up to date of such event plus Ovivo's overhead and reasonable profit. Additionally, all charges related to and risks incidental to storage, disposition and/or resumption of work shall be borne solely by Purchaser. Full payment for all work shall be due and payable thirty (30) days from the date work is placed into storage.

PROPOSAL

Ovivo USA, LLC

4246 Riverboat Road • Suite 300 • Salt Lake City, Utah 84123-2583 USA

Tel: (801) 931-3000 • Fax: (801) 931-3080

www.ovivowater.com

TAXES

Federal, State or local sales, use or other taxes are not included in the sales price. Such taxes, if applicable, shall be for Purchaser's account.

BACKCHARGES

In no event shall Purchaser/Owner do or cause to be done any work, purchase any services or material or incur any expense for the account of Ovivo, nor shall Ovivo be responsible for such work or expenses, until after Purchaser/Owner has provided Ovivo's PROJECT MANAGER full details (including estimate of material cost and amount and rate of labor required) of the work, services, material or expenses, and Ovivo has approved the same in writing. Ovivo will not accept Products returned by Purchaser/Owner unless Ovivo has previously accepted the return in writing and provided Purchaser/Owner with shipping instructions.

****PURCHASE ORDER SUBMISSION****

In an effort to ensure all purchase orders are processed timely and efficiently, please submit all purchase order documentation to the following department and address:

Attn: Order Entry Administrator
Ovivo USA, LLC
4246 Riverboat Road - Suite 300
Salt Lake City, Utah 84123-2583
Fax #: 801-931-3080
Tel. #: 801-931-3000
Email: bill.stewart@ovivowater.com

PROPOSAL

Ovivo USA, LLC

4246 Riverboat Road • Suite 300 • Salt Lake City, Utah 84123-2583 USA

Tel: (801) 931-3000 • Fax: (801) 931-3080

www.ovivowater.com

ADDITIONAL FIELD SERVICE

When included and noted in the Product pricing of each proposal item, Ovivo will supply the service of a competent field representative to inspect the completed installation and adjustment of equipment, supervise initial operation, and instruct Owner's personnel in the operation and maintenance of each proposal item for the number of eight (8) hour days. Notwithstanding Ovivo's performance of the above-referenced services, Ovivo shall not be held liable for any faulty workmanship or other defects in the Products' installation, or for other goods and/or services, performed by third parties unless such goods and/or services are expressly included under Ovivo's scope of work.

If additional service is required over and above the Field Services described above, it will be furnished to the Purchaser and billed to him at the current rate for each additional day required, plus travel and lodging expenses incurred by the service personnel during the additional service days.

It shall be the Purchaser's responsibility to provide for all necessary lubrication of all equipment prior to placing equipment in operation. All equipment must be in operating condition and ready for the Field Service Engineer when called to the project location. Should the Contractor not be ready when the Field Service Engineer is requested or if additional service is requested, the Ovivo current service rates will apply for each additional day required. Plus, travel and lodging expenses incurred by the service personnel during the additional service days.

GENERAL ITEMS NOT INCLUDED

Unless specifically and expressly included above, prices quoted by Ovivo do not include unloading, piping, valves, fittings, stairways, ladders, walkways, grating, wall spools, concrete, grout, sealant, dissimilar metal protection, oakum, mastic, field painting, oil or grease, electrical controls, wiring, mounting hardware, welding, weld rod, shims, leveling plates, protection against corrosion due to unprotected storage, special engineering, or overall plant or system operating instructions or any other products or services.

Performance and payment security, including but not limited to bonds, letters of credit, or bank guarantees, are not included, but can be provided if purchased for an additional cost.

PROPOSAL

Ovivo USA, LLC

4246 Riverboat Road • Suite 300 • Salt Lake City, Utah 84123-2583 USA
Tel: (801) 931-3000 • Fax: (801) 931-3080
www.ovivowater.com

WARRANTY AND CONDITIONS

Ovivo standard Terms and Conditions of Sale is attached and made an essential part of this proposal. These terms and conditions are an integral part of Ovivo's offer of Products and related services and replace and supersede any terms and conditions or warranty included in Purchaser or Owner requests for quotation or specifications and cannot be changed without written approval from an authorized representative of Ovivo.

Attachments: Ovivo USA, LLC General Terms and Conditions, QFORMEWT 0115-02031 Rev H
Ovivo USA 2013 North American Field Service Rate Schedule

PROPOSAL

Ovivo USA, LLC
4246 Riverboat Road • Suite 300 • Salt Lake City, Utah 84123-2583 USA
Tel: (801) 931-3000 • Fax: (801) 931-3080
www.ovivowater.com

1. ACCEPTANCE. The proposal of OVIVO USA, LLC ("SELLER"), as well as these terms and conditions of sale (collectively the "Agreement"), constitutes SELLER's contractual offer of goods and associated services, and PURCHASER's acceptance of this offer is expressly limited to the terms of the Agreement. The scope and terms and conditions of this Agreement represent the entire offer by SELLER and supersede all prior solicitations, discussions, agreements, understandings and representations between the parties. Any scope or terms and conditions included in PURCHASER's acceptance/purchase order that are in addition to or different from this Agreement are hereby rejected.

2. DELIVERY. Any statements relating to the date of shipment of the Products (as defined below) represent SELLER's best estimate, but is not guaranteed, and SELLER shall not be liable for any damages due to late delivery. The Products shall be delivered to the delivery point or points in accordance with the delivery terms stated in SELLER's proposal. If such delivery is prevented or postponed by reason of Force Majeure (as defined below), SELLER shall be entitled at its option to tender delivery to PURCHASER at the point or points of manufacture, and in default of PURCHASER's acceptance of delivery to cause the Products to be stored at such a point or points of manufacture at PURCHASER's expense. Such tender, if accepted, or such storage, shall constitute delivery for all purposes of this agreement. If shipment is postponed at request of PURCHASER, or due to delay in receipt of shipping instructions, payment of the purchase price shall be due on notice from SELLER that the Products are ready for shipment. Handling, moving, storage, insurance and other charges thereafter incurred by SELLER with respect to the Products shall be for the account of PURCHASER and shall be paid by PURCHASER when invoiced.

3. TITLE AND RISK OF LOSS. SELLER shall retain the fullest right, title, and interest in the Products to the extent permitted by applicable law, including a security interest in the Products, until the full purchase price has been paid to SELLER. The giving and accepting of drafts, notes and/or trade acceptances to evidence the payments due shall not constitute or be construed as payment so as to pass SELLER's interests until said drafts, notes and/or trade acceptances are paid in full. Risk of loss shall pass to PURCHASER at the delivery point.

4. PAYMENT TERMS. SELLER reserves the right to ship the Products and be paid for such on a pro rata basis, as shipped. If payments are not made by the due date, interest at a rate of two percent (2%) per month, calculated daily, shall apply from the due date for payment. PURCHASER is liable to pay SELLER's legal fees and all other expenses in respect of enforcing or attempting to enforce any of SELLER'S rights relating to a breach or threatened breach of the payment terms by PURCHASER.

5. TAXES. Unless otherwise specifically provided in SELLER's quotation/proposal; PURCHASER shall pay and/or reimburse SELLER, in addition to the price, for all sales, use and other taxes, excises and charges which SELLER may pay or be required to pay to any government directly or indirectly in connection with the production, sale, transportation, and/or use by SELLER or PURCHASER, of any of the Products or services dealt with herein (whether the same may be regarded as personal or real property). PURCHASER agrees to pay all property and other taxes which may be levied, assessed or charged against or upon any of the Products on or after the date of actual shipment, or placing into storage for PURCHASER'S account.

6. MECHANICAL WARRANTY. Solely for the benefit of PURCHASER, SELLER warrants that new equipment and parts manufactured by it and provided to PURCHASER (collectively, "Products") shall be free from defects in material and workmanship. The warranty period shall be twelve (12) months from startup of the equipment not to exceed eighteen (18) months from shipment. If any of SELLER'S Products fail to comply with the foregoing warranty, SELLER shall repair or replace free of charge to PURCHASER, EX WORKS SELLER'S FACTORIES or other location that SELLER designates, any Product or parts thereof returned to SELLER, which examination shall show to have failed under normal use and service operation by PURCHASER within the Warranty Period; provided, that if it would be impracticable for the Product or part thereof to be returned to SELLER, SELLER will send a representative to PURCHASER'S job site to inspect the Product. If it is determined after inspection that SELLER is liable under this warranty to repair or replace the Product or part thereof, SELLER shall bear the transportation costs of (a) returning the Product to SELLER for inspection or sending its representative to the job site and (b) returning the repaired or replaced Products to PURCHASER; however, if it is determined after inspection that SELLER is not liable under this warranty, PURCHASER shall pay those costs. For SELLER to be liable with respect to this warranty, PURCHASER must make its claims to SELLER with respect to this warranty in writing no later than thirty (30) days after the date PURCHASER discovers the basis for its warranty claim and in no event more than thirty (30) days after the expiration of the Warranty Period. In addition to any other limitation or disclaimer with respect to this warranty, SELLER shall have no liability with respect to any of the following: (i) failure of the Products, or damages to them, due to PURCHASER'S negligence or willful misconduct, abuse or improper storage, installation, application or maintenance (as specified in any manuals or written instructions that SELLER provides to the PURCHASER); (ii) any Products that have been altered or repaired in any way without SELLER'S prior written authorization; (iii) The costs of dismantling and reinstallation of the Products; (iv) any Products damaged while in transit or otherwise by accident; (v) decomposition of Products by chemical action, erosion or corrosion or wear to Products or due to conditions of temperature, moisture and dirt; or (vi) claims with respect to parts that are consumable and normally replaced during maintenance such as filter media, filter drainage belts and the like, except where such parts are not performing to SELLER'S estimate of normal service life, in which case, SELLER shall only be liable for the pro rata cost of replacement of those parts based on SELLER'S estimate of what the remaining service life of those parts should have been; provided, that failure of those parts did not result from any of the matters listed in clauses (i) through (v) above. With regard to third-party parts, equipment, accessories or components not of SELLER'S design, SELLER'S liability shall be limited solely to the assignment of available third-party warranties. THE PARTIES AGREE THAT ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY, WHETHER WRITTEN, ORAL OR STATUTORY, ARE EXCLUDED TO THE FULLEST EXTENT PERMISSIBLE BY LAW. All warranties and obligations of SELLER shall terminate if PURCHASER fails to perform its obligations under this Agreement including but not limited to any failure to pay any charges due to SELLER. SELLER'S quoted price for the Products is based upon this warranty. Any increase in warranty obligation may be subject to an increase in price.

7. CONFIDENTIAL INFORMATION. All nonpublic information and data furnished to PURCHASER hereunder, including but not limited to price, size, type and design of the Products is the sole property of SELLER and submitted for PURCHASER'S own confidential use solely in connection with this Agreement and is not to be made known or available to any third party without SELLER'S prior written consent.

8. PAINTING. The Products shall be painted in accordance with SELLER'S standard practice, and purchased items such as motors, controls, speed reducers, pumps, etc., will be painted in accordance with manufacturers' standard practices, unless otherwise agreed in writing.

9. DRAWINGS AND TECHNICAL DOCUMENTATION. When PURCHASER requests approval of drawings before commencement of manufacture, shipment may be delayed if approved drawings are not returned to SELLER within fourteen (14) days of receipt by PURCHASER of such drawings for approval. SELLER will furnish only general arrangement, general assembly, and if required, wiring diagrams, erection drawings, installation and operation-maintenance manuals for SELLER'S equipment (in English language). SELLER will supply six (6) complete sets of drawings and operating instructions. Additional sets will be paid for by PURCHASER. Electronic files, if requested from SELLER, will be provided in pdf, jpg or tif format only.

10. SET OFF. This Agreement shall be completely independent of all other contracts between the parties and all payments due to SELLER hereunder shall be paid when due and shall not be setoff or applied against any money due or claimed to be due from SELLER to PURCHASER on account of any other transaction or claim, except for archival or security purposes; b) not to use the program on any computer other than the computer with which it is supplied; and c) to limit access to the program to those of its employees who are necessary to permit authorized use of the program. PURCHASER agrees to execute and be bound by the terms of any software license

applicable to the Products supplied.

11. SOFTWARE. PURCHASER shall have a nonexclusive and nontransferable license to use any information processing program supplied by SELLER with the Products. PURCHASER acknowledges that such programs and the information contained therein is Confidential Information and agrees: a) not to copy or duplicate the program

12. PATENT INDEMNITY. SELLER will defend at its own expense any suit instituted against PURCHASER based upon claims that SELLER'S Product hereunder in and of itself constitutes an infringement of any valid apparatus claims of any United States patent issued and existing as of the date of this Agreement, if notified promptly in writing and given all information, assistance, and sole authority to defend and settle the same, and SELLER shall indemnify the PURCHASER against such claims of infringement. Furthermore, in case of the use of the Products is enjoined in such suit or in case SELLER otherwise deems it advisable, SELLER shall, at its own expense and discretion, (a) procure for the PURCHASER the right to continue using the Products, (b) replace the same with non-infringing Products, (c) modify the Product so it becomes non-infringing, or (d) remove the Products and refund the purchase price less freight charges and depreciation. SELLER shall not be liable for, and PURCHASER shall indemnify SELLER for, any claim of infringement related to (a) the use of the Products for any purpose other than that for which it was furnished by SELLER, (b) compliance with equipment designs not furnished by SELLER or (c) use of the Products in combination with any other equipment. The foregoing states the sole liability of SELLER for patent infringement with respect to the Products.

13. GENERAL INDEMNITY. Subject to the rights, obligations and limitations of liabilities of the parties set forth in this Agreement, PURCHASER shall protect and indemnify SELLER, its ultimate parent, its ultimate parent's subsidiaries and each of their respective officers, directors, employees and agents, from and against all claims, demands and causes of action asserted by any entity to the extent of PURCHASER'S negligence or willful misconduct in connection with this Agreement.

14. DEFAULT TERMINATION. In the event that PURCHASER becomes insolvent, commits an act of bankruptcy or defaults in the performance of any term or condition of this Agreement, the entire unpaid portion of the purchase price shall, without notice or demand, become immediately due and payable. SELLER at its option, without notice or demand, shall be entitled to sue for said balance and for reasonable legal fees, plus out-of-pocket expenses and interest; and/or to enter any place where the Products are located and to take immediate possession of and remove the Products, with or without legal process; and/or retain all payments made as compensation for the use of the Products; and/or resell the Products, without notice or demand, for and on behalf of the PURCHASER, and to apply the net proceeds from such sale (after deduction from the sale price of all expenses of such sale and all expenses of retaking possession, repairs necessary to put the Products in saleable condition, storage charges, taxes, liens, collection and legal fees and all other expenses in connection therewith) to the balance then due to SELLER for the Products and to receive from the PURCHASER the deficiency between such net proceeds of sale and such balance. PURCHASER hereby waives all trespass, damage and claims resulting from any such entry, repossession, removal, retention, repair, alteration and sale. The remedies provided in this paragraph are in addition to and not limitations of any other rights of SELLER.

15. CANCELLATION. PURCHASER may terminate this Agreement for convenience upon giving SELLER thirty (30) days prior written notice of such fact and paying SELLER for all costs and expenses (including overhead) incurred by it in performing its work and closing out the same plus a reasonable profit thereon. All such costs and expenses shall be paid to SELLER within ten (10) days of the termination of the Agreement, or be subject to an additional late payment penalty of five percent (5%) of the total amount of costs and expenses owed.

16. REMEDIES. The rights and remedies of the PURCHASER in connection with the goods and services provided by SELLER hereunder are exclusive and limited to the rights and remedies expressly stated in this Agreement.

17. INSPECTION. PURCHASER is entitled to make reasonable inspection of Products at SELLER'S facility. SELLER reserves the right to determine the reasonableness of the request and to select an appropriate time for such inspection. All costs of inspections not expressly included as an itemized part of the quoted price of the Products in this Agreement shall be paid by PURCHASER.

18. WAIVER. Any failure by SELLER to enforce PURCHASER'S strict performance of any provision of this Agreement will not constitute a waiver of its right to subsequently enforce such provision or any other provision of this Agreement.

19. COMPLIANCE WITH LAWS. If applicable laws, ordinances, regulations or conditions require anything different from, or in addition to, that called for by this Agreement, SELLER will satisfy such requirements at PURCHASER'S written request and expense.

20. FORCE MAJEURE. If SELLER is rendered unable, wholly or in material part, by reason of Force Majeure to carry out any of its obligations hereunder, then on SELLER'S notice in writing to PURCHASER within a reasonable time after the occurrence of the cause relied upon, such obligations shall be suspended. "Force Majeure" shall include, but not be limited to, acts of God, laws and regulations, strikes, civil disobedience or unrest, lightning, fire, flood, washout, storm, communication lines failure, delays of the PURCHASER or PURCHASER'S subcontractors, breakage or accident to equipment or machinery, wars, police actions, terrorism, embargos, and any other causes that are not reasonably within the control of the SELLER. If the delay is the result of PURCHASER'S action or inaction, then in addition to an adjustment in time, SELLER shall be entitled to reimbursement of costs incurred to maintain its schedule.

21. INDEPENDENT CONTRACTOR. It is expressly understood that SELLER is an independent contractor, and that neither SELLER nor its principals, partners, parents, subsidiaries, affiliates, employees or subcontractors are servants, agents, partners, joint ventures or employees of PURCHASER in any way whatsoever.

22. SEVERABILITY. Should any portion of this Agreement, be held to be invalid or unenforceable under applicable law then the validity of the remaining portions thereof shall not be affected by such invalidity or unenforceability and shall remain in full force and effect. Furthermore, any invalid or unenforceable provision shall be modified accordingly within the confines of applicable law, giving maximum permissible effect to the parties' intentions expressed herein.

23. CHOICE OF LAW, CHOICE OF VENUE. This Agreement shall be governed and construed in accordance with the laws of the State of Utah, without regard to its rules regarding conflicts or choice of law. The parties submit to the jurisdiction and venue of the state and federal courts located in Salt Lake City, Utah.

24. ASSIGNMENT. PURCHASER shall not assign or transfer this Agreement without the prior written consent of the SELLER. Any attempt to make such an assignment or transfer shall be null and void. SELLER shall have the authority to assign, or otherwise transfer, its rights and obligations in connection with this Agreement, in whole or in part, upon prior written notice to PURCHASER.

25. LIMITATION ON LIABILITY, TO THE EXTENT PERMISSIBLE BY LAW, SELLER SHALL HAVE NO FURTHER LIABILITY IN CONNECTION WITH THIS AGREEMENT IN EXCESS OF THE COST OF CORRECTING ANY DEFECTS, OR IN THE ABSENCE OF ANY DEFECT, IN EXCESS OF THE VALUE OF THE PRODUCTS SOLD HEREUNDER. NOTWITHSTANDING ANY LIABILITIES OR RESPONSIBILITIES ASSUMED BY SELLER HEREUNDER, SELLER SHALL IN NO EVENT BE RESPONSIBLE TO PURCHASER OR ANY THIRD PARTY, WHETHER ARISING UNDER CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, OR OTHERWISE, FOR LOSS OF ANTICIPATED PROFITS, LOSS BY REASON OF PLANT SHUTDOWN, NON-OPERATION OR INCREASED EXPENSE OF OPERATION, SERVICE INTERRUPTIONS, COST OF PURCHASED OR REPLACEMENT POWER, COST OF MONEY, LOSS OF USE OF CAPITAL OR REVENUE OR ANY OTHER INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE, EXEMPLARY, OR CONSEQUENTIAL LOSS OR DAMAGE, WHETHER ARISING FROM DEFECTS, DELAY, OR FROM ANY OTHER CAUSE WHATSOEVER.

REVISION DATE -- SEPTEMBER 2010

PROPOSAL

Ovivo USA, LLC

4246 Riverboat Road • Suite 300 • Salt Lake City, Utah 84123-2583 USA

Tel: (801) 931-3000 • Fax: (801) 931-3080

www.ovivowater.com

**NORTH AMERICAN
FIELD SERVICE RATE SHEET**

Effective January 1, 2013

Standard (Travel)	Daily Rate (8 hour day)	\$ 1,200.00
Hourly Rate (4 hour minimum)		\$ 150.00
Standard (Labor)	Daily Rate (8 hour day)	\$ 1,200.00
Hourly Rate (4 hour minimum)		\$ 150.00
Saturday	Daily Rate (8 hour day)	\$ 1,800.00
Hourly Rate (4 hour minimum)		\$ 225.00
Sundays/Holidays *	Daily Rate (8 hour day)	\$ 2,400.00
Hourly Rate (4 hour minimum)		\$ 300.00
Overtime **	Hourly Rate - Standard Day	\$ 225.00
Hourly Rate - Weekends & Holidays		\$ 300.00

* Except Christmas Day and New Year's Day

** For all hours worked over eight (8) hours per day

UNLESS OTHERWISE ARRANGED; EXPENSES ARE CHARGED AT ACTUAL COST PLUS 10%

Please Note:

- All of the rates provided are portal to portal. In addition, travel and living expenses will be invoiced at actual cost PLUS 10 % and documentation will be provided for these expenses. ***If a fixed Per Diem rate is required, it will be charged at \$250.00 per day (lodging and meals) with the exception of the East Coast where the price will be \$300.00.*** Travel on Saturday, Sunday or Holidays, and after 8 hours per day will be billed at the overtime rate.
- Use of **Ovivo** Fleet vehicles for travel will be charged at the rate of \$0.56 per mile.

PROPOSAL

Ovivo USA, LLC

4246 Riverboat Road • Suite 300 • Salt Lake City, Utah 84123-2583 USA
Tel: (801) 931-3000 • Fax: (801) 931-3080
www.ovivowater.com

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016

CONSENT AGENDA
ITEM 9

Resolution 2016-04 ‘Adopt 457 Governmental Deferred Compensation Plan for the Peace River Manasota Regional Water Supply Authority’

Recommended Action -

Motion to approve Resolution 2016-04 ‘Adopt 457 Governmental Deferred Compensation Plan for the Peace River Manasota Regional Water Supply Authority’.

The Authority’s current 457b Deferred Compensation Plan was established in 1994 under NACo and is currently being administered through Nationwide. After reviewing the current market for 457b plans, it was determined there are better 457b plan options that will assist the Authority in the attraction and retention of high quality employees.

Budget Action – None

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

Resolution No. 2016-04

**ADOPT 457 GOVERNMENTAL DEFERRED COMPENSATION PLAN FOR THE
PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY**

The Peace River Manasota Regional Water Supply Authority, created pursuant to Chapter 373.1962, Florida Statutes, now found in Section 373.713, Florida Statutes, and Interlocal agreement pursuant to Chapter 163.01, Florida Statutes, in lawful session and in regular order of business properly presented, finds that:

WHEREAS, pursuant to Resolution No. 1993-06, adopted January 5, 1994, the Authority established a Deferred Compensation Plan available to all eligible Authority employees pursuant to Section 457 of the Internal Revenue Code; and

WHEREAS, the Authority adopted the National Association of Counties (NACo) Deferred Compensation Plan; and

WHEREAS, the Authority has the fiduciary responsibility for the Deferred Compensation Plan and has determined that is it in the best interests of its employees to terminate the NACo Deferred Compensation Plan and adopt a new 457 Governmental Deferred Compensation Plan in the form of the standard plan document as provided by VALIC;

NOW, THEREFORE, BE IT RESOLVED, by the Authority Board of the Peace River Manasota Regional Water Supply Authority that Resolution 1993-06 is hereby rescinded and the Executive Director or his designee is authorized to execute on behalf of the Authority any and all documents necessary to carry out the purpose of this resolution.

DONE at Bradenton, Florida this Sixth day of April 2016.

Attest:

Peace River Manasota
Regional Water Supply Authority

Patrick J. Lehman
Executive Director

Commissioner Christopher G. Constance
Chair

Approved as to Form:

Douglas Manson
General Counsel for Peace River Manasota
Regional Water Supply Authority

SUPPORTING MATERIALS

MEMORANDUM

April 6, 2016

TO: Board of Directors
Peace River Manasota Regional Water Supply Authority

THRU: Patrick J. Lehman
Executive Director

FROM: Ann Lee
Finance/Administration Manager

**SUBJ: Resolution to Terminate Existing Deferred Compensation and Adopt a New 457
Governmental Deferred Compensation Plan**

The Authority's current 457b Deferred Compensation Plan was established in 1994 under NACo and is currently being administered through Nationwide. After reviewing the current market for 457b plans, it was discovered that there are better 457b plans options that will assist the Authority in the attraction and retention of high quality employees.

We received information and 457b plan proposals from five plan providers, including the incumbent. After careful review of the proposals, I recommend that we terminate our current 457b Deferred Compensation plan and establish a new 457b Deferred Compensation Plan to be administered by VALIC. The new plan will both decrease the fees seen by participants and increase the number of additional no cost program benefits, including full financial planning for all of our employees.

I have attached a matrix of the 457b plan proposals that were received as well as the "Specimen Section 457(b) Deferred Compensation Plan Governmental Employers" from VALIC.

If you have any questions, I am at your disposal.

Provider	Nutracommit	Northside	Vital	Empower	Voya	Principal
Plan/Proposed Plan	Current Plan, began 1/5/94	FreedomPro Group Annuity	457b/ Roth 457 Group Annuity	457b Mutual Fund	RetireFlex 457b Mutual Fund	457b Mutual Fund
Plan Type (Mutual Fund vs Annuity)	Mutual Fund	Group Annuity	not applicable	Mutual Fund	Mutual Fund	Mutual Fund
If Mutual Fund, who is plan Custodian?	in house	not applicable	not applicable	Wells Fargo	in house	in house
Guaranteed Death Benefit	no	no	yes	yes, but to extra .5%	no	no
Participant Fees	1.09%-2.15%	64%-1.55%	0.70% - 2.24%	0.70% + fund expenses & mutual fund fees (depending on funds we choose from WellsFargo)	2.25%-4% depending on plan & participant account balances	0.73% locked fee for 3 years; afterwards changed annually based on participants & plan assets
How are the fees calculated	Net Asset Value per Investment	Net Asset Value per Investment	Dollar weighted-fees done by % of total \$ in account. If you have 10% of total \$ in 1.85% fee fund, your fee would be 1.85 * .1 = .185% for this \$ in that fund	Net Asset Value per Investment	Net Asset Value per Investment	Net Asset Value per Investment
Guaranteed Investment Option?	yes	yes	yes-multiple	yes	yes	yes
Minimum Rate on Option - net of fees	3.50%	1.00%	1.15%	0.00%	1.00%	1.00%
Current Guarantee Option Rate	3.50%	2.50%	2.15%	1.45%	1.85%	1.90%
Restrictions on Guaranteed Option?	yes- 20% max per year reinvestment	yes- 20% max per year reinvestment	yes- 20% max per year reinvestment	yes- 20% max per year reinvestment	yes- 20% max per year reinvestment	no
Implementation Time	n/a	45 days	30 days - 60 days, contingent on outgoing provider	18 weeks	10-12 weeks	8-10 weeks
Closest Local Rep	Sarasota	Sarasota	Has Sarasota & Arcadia reps	Clemson	North Carolina	Sarasota
Plan sponsor to Authority Members?	yes	yes	yes	no	yes	no
Plan sponsor to other Gov't agencies in Florida?	yes	yes	yes	yes	yes	yes
Annual Education/enrollment seminars?	yes	yes	yes	yes	yes	yes
Other program benefits (without cost)	Telephone Financial Needs Analysis	Telephone Financial Needs Analysis, web & mobile apps	Full Employee Financial Planning (in person), web & mobile apps	One time financial consultation, web & mobile apps	Personal Financial Dashboard (web only)	Full Employee Financial planning (in person), web & mobile apps
Other Program Costs	Guarantee Fund has might fee of 001.506%	Co-Fiduciary with Morning Star	Monitor/benchmark all funds, do qtrly reviews with clients to assess funds	\$50 distribution req. fee (per request) \$75 loan set up fee, then \$50 annual fee	no distribution fee if qualified distribution (reire, hardship, etc)	Co-Fiduciary Responsibility (.02% of .73% above)
			Will perform retirement planning, finance mgmt & PMS seminars	\$50 periodic payment fee per request, \$25 annual maint	\$100 loan fee	\$40 distribution fee for non retirement
			no distribution fee if qualified distribution (reire, hardship, etc)	Online Investment Advice Charges		\$50 loan fee, \$ 48 annual maint on loans
			\$60 loan fee (one time)			\$40 fee for retirement distribution installation payments (one time fee)

SPECIMEN
SECTION 457(b) DEFERRED COMPENSATION PLAN
GOVERNMENTAL EMPLOYERS

This specimen plan document (which includes both an Adoption Agreement and a Basic Plan Document) is intended to meet the requirements of an eligible deferred compensation plan under Section 457(b) of the Internal Revenue Code of 1986, as amended, and the regulations promulgated thereunder, that is sponsored by a governmental employer, as defined thereunder. This document has not been approved by the Internal Revenue Service and is provided for consideration by the employer and its legal counsel. Modifications may be required depending on the specific facts and circumstances of the employer, including any applicable state or local laws, rules or regulations regarding deferred compensation or retirement benefits for governmental employees. VALIC cannot and does not provide legal or tax advice.

ADOPTION AGREEMENT
SECTION 457(b) DEFERRED COMPENSATION PLAN
(Governmental)

The undersigned employer hereby adopts or restates, as applicable, this Plan. This Plan shall comprise both (1) this Adoption Agreement and (2) the Basic Plan Document. Article and section references in this Adoption Agreement refer to articles and sections of the Basic Plan Document unless otherwise indicated.

Employer Name: Peace River Manasota Regional Water Supply Authority

Employer Address: 9415 Town Center Parkway

Lakewood Ranch, FL 34202

Plan Name: Peace River Manasota Regional Water Supply Authority Deferred Compensation Plan

1. **Plan Effective Date.** ("Effective Date.") (Check one.)

- This Plan is being established by the Employer as a new Plan, effective _____, _____.
- This Plan amends and restates the Plan previously established by the Employer and is effective April 6, 2016. The Plan was originally established by the Employer effective January 5, 1994.

2. **Eligible Employees.** (Check one.)

- All Employees shall be eligible to participate.
- The Employer, in its sole discretion, shall determine each Plan Year which Employees shall be eligible to participate in the Plan.
- All Employees shall be eligible to participate except the following Employees (specify which Employees shall not be allowed to participate in the Plan):

3. **Roth Contributions.** (Check one.)

- Designated Roth Contributions are not permitted, and Section 4.10 shall not apply to this Plan.
- Participants may make Designated Roth Contributions (as described in Section 4.10) in lieu of or in addition to pre-tax Elective Deferral Contributions, effective April 6, 2016 (insert date not earlier than the later of January 1, 2011 or the date of the Employer's resolution adopting Designated Roth Contributions).

4. **Employer Contributions.** (Check one.) Note: Employer Contributions are combined with Elective Deferral Contributions and Designated Roth Contributions in applying the contribution limits described in Section 2.18.

- There shall be no Employer Contributions under this Plan.
- Discretionary Employer Contribution. The Employer may, in its absolute discretion, make an Employer Contribution to the Plan, and may determine, in its absolute discretion, how any such Employer Contribution shall be allocated among Plan Participants. This Discretionary Employer Contribution may be a matching or non-matching contribution.
- FICA Opt-out Contribution. As described in Section 4.11, the Employer shall make FICA Opt-out Contributions (contributions other than Elective Deferral Contributions or Designated Roth Contributions) on behalf of the following Employees in lieu of paying/withholding FICA taxes for such Employees and in the amounts indicated below (check applicable box and fill in blanks for required contribution percentages):
 - All Employees
 - Part-time, seasonal and temporary Employees only

- Other (indicate which Employees shall be eligible for the FICA Opt-out Contributions):

The required FICA Opt-out Contribution shall consist of the following types of contributions (which must total 7.5% or more of the Participant's Compensation):

- Employer Contribution = _____% of Compensation
- Mandatory Employee Contribution = _____% of Compensation
- Other: _____
- _____
- _____

5. Loans. (Check one.)

- Yes, loans are allowed and Article IX shall apply to this Plan.
- No, loans are not allowed and Article IX shall not apply to this Plan.

6. Unforeseeable Emergency Withdrawals. (Check one.)

- Yes. Withdrawals under Section 6.08 shall be available under this Plan. (Check one.)
- Withdrawals on account of an illness, accident or need to pay for the funeral expenses of the Participant's primary Beneficiary shall be available effective the later of (a) August 17, 2006, (b) the original effective date of the Plan or, if applicable, (c) _____, _____ (insert date that this option was first available, if such date was later than August 17, 2006).
- Withdrawals on account of an illness, accident or need to pay for funeral expenses of the Participant's primary Beneficiary shall not be available.
- No. Withdrawals under Section 6.08 shall not be available under this Plan.

7. Participant's Election to Receive In-Service Distribution. A Participant may elect to receive an in-service distribution of his account balance as described in Section 6.10. (Check one.)

- Yes, if the total amount payable to a Participant under the Plan does not exceed the dollar amount under Code Section 411(a)(11)(A) (currently \$5,000).
- No. Section 6.10 shall not apply to this Plan.

8. Distribution without Participant's Consent. Small accounts of certain inactive Participants may be distributed without the Participant's consent as described in Section 6.11. (Check one.)

- Yes, if the total amount payable to a Participant under the Plan does not exceed \$1,000. Such amount will be paid in cash to the Participant.
- No. Section 6.11 shall not apply to this Plan.

9. Distributions to Individuals in Uniformed Services. (Check one.)

- The Plan does not permit distributions to individuals who are deemed to have a Severance from Employment solely on account of their performing services in the uniformed services and Section 6.13 shall not apply to this Plan.
- Participants who are deemed to have a Severance from Employment on account of their performing services in the uniformed services for a period of 30 days or more may elect to receive a distribution of all or a portion of their Account (subject to the post-distribution restrictions described in Section 6.13).

10. In-plan Roth Conversions. (Check one.) (Note: Employer cannot allow in-plan Roth conversions unless it also elects to allow Designated Roth Contributions under Section 3, above, of this Adoption Agreement.)

- In-plan Roth conversions are not permitted, and Section 6.12 shall not apply to this Plan.
- Participants may convert certain pre-tax amounts to Roth contributions in an "in-plan" rollover/conversion described in Section 6.12, but only if such amounts are currently distributable under the terms of the Plan, effective _____, _____ (insert date not earlier than the later of January 1, 2011 or the date of the Employer's resolution adopting in-plan Roth conversions).

11. Deductions from Distributions to Eligible Retired Public Safety Officers. (Check one.)
- For distributions after December 31, 2006, an Eligible Retired Public Safety Officer may elect, pursuant to Section 6.14, to have up to \$3,000 of the distribution deducted and paid directly to the provider of an accident or health insurance plan or qualified long-term care insurance plan.
 - The Plan does not allow elections by Eligible Retired Public Safety Officers under Section 6.14.
12. Non-spousal Beneficiary Rollovers. As described in Section 8.03, non-spousal Beneficiary rollovers are allowed after December 31, 2006, unless elected otherwise below. (Note: Such distributions are required by law to be allowed after December 31, 2009.)
- Non-spousal Beneficiary rollovers are not allowed prior to January 1, 2010.
 - Non-spousal Beneficiary rollovers are allowed effective _____, _____ (insert date not earlier than January 1, 2007 and not later than December 31, 2009).
13. Required Minimum Distributions for 2009. (Check one of the boxes in each of subsections (a) and (b) below. If none of the boxes in a subsection is checked, the first option shall apply to the Plan.)
- (a) For purposes of 2009 required minimum distributions:
- This option reflects VALIC standard operations during 2009.** The provisions of Section 6.05(a) apply (Required Minimum Distributions continue in accordance with the terms of the Plan for Participants or Beneficiaries receiving installment payments unless such Participant or Beneficiary elects otherwise, whereas Required Minimum Distributions are suspended for all other Participants and Beneficiaries).
 - The provisions of Section 6.05(b) apply (Required Minimum Distributions continue in accordance with the terms of the Plan for all Participants and Beneficiaries, unless otherwise elected by a Participant or Beneficiary).
 - The provisions of Section 6.05(c) apply (Required Minimum Distributions continue in accordance with the terms of the Plan for all Participants and Beneficiaries, but only Participants or Beneficiaries receiving installment payments may elect otherwise).
 - Other: _____

 - Not applicable (Plan established as a new Plan after 2009). (Do not complete subsection (b) below.)
- (b) For purposes of Section 6.05(d), the Plan will treat the following as eligible rollover distributions in 2009:
- This option reflects VALIC standard operations during 2009.** A direct rollover option shall be offered only for distributions that would be eligible rollover distributions without regard to Code Section 401(a)(9)(H).
 - Eligible rollover distributions shall include 2009 Required Minimum Distributions and installment payments that include 2009 Required Minimum Distributions.
 - Eligible rollover distributions shall include 2009 Required Minimum Distributions, but only if paid with an additional amount that is an eligible rollover distribution without regard to Code Section 401(a)(9)(H).
14. Optional Benefit Accruals under HEART Act. (Check one.)
- The optional benefit accrual provisions described in Section 4.12 for individuals who die or become disabled while performing qualified military service shall not apply.
 - The optional benefit accrual provisions described in Section 4.12 for individuals who die or become disabled while performing qualified military service shall apply effective _____, _____ (insert date not earlier than first day of 2007 Plan Year).
15. Governing Law. This Plan shall be construed under the laws of the State/Commonwealth of Florida (insert State/Commonwealth). This Plan shall be subject to any applicable State, county or local deferred compensation rules and regulations.

The Employer hereby causes this Adoption Agreement to be executed by its duly authorized representative on the date specified below.

Employer (Please Print): Peace River Manasota Regional Water Supply Authority

Employer's Signature: _____

Name (Please Print): Patrick J. Lehman

Title: Executive Director Date: _____

PARTICIPATION AGREEMENT
SECTION 457(b) DEFERRED COMPENSATION PLAN
(Governmental)

Complete this page *only* if more than one Employer will adopt this Section 457(b) Deferred Compensation Plan. Each Participating Employer must execute a separate Participation Agreement.

Check here if not applicable and do not complete this page.

The undersigned governmental entity, by executing this Participation Agreement, elects to become a Participating Employer in the Section 457(b) eligible deferred compensation plan identified in the accompanying Adoption Agreement and below (the "Plan"), as if the Participating Employer were a signatory to the Adoption Agreement for the Plan. The Participating Employer accepts, and agrees to be bound by, all of the elections made by the signatory Employer in the Adoption Agreement for the Plan, except as otherwise provided in this Participation Agreement.

1. **EFFECTIVE DATE.** (Note: The Effective Date of the Participating Employer's adoption of the Plan cannot be earlier than the original effective date of the Plan, as adopted by the signatory Employer. If the Participating Employer is adopting the Plan as a restatement of an existing governmental Section 457(b) plan of the Participating Employer, the Effective Date of the Participating Employer's adoption of the Plan must not be earlier than the later of (i) the original effective date of the Participating Employer's existing Section 457(b) plan, (ii) the effective date of the most recent restatement of the Plan by the signatory Employer, or (iii) the first day of the Plan Year that includes the date the Participation Agreement is executed.)

The Effective Date of the Participating Employer's adoption of the Plan is: _____.

2. **NEW PLAN/RESTATEMENT.** The Participating Employer's adoption of this Plan constitutes: (Check one.)

- The adoption of a new governmental Section 457(b) plan by the Participating Employer.
- An amendment and restatement of a governmental Section 457(b) plan currently maintained by the Participating Employer identified as the _____ and having an original effective date of _____.

The Participating Employer hereby causes this Participation Agreement to be executed by its duly authorized representative on the date specified below.

Plan Name (Please Print): _____

Participating Employer Name (Please Print): _____

Participating Employer's Signature: _____

Name (Please Print): _____

Title: _____ Date: _____

Acceptance by the Signatory Employer of the Adoption Agreement.

Signatory Employer Name (Please Print): _____

Signatory Employer's Signature: _____

Name (Please Print): _____

Title: _____ Date: _____

BASIC PLAN DOCUMENT
SECTION 457 (b) DEFERRED COMPENSATION PLAN
(Governmental)

ARTICLE I. INTRODUCTION

This Plan is intended to be an eligible deferred compensation plan under Section 457 of the Internal Revenue Code of 1986, as amended. The primary purpose of this Plan is to attract and retain qualified personnel by permitting them to provide for benefits in the event of their retirement or death. Nothing contained in this Plan shall be deemed to constitute an employment agreement between any Participant and the Employer and nothing contained herein shall be deemed to give any Participant any right to be retained in the employ of the Employer.

ARTICLE II. DEFINITIONS

- 2.01 Account: The account maintained for each Participant reflecting the cumulative amount of each Participant's Deferred Compensation, including any income, gains, losses, or increases or decreases in market value attributable to the investment of the Participant's Deferred Compensation, and further reflecting any distributions to the Participant or the Beneficiary and any fees or expenses charged against the Participant's Deferred Compensation.
- 2.02 Adoption Agreement: The separate agreement which is executed by the Employer and sets forth the elective provisions of this Plan as specified by the Employer.
- 2.03 Annuity Contract: If selected by the Employer as an investment option, one or more group fixed, variable or combination fixed and variable annuity contracts issued by The Variable Annuity Life Insurance Company (VALIC) and approved for sale in the Employer's state, or by another insurance company qualified to do business in the Employer's state, which provide for periodic payments at regular intervals, whether for a period certain or during one or more lives, and which are non-transferable.
- 2.04 Beneficiary or Beneficiaries: The person or persons designated by the Participant in his Deferred Compensation Agreement who shall receive any benefits payable hereunder in the event of the Participant's death. If more than one designated Beneficiary survives the Participant, payments shall be made equally to the surviving Beneficiaries, unless otherwise provided in the Deferred Compensation Agreement. If no Beneficiary is designated in the Deferred Compensation Agreement or if no designated Beneficiary survives the Participant, then the estate of the Participant shall be the Beneficiary. However, a Participant may designate a contingent Beneficiary (or Beneficiaries) who shall become the primary Beneficiary (or Beneficiaries) under this Plan in the event that no primary Beneficiary survives the Participant.
- 2.05 Code: The Internal Revenue Code of 1986, as amended, and regulations thereunder.
- 2.06 Compensation: The amount of compensation that would be payable to a Participant by the Employer if no Deferred Compensation Agreement were in effect to defer compensation under this Plan. The term Compensation includes amounts that are excludable from an Employee's gross income and that are contributed by the Employer at the Employee's election to a cafeteria plan, qualified transportation fringe benefit plan, a Section 401(k) arrangement, a SARSEP, a Section 403(b) arrangement, a SIMPLE plan or another Section 457(b) plan of the Employer. For years beginning after 2008, Compensation shall include "differential wage payments," as that term is defined in Section 2.17 (Includible Compensation).
- 2.07 Deferred Compensation: The amount of Compensation otherwise payable to the Participant that the Participant elects to defer hereunder (as either pre-tax Elective Deferral Contributions or after-tax Designated Roth Contributions), any amount credited to a Participant's Account by reason of a transfer under Section 8.01, or any other amount that the Employer agrees to credit to a Participant's Account (as an Employer Contribution) and that does not exceed the Maximum Limitation.
- 2.08 Deferred Compensation Agreement: An agreement entered into between a Participant and the Employer and any amendments or modifications thereof, which agreement shall fix the amount of pre-tax Elective Deferral and/or after-tax Designated Roth Contributions, if applicable, that the Participant elects to defer; specify the Participant's investment selection with respect to his Deferred Compensation; designate the Participant's Beneficiary or Beneficiaries; and incorporate the terms, conditions, and provisions of this Plan by reference.
- 2.09 Designated Roth Contribution: The amount of a Participant's Compensation that he elects to defer to the Plan (as Deferred Compensation) on an after-tax basis.

- 2.10 **Elective Deferral Contribution:** The amount of a Participant's Compensation that he elects to defer to the Plan (as Deferred Compensation) on a pre-tax basis.
- 2.11 **Eligible Retirement Plan:** A plan described in Code Section 402(c)(8)(B) to which an Eligible Rollover Distribution may be transferred pursuant to Code Section 457(e)(16).
- 2.12 **Eligible Rollover Distribution:** A qualifying distribution to a Participant, or to a spousal Beneficiary of a deceased Participant, that is described in Code Section 402(c)(4).
- 2.13 **Employee:** Any individual, whether appointed, elected or under contract, providing services for the Employer for which compensation is paid. For years beginning after December 31, 2008, the term Employee also includes an individual receiving "differential wage payments," as that term is defined in Section 2.17 (Includible Compensation), from the Employer.
- 2.14 **Eligible Employee:** An Employee who, based on the Employer's elections in the Adoption Agreement, is eligible to participate in the Plan.
- 2.15 **Employer:** The entity identified in the Adoption Agreement, which entity is a State, political subdivision of a State, or an agency or instrumentality of a State or political subdivision of a State.
- 2.16 **Employer Contribution:** The amount (if any) that the Employer contributes to the Plan (as Deferred Compensation) that does not reduce (on a pre-tax or an after-tax basis) the Participant's Compensation for the Plan Year.
- 2.17 **Includible Compensation:** For a taxable year, the Participant's compensation, as defined in Code Section 415(c)(3), for services performed for the Employer. For years beginning after 2008, Includible Compensation shall include "differential wage payments," as defined in Code Section 3401(h)(2) (a payment by the Employer to an individual with respect to any period during which the individual is performing service in the uniformed services while on active duty for a period of more than 30 days, and which payment represents all or a portion of the wages the individual would have received from the Employer if the individual were performing service for the Employer). The amount of Includible Compensation shall be determined without regard to any community property laws.
- 2.18 **Maximum Limitation:** The maximum amount that may be deferred under this Plan (other than rollover amounts described in Section 8.02) for the taxable year of a Participant. Such amount shall be either the Normal Limitation or Catch-Up Limitation, whichever is applicable.
- (a) **Normal Limitation:** The maximum amount deferred shall not exceed the lesser of the Applicable Dollar Amount (as described in Section 2.18(c) below) or 100% of the Participant's Includible Compensation, as adjusted by Section 2.18(d) below. Notwithstanding the preceding provisions of this paragraph, for calendar years prior to 2002, the maximum amount deferred shall not exceed such limit or limits in effect for the applicable year pursuant to Code Section 457.
- (b) **Catch-Up Limitation:** For each one of the last three (3) taxable years of a Participant ending before the Participant's attainment of Normal Retirement Age, the maximum amount deferred for each such year shall be the lesser of:
- (1) twice the Applicable Dollar Amount (as described in Section 2.18(c) below); or
 - (2) the sum of the Normal Limitation, plus that portion of the Normal Limitation not used in each of the prior taxable years of the Participant commencing after 1978 in which (i) the Participant was eligible to participate in this Plan or another eligible plan of the Employer, and (ii) compensation deferred under this Plan (or such other plan) was subject to the deferral limitations set forth in this section.
- A Participant may utilize the Catch-Up Limitation only if the Participant has not previously utilized it with respect to a different Normal Retirement Age under this Plan or any other plan.
- For years prior to 2002, the limit under this paragraph (b) for any year shall not exceed \$15,000.
- (c) **Applicable Dollar Amount:** For contributions in 2006 and subsequent years, the Applicable Dollar Amount shall be \$15,000 as adjusted for cost-of-living increases in accordance with Code Section 457(e)(15). The Applicable Dollar Amount for the 2011 calendar year is \$16,500 and for the 2012 calendar year is \$17,000.
- (d) **Coordination with Other Plans:** For contribution years prior to 2002, the amount excludible from a Participant's gross income for any taxable year under this Plan or any other plan under Code Section 457(b) shall not exceed \$7,500 (as adjusted for cost-of-living increases in accordance with Code Section 457(e)(15)) or such greater amount allowed under paragraph (b) of this section, less any amount excluded from gross income under Code Section 403(b), 402(e)(3), or 402(h)(1)(B) or (k), or any amount with respect to which a deduction is allowable by reason of a contribution to an organization under Code Section 501(c)(18).

- (e) Age-Based Catch-Up Contributions: In addition to any other limit set forth in this section, a Participant who will attain age 50 in the calendar year may contribute an additional \$5,000 as adjusted for cost-of-living increases in accordance with Code Section 414(v)(2)(C). The Age-Based Catch-Up limitation for the 2011 and 2012 calendar years is \$5,500.
- (f) Coordination of Catch-Up Contributions: A Participant may not utilize both the Catch-Up Limitation and the Age-Based Catch-Up Contribution in the same year. The Age-Based Catch-Up Contribution shall not apply for any taxable year for which a higher Catch-Up Limitation applies.
- (g) Excess Deferrals: Any amount deferred in excess of the Maximum Limitation or Age-Based Catch-Up Contribution shall be distributed to the Participant, with allocable net income, as soon as administratively practicable after the Plan determines that the amount is an excess deferral. An excess deferral as a result of a failure to comply with the individual limitation under Treas. Reg. Section 1.457-5 for a taxable year may be distributed to the Participant, with allocable net income, as soon as administratively practicable after the Plan determines that the amount is an excess deferral.

2.19 Normal Retirement Age: The age that determines the period during which a Participant may utilize the Catch-Up Limitation of Section 2.18(b) hereunder. A Participant's Normal Retirement Age shall be age 70½, unless the Participant has elected an alternative Normal Retirement Age by written instrument delivered to the Employer prior to Severance from Employment.

A Participant's alternative Normal Retirement Age may not be earlier than the earliest date that the Participant shall become eligible to retire and receive unreduced retirement benefits under the Employer's defined benefit plan or money purchase plan covering that Participant and may not be later than the calendar year in which the Participant attains age 70½. If the Participant will not be eligible to receive benefits under a defined benefit plan or money purchase plan maintained by the Employer, the Participant's Normal Retirement Age may not be earlier than attainment of age 65 and may not be later than the calendar year in which the Participant attains age 70½.

If the Participant is a qualified police officer or firefighter as defined under Code Section 415(b)(2)(H)(ii)(I), then such qualified police officer or firefighter may designate an alternative Normal Retirement Age that is between age 40 and age 70½.

Once a Participant has to any extent utilized the Catch-Up Limitation of Section 2.18(b), his Normal Retirement Age may not be changed.

2.20 Participant: Any Eligible Employee who has enrolled in this Plan pursuant to the requirements of Article IV or who has previously deferred compensation under this Plan and who has not received a distribution of his entire benefit under the Plan.

2.21 Plan Year: The 12-month period commencing each January 1st and ending on the following December 31st.

2.22 Severance from Employment: Termination of the Participant's employment relationship with the Employer. For years after 2008, solely for purposes of the withdrawal restrictions of Code Section 457(d)(1)(A), an individual shall be treated as having been severed from employment during any period the individual is performing service in the uniformed services, as described in Code Section 3401(h)(2)(A). For years prior to 2002, references in this Plan to Severance from Employment shall mean severance of the Participant's employment with the Employer, within the meaning of Code Section 402(e)(4)(D)(i)(III), rather than termination of the Participant's employment relationship with the Employer.

2.23 Service Provider: The Variable Annuity Life Insurance Company (VALIC), VALIC Retirement Services Company or such other entity as the Employer designates to perform administrative services under this Plan.

ARTICLE III. ADMINISTRATION

3.01 Plan Administrator. This Plan shall be administered by the Employer or one or more persons designated by the Employer. The Plan Administrator, if other than the Employer, shall act as the agent of the Employer in all matters concerning the administration of this Plan. The Plan Administrator shall have full power to adopt, amend, and revoke such rules and regulations consistent with and as may be necessary to implement, operate and maintain this Plan, to enter into contracts on behalf of the Employer under this Plan, and to make discretionary decisions affecting the rights or benefits of Participants under Section 6.08 of this Plan.

3.02 Employee with Administrative Responsibilities. Any Employee who is charged with administrative responsibilities hereunder may participate in the Plan under the same terms and conditions as apply to other Employees. However, he

shall not have the power to participate in any discretionary action taken with respect to his participation under Section 6.08 of this Plan.

- 3.03 Administrative Services. The Employer may enter into an agreement with a Service Provider to provide nondiscretionary administrative services under this Plan for the convenience of the Employer, including, but not limited to, the enrollment of Employees as Participants, the maintenance of Accounts and other records, the making of periodic reports to Participants, and the disbursement of benefits to Participants.

ARTICLE IV. PARTICIPATION IN THE PLAN

- 4.01 Participant. An Eligible Employee becomes a Participant when he has executed and entered into a Deferred Compensation Agreement with the Employer. An Eligible Employee is not precluded from becoming a Participant by reason of having received a pre-1997 cash-out distribution (upon separation from service) of \$3,500 or less from a Code Section 457(b) plan.
- 4.02 Enrollment in the Plan. An Eligible Employee may elect to defer Compensation for a calendar month by entering into a Deferred Compensation Agreement before the first day of the month in which the Compensation is paid or made available. A new Eligible Employee may defer Compensation payable in the calendar month which includes the first day of employment by entering into a Deferred Compensation Agreement on or before the first day of employment.
- 4.03 Minimum Deferral Amount. At the time of entering into or amending a Deferred Compensation Agreement hereunder, an Eligible Employee or Participant must agree to defer a minimum periodic amount as specified by the Plan Administrator.
- 4.04 Change in Amount of Deferred Compensation or Beneficiary. A Participant may not amend or modify an executed Deferred Compensation Agreement to change the amount of Deferred Compensation except with respect to compensation to be earned in the subsequent calendar month and provided that notice is given prior to the beginning of the month for which such change is to be effective. The Employer may suspend a Participant's Elective Deferral Contributions and/or Designated Roth Contributions for up to 6 months in the event a Participant takes a hardship distribution from the Employer's Section 401(k) plan or Section 403(b) arrangement if required under the terms of such plan or arrangement. A Participant may change the Beneficiary designated in his Deferred Compensation Agreement at any time by giving written notice to the Plan Administrator.
- 4.05 Revocation of Deferred Compensation Agreement. A Participant may revoke his Deferred Compensation Agreement and his Compensation shall be restored in the subsequent calendar month, by giving notice to the Employer prior to the beginning of the month for which such revocation is to be effective.
- 4.06 New Deferred Compensation Agreement Upon Return to Service or After Revocation. A Participant who returns to active service with the Employer after a Severance from Employment, or who has revoked his Deferred Compensation Agreement under Section 4.05, may again become an active Participant by executing a new Deferred Compensation Agreement with the Employer prior to the beginning of the calendar month for which it is to be effective.
- 4.07 Leave of Absence; Other Absences. Compensation may continue to be deferred under this Plan with respect to a Participant who is on an approved leave of absence from the Employer with Compensation, and all of the rules of this Article shall apply with respect to making, amending or revoking any Deferred Compensation Agreement for such a Participant.
- 4.08 Deferrals of Sick, Vacation, and Back Pay. Subject to approval of the Employer, an Eligible Employee or Participant who has not had a Severance from Employment may elect to defer accumulated sick pay, accumulated vacation pay, and back pay under this Plan in accordance with the requirements of Code Section 457(b). These amounts may be deferred for any calendar month only if an agreement providing for the deferral is entered into before the beginning of the month in which the amounts would otherwise be paid or made available and the Participant is an Employee on the date the amounts would otherwise be paid or made available.
- 4.09 Deferrals of Amounts Paid After Severance from Employment. Subject to the approval of the Employer:
- (a) An Eligible Employee or Participant may elect to defer certain amounts that are paid after Severance from Employment, but only if such amounts are
 - (1) paid by the later of 2½ months after Severance from Employment or the end of the calendar year that includes the date of Severance from Employment, and
 - (2) one of the following types of compensation:

- (i) regular compensation for services rendered by the Eligible Employee or Participant (including base pay, overtime, shift differential, commission, bonus or other similar pay), so long as these amounts would have been paid to the Eligible Employee or Participant prior to termination of employment if the Eligible Employee or Participant had not had a Severance from Employment; or
 - (ii) payments for accrued but unused sick, vacation or other leave, but only if the Eligible Employee or Participant would have been able to use such leave if employment had continued.
 - (b) An Eligible Employee or Participant may also elect to defer amounts paid to the Eligible Employee or Participant during periods when the Eligible Employee or Participant is not performing services for the Employer by reason of qualified military service (as that term is used in Code Section 414(u)(1)), but only to the extent those payments do not exceed the amount the Eligible Employee or Participant would have received if the Eligible Employee or Participant had continued to perform services for the Employer rather than entering qualified military service.
 - (c) An Eligible Employee or Participant may also elect to defer amounts paid to the Eligible Employee or Participant during a period when the Eligible Employee or Participant is not performing services for the Employer because the Eligible Employee or Participant is permanently and totally disabled (as that term is defined in Code Section 22(e)(3)), so long as either:
 - (1) the Eligible Employee or Participant was not a highly compensated employee (as defined in Code Section 414(q)) immediately before becoming permanently and totally disabled, or
 - (2) the plan under which the disability payments are made provides for payments to all Eligible Employees or Participants who are permanently and totally disabled for a fixed or determined period.
- 4.10 Designated Roth Contributions. If elected by the Employer in the Adoption Agreement, the Participant may designate that all or a portion of his/her elective contributions to the Plan be treated as after-tax Roth contributions (referred to herein as "Designated Roth Contributions"). Such designation must be made before the date upon which the amounts designated would otherwise have been payable to the Participant (but for the election to defer), and such designation must be irrevocable on and after that date. Designated Roth Contributions (and the earnings thereon) shall be accounted for separately from all other contributions to the Plan (including rollovers of Roth contributions from other plans and in-plan Roth conversions) and the earnings on those contributions. If a Participant takes a distribution of less than 100% of his Account (including an In-Service Distribution or an Unforeseeable Emergency Withdrawal), the Participant may designate whether such distribution shall be made from the Participant's pre-tax Elective Deferral Contributions or after-tax Designated Roth Contributions.
- 4.11 Employer Contributions. If elected by the Employer in the Adoption Agreement, the Employer may/shall make contributions (that are not part of the Participant's Compensation) to the Plan as additional Deferred Compensation. Employer contributions may, but need not, be accounted for separately from Employee pre-tax Elective Deferral Contributions, but shall be accounted for separately from Designated Roth Contributions, amounts converted to Roth contributions through an in-plan Roth conversion, and rollover contributions (whether from a non-Roth account or a designated Roth account). If the Employer elects in the Adoption Agreement to make contributions in lieu of withholding/paying FICA taxes (hereinafter referred to as "FICA Opt-out Contributions") for some or all Participants for a given pay period, such contributions must total at least 7.5% of the Participant's Compensation for the pay period, and must be 100% vested at all times. If the Employer requires Participants to make mandatory salary reduction (*i.e.*, pre-tax) contributions to the Plan as a condition of employment (hereinafter referred to as "Employee Mandatory Contributions"), such contributions shall be treated as Employer Contributions for all purposes under this Plan (including the 7.5% of Compensation requirement for FICA Opt-out Contributions).
- 4.12 Compliance with HEART Act. In the case of a death occurring on or after January 1, 2007, if a Participant dies while performing qualified military service (as defined in Code Section 414(u)), the Participant's Beneficiary is entitled to any additional benefits (other than benefit accruals relating to the period of qualified military service), if any, provided under the Plan as if the Participant had resumed employment and then terminated employment on account of death. If (and only if) the Employer elects in the Adoption Agreement, then effective as of the date elected in the Adoption Agreement, the Plan shall treat an individual who dies or becomes disabled (as defined in Code Section 72(m)(7)) while performing qualified military service with respect to the Employer as if the individual had resumed employment in accordance with the individual's reemployment rights under USERRA, on the day preceding death or disability (as the case may be) and terminated employment on the actual date of death or disability. The Plan will determine the amount of Elective Deferral Contributions (or Designated Roth Contributions) of an individual treated as employed under this section for purposes of applying Code Section 414(u)(8)(C) on the basis of the individual's average actual Elective Deferral Contributions (or Designated Roth Contributions) for the lesser of (i) the 12-month period of service

with the Employer immediately prior to the qualified military service or (ii) the actual length of continuous service with the Employer.

ARTICLE V. INVESTMENT OF DEFERRED COMPENSATION

- 5.01 Annuity Contracts and Other Plan Investments. For the purposes of satisfying its obligation to provide benefits under this Plan, the Employer shall invest the amount of compensation deferred by each Participant in Annuity Contracts and other Plan investments as specified in the Participants' Deferred Compensation Agreements. Amounts deferred under this Plan must be transferred to a trust, custodial account or annuity contract described in Section 5.02 within a period that is not longer than is reasonable for the proper administration of the Participant Accounts. Responsibility for the selection of investment alternatives for Plan assets shall be retained by the Employer, and the Employer shall have the right to modify the selection of investment alternatives from time to time. However, Participants and Beneficiaries may allocate amounts held in their Accounts or otherwise credited for their benefit under the Plan among the investment alternatives selected by the Employer, and the Employer shall cause such amounts to be so allocated within a reasonable time after the receipt of Participant instructions, or may instruct the issuer, trustee, or custodian to accept such allocation instructions directly from Participants and Beneficiaries as representatives of the Employer.
- 5.02 Exclusive Benefit. Notwithstanding any provision of the Plan to the contrary, all amounts held under the Plan, including amounts deferred and earnings or other accumulations attributable thereto, shall be held for the exclusive benefit of Plan Participants and Beneficiaries (i) in annuity contracts or (ii) in trust or in one or more custodial accounts pursuant to one or more separate written instruments. Any such annuity contract, trust, or custodial account must satisfy the requirements of Code Section 457(g)(1). The annuity contract, trust or custodial account must make it impossible, prior to the satisfaction of all liabilities with respect to Participants and their Beneficiaries, for any part of the assets and income of the annuity contract, trust or custodial account to be used for, or diverted to, purposes other than for the exclusive benefit of Participants and their Beneficiaries. For purposes of this section, the terms Participant and Beneficiary shall also include contingent beneficiaries and/or spouses, former spouses, or children of Participants for whose benefit amounts are being held under the Plan pursuant to the terms of a domestic relations order which has been recognized under the terms of the Plan. Any discretionary authority reserved to the Employer (or to any administrator or administrative committee) under the Plan or under any investment held under the Plan, to the extent the exercise thereof would otherwise be inconsistent with this section, shall be exercised for the exclusive benefit of Plan Participants and Beneficiaries. Any issuer of an annuity contract or trustee or custodian of other investments held under the Plan shall have no authority to pay any amounts from such Plan investments to any creditor of the Employer, and shall have no duty to inquire into the validity of any request by the Employer or by an administrator or administrative committee for distribution of amounts for the benefit of a Participant or a Beneficiary under the Plan.
- 5.03 Benefits Based on Participant's Account Value. The benefits paid to a Participant or Beneficiary pursuant to Article VI of this Plan shall be based upon the value of the Participant's Account. In no event shall the Employer's liability to pay benefits exceed the value of the Participant's Account, and the Employer shall not be liable for losses arising from depreciation or other decline in the value of any investments acquired under this Plan.
- 5.04 Periodic Reports. Each Participant shall receive periodic reports, not less frequently than annually, showing the then-current value of his Account.
- 5.05 Employer-Directed Accounts. Notwithstanding any provision of the Plan to the contrary, the Employer shall direct the issuer, trustee or custodian with respect to the investment of any contributions that are forwarded to the issuer, trustee or custodian prior to the date on which the Participant or Beneficiary completes the necessary paperwork with the issuer, trustee or custodian (or takes such other action or actions as may be necessary) to direct the investment of such amounts. This direction shall be effective only until such time as the Participant or Beneficiary exercises his right to direct the investment of such amounts in accordance with the terms of the Plan.

ARTICLE VI. BENEFITS

- 6.01 Distribution of Benefits. Except as otherwise provided in this Article, a Participant's Account shall become distributable upon a Participant's attainment of age 70½ or Severance from Employment. If the Participant has had a Severance from Employment, the distribution of a Participant's Account shall commence no later than April 1st of the calendar year following the year of the Participant's attainment of age 70½. Distributions shall be made in accordance with one of the payment options described in Section 6.03.
- 6.02 Distribution Procedures. The Employer may from time to time establish procedures for Participant distribution elections, provided that such procedures are not inconsistent with the requirements of Section 6.01.

6.03 Payment Options. A Participant (or a Beneficiary as provided in Sections 6.06 or 6.07) may elect to have the value of the Participant's Account distributed in accordance with one of the following payment options provided that such option is available under the investment and consistent with the requirements set forth in Section 6.04:

- (a) life annuity;
- (b) life annuity with 60, 120, or 180 monthly payments guaranteed;
- (c) unit refund life annuity;
- (d) joint and last survivor annuity (spouse only);
- (e) lump sum;
- (f) term certain annuity with 36, 48, 60, 72, 84, 96, 108, 120, 132, 144, 156, 168 or 180 monthly payments guaranteed;
- (g) withdrawals for a specified number of years;
- (h) withdrawals of a specified amount; or
- (i) any other method of payment agreed upon between Participant and Employer and accepted by the investment provider or Service Provider.

If a Participant fails to elect a payment option, any required payments shall be made under a payment option designated by the Employer.

Notwithstanding the options above, any option that involves a life contingency (or a joint life contingency) shall only be available under an Annuity Contract offered or obtained under the terms of the Plan.

6.04 Required Minimum Distributions.

- (a) No payment option may be selected by the Participant (or a Beneficiary) unless it satisfies the requirements of Code Section 401(a)(9) and any additional Code limitations applicable to the Plan. The provisions of this section shall apply for purposes of determining required minimum distributions for calendar years beginning with the 2003 calendar year. The requirements of this section shall take precedence over any inconsistent provisions of the Plan. All distributions required under this section shall be determined and made in accordance with the regulations under Code Section 401(a)(9). Notwithstanding the other provisions of this section, distributions may be made under a designation made before January 1, 1984, in accordance with Section 242(b)(2) of the Tax Equity and Fiscal Responsibility Act (TEFRA) and the provisions of the Plan that relate to Section 242(b)(2) of TEFRA.
- (b) The Participant's entire interest shall be distributed, or begin to be distributed, to the Participant no later than the Participant's required beginning date. If the Participant dies before distributions begin, the Participant's entire interest shall be distributed, or begin to be distributed, no later than as follows:
 - (1) If the Participant's surviving spouse is the Participant's sole designated Beneficiary, then unless the surviving spouse elects to apply the 5-year rule (pursuant to subsection (f), below), distributions to the surviving spouse shall begin by December 31st of the calendar year immediately following the calendar year in which the Participant died, or by December 31st of the calendar year in which the Participant would have attained age 70½, if later.
 - (2) If the Participant's surviving spouse is not the Participant's sole designated Beneficiary, then unless the designated Beneficiary elects to apply the 5-year rule (pursuant to subsection (f), below), distributions to the designated Beneficiary shall begin by December 31st of the calendar year immediately following the calendar year in which the Participant died.
 - (3) If there is no designated Beneficiary as of September 30th of the year following the year of the Participant's death, the Participant's entire interest shall be distributed by December 31st of the calendar year containing the fifth anniversary of the Participant's death.
 - (4) If the Participant's surviving spouse is the Participant's sole designated Beneficiary and the surviving spouse dies after the Participant but before distributions to the surviving spouse begin, this subsection (b), other than paragraph (b)(1), shall apply as if the surviving spouse were the Participant.

For purposes of this subsection (b) and subsection (d), unless paragraph (b)(4) applies, distributions are considered to begin on the Participant's required beginning date. If paragraph (b)(4) applies, distributions are considered to begin on the date distributions are required to begin to the surviving spouse under paragraph

(b)(1). If distributions under an annuity purchased from an insurance company irrevocably commence to the Participant before the Participant's required beginning date (or to the Participant's surviving spouse before the date distributions are required to begin to the surviving spouse under paragraph (b)(1)), the date distributions are considered to begin is the date distributions actually commence.

Unless the Participant's interest is distributed in the form of an annuity purchased from an insurance company or in a single sum on or before the required beginning date, as of the first distribution calendar year distributions shall be made in accordance with subsections(c) and (d) of this section. If the Participant's interest is distributed in the form of an annuity purchased from an insurance company, distributions thereunder shall be made in accordance with the requirements of Code Section 401(a)(9).

- (c) During the Participant's lifetime, the minimum amount that shall be distributed for each distribution calendar year is the lesser of:
- (1) the quotient obtained by dividing the Participant's account balance by the distribution period in the Uniform Lifetime Table set forth in Section 1.401(a)(9)-9 of the regulations, using the Participant's age as of the Participant's birthday in the distribution calendar year; or
 - (2) if the Participant's sole designated Beneficiary for the distribution calendar year is the Participant's spouse, the quotient obtained by dividing the Participant's account balance by the number in the Joint and Last Survivor Table set forth in Section 1.401(a)(9)-9 of the regulations, using the Participant's and spouse's attained ages as of the Participant's and spouse's birthdays in the distribution calendar year.

Required minimum distributions shall be determined under this subsection (c) beginning with the first distribution calendar year and up to and including the distribution calendar year that includes the Participant's date of death.

- (d) (1) If the Participant dies on or after the date distributions begin and there is a designated Beneficiary, the minimum amount that shall be distributed for each distribution calendar year after the year of the Participant's death is the quotient obtained by dividing the Participant's account balance by the longer of the remaining life expectancy of the Participant or the remaining life expectancy of the Participant's designated Beneficiary, determined as follows:
- (a) The Participant's remaining life expectancy is calculated using the age of the Participant in the year of death, reduced by one for each subsequent year.
 - (b) If the Participant's surviving spouse is the Participant's sole designated Beneficiary, the remaining life expectancy of the surviving spouse is calculated for each distribution calendar year after the year of the Participant's death using the surviving spouse's age as of the spouse's birthday in that year. For distribution calendar years after the year of the surviving spouse's death, the remaining life expectancy of the surviving spouse is calculated using the age of the surviving spouse as of the spouse's birthday in the calendar year of the spouse's death, reduced by one for each subsequent calendar year.
 - (c) If the Participant's surviving spouse is not the Participant's sole designated Beneficiary, the designated Beneficiary's remaining life expectancy is calculated using the age of the Beneficiary in the year following the year of the Participant's death, reduced by one for each subsequent year.
- (2) If the Participant dies on or after the date distributions begin and there is no designated Beneficiary as of September 30th of the year after the year of the Participant's death, the minimum amount that shall be distributed for each distribution calendar year after the year of the Participant's death is the quotient obtained by dividing the Participant's account balance by the Participant's remaining life expectancy calculated using the age of the Participant in the year of death, reduced by one for each subsequent year.
- (3) Except as otherwise elected (pursuant to subsection (f), below), if the Participant dies before the date distributions begin and there is a designated Beneficiary, the minimum amount that shall be distributed for each distribution calendar year after the year of the Participant's death is the quotient obtained by dividing the Participant's account balance by the remaining life expectancy of the Participant's designated Beneficiary, determined as provided in paragraphs (1) and (2), above.
- (4) If the Participant dies before the date distributions begin and there is no designated Beneficiary as of September 30th of the year following the year of the Participant's death, distribution of the Participant's entire interest shall be completed by December 31st of the calendar year containing the fifth anniversary of the Participant's death.

- (5) If the Participant dies before the date distributions begin, the Participant's surviving spouse is the Participant's sole designated Beneficiary, and the surviving spouse dies before distributions are required to begin to the surviving spouse under paragraph (b)(1), this subsection (d) shall apply as if the surviving spouse were the Participant.
- (e) Definitions.
- (1) "Designated Beneficiary" means the individual who is designated as the Beneficiary under Section 2.04 of the Plan and is the designated Beneficiary under Code Section 401(a)(9) and Section 1.401(a)(9)-1, Q&A-4, of the regulations.
- (2) "Distribution calendar year" means a calendar year for which a minimum distribution is required. For distributions beginning before the Participant's death, the first distribution calendar year is the calendar year immediately preceding the calendar year that contains the Participant's required beginning date. For distributions beginning after the Participant's death, the first distribution calendar year is the calendar year in which distributions are required to begin under subsection (b). The required minimum distribution for the Participant's first distribution calendar year shall be made on or before the Participant's required beginning date. The required minimum distribution for other distribution calendar years, including the required minimum distribution for the distribution calendar year in which the Participant's required beginning date occurs, shall be made on or before December 31st of that distribution calendar year.
- (3) "Life expectancy" means life expectancy as computed by use of the Single Life Table in Section 1.401(a)(9)-9 of the regulations.
- (4) "Participant's account balance" means the account balance as of the last valuation date in the calendar year immediately preceding the distribution calendar year (valuation calendar year) increased by the amount of any contributions made and allocated or forfeitures allocated to the account balance as of dates in the valuation calendar year after the valuation date and decreased by distributions made in the valuation calendar year after the valuation date. The account balance for the valuation calendar year includes any amounts rolled over or transferred to the Plan either in the valuation calendar year or in the distribution calendar year if distributed or transferred in the valuation calendar year.
- (5) "Required beginning date" means April 1st of the calendar year following the later of:
- (a) the calendar year in which the Participant attains age 70½; or
- (b) the calendar year in which the Participant retires.
- (f) Participants or Beneficiaries may elect, on an individual basis, whether the 5-year rule or the life expectancy rule in subsections (b) and (d) applies to distributions after the death of a Participant who has a designated Beneficiary. The election must be made no later than the earlier of September 30th of the calendar year in which distribution would be required to begin under subsection (b), or by September 30th of the calendar year which contains the fifth anniversary of the Participant's (or, if applicable, the surviving spouse's) death. If neither the Participant nor the Beneficiary makes an election under this paragraph, distributions shall be made in accordance with subsections (b) and (d).

6.05 2009 Required Minimum Distributions ("RMDs").

- (a) Continuation of RMDs for Participants Receiving Installment Payments Unless Otherwise Elected by the Participant; Suspension of RMDs for All Other Participants. This paragraph applies if elected by the Employer in the Adoption Agreement or if no election is made by the Employer in the Adoption Agreement. Notwithstanding the provisions of Code Section 401(a)(9)(H), a Participant or Beneficiary who would have been required to receive required minimum distributions for 2009 but for the enactment of Code Section 401(a)(9)(H) ("2009 RMDs"), and who would have satisfied that requirement by receiving distributions that are one or more payments in a series of installments (that include 2009 RMDs), will continue to receive those distributions for 2009 unless the Participant or Beneficiary chooses not to receive such distributions. Participants and Beneficiaries described in the preceding sentence will be given the opportunity to elect not to receive the distributions that include 2009 RMDs. For all other Participants and Beneficiaries, the requirement to receive the 2009 RMD shall be suspended in accordance with Code Section 401(a)(9)(H).
- (b) Continuation of RMDs for All Participants Unless Otherwise Elected by the Participant. This paragraph applies if elected by the Employer in the Adoption Agreement. Notwithstanding the provisions of Code Section 401(a)(9)(H), a Participant or Beneficiary who would have been required to receive required minimum distributions for 2009 but for the enactment of Code Section 401(a)(9)(H) ("2009 RMDs"), and who would have satisfied that

requirement by receiving distributions that are either (1) equal to the 2009 RMDs or (2) one or more payments in a series of installments (that include 2009 RMDs), will receive those distributions for 2009 unless the Participant or Beneficiary chooses not to receive such distributions. Participants and Beneficiaries described in the preceding sentence will be given the opportunity to elect to stop receiving the distributions described in the preceding sentence.

- (c) Continuation of RMDs for All Participants Unless Otherwise Elected by Participants Receiving Installment Distributions. This paragraph applies if elected by the Employer in the Adoption Agreement. Notwithstanding the provisions of Code Section 401(a)(9)(H), a Participant or Beneficiary who would have been required to receive required minimum distributions for 2009 but for the enactment of Code Section 401(a)(9)(H) ("2009 RMDs"), and who would have satisfied that requirement by receiving distributions that are either (1) equal to the 2009 RMDs or (2) one or more payments in a series of installments (that include the 2009 RMDs), will receive those distributions for 2009. However, Participants and Beneficiaries receiving installments will be given the opportunity to elect not to receive the distributions that include 2009 RMDs.
- (d) Direct Rollovers. Notwithstanding the provisions of the Plan relating to required minimum distributions under Code Section 401(a)(9), and solely for purposes of applying the direct rollover provisions of the Plan, certain additional distributions in 2009, as elected by the Employer in the Adoption Agreement, will be treated as eligible rollover distributions. If no election is made by the Employer in the Adoption Agreement, then a direct rollover will be offered only for distributions that would be eligible rollover distributions without regard to Code Section 401(a)(9)(H).

6.06 Post-Retirement Death Benefits. Should the Participant die after he has begun to receive benefits under an annuity payment option, the guaranteed or remaining payments, if any, under the annuity payment option shall be payable to the Participant's Beneficiary commencing with the first payment due after the death of the Participant. If the Beneficiary does not continue to live for the remaining period of payments under the annuity payment option, then the remaining benefits under the annuity payment option shall be paid to the Beneficiary's beneficiary or, if none, the Beneficiary's estate. Should the Participant die after he has begun to receive benefits under any other payment option, a death benefit equal to the value of the Participant's Account shall be payable to the Beneficiary. Such death benefit shall be paid in a lump sum unless the Beneficiary elects a different payment option. Should the Beneficiary die before the completion of payments under an annuity payment option or before distribution of the entire Participant Account, then the value of the remaining payments under the annuity payment option, or the value of the Participant Account in a lump sum, respectively, shall be paid to the Beneficiary's beneficiary or, if none, the Beneficiary's estate. Payment to the Participant's Beneficiary under this section must comply with Code Section 401(a)(9), and with any additional Code limitations applicable to the Plan. In no event shall the Employer be liable for any payments made in the name of the Participant or a Beneficiary before the Employer or its agent receives proof of the death of the Participant or Beneficiary.

6.07 Pre-Retirement Death Benefits. Should the Participant die before he has begun to receive benefits under Section 6.01, a death benefit equal to the value of the Participant's Account shall be payable to the Beneficiary. Such death benefit shall be paid in a lump sum unless the Beneficiary elects a different payment option. Payment to the Participant's Beneficiary must comply with Code Section 401(a)(9), and with any additional Code limitations applicable to the Plan. Should the Beneficiary die before the completion of payments under an annuity payment option or before distribution of the entire Participant Account, the value of the remaining payments under the annuity payment option, or the value of the Participant Account in a lump sum, shall be paid to the Beneficiary's beneficiary or, if none, the Beneficiary's estate.

6.08 Unforeseeable Emergency Withdrawals. If the Employer so elects in the Adoption Agreement, then in the event of an unforeseeable emergency, a Participant may apply to the Employer to receive that part of the value of his Account that is reasonably needed to satisfy the emergency need (including any amounts that may be necessary to pay any federal, state or local income taxes or penalties reasonably anticipated to result from the distribution). If such application for withdrawal is approved by the Employer, the Employer shall direct the issuer, trustee or custodian to pay the Participant such value as the Employer deems necessary to meet the emergency need.

The regulations under Section 457(d)(1)(A)(iii) of the Code define an unforeseeable emergency as a severe financial hardship of the Participant or Beneficiary resulting from an illness or accident of the Participant or Beneficiary, the Participant's or Beneficiary's spouse, or the Participant's or Beneficiary's dependent (as defined in Code Section 152, and, for taxable years beginning on or after January 1, 2005, without regard to Code Section 152(b)(1), (b)(2), and (d)(1)(B)); loss of the Participant's or Beneficiary's property due to casualty (including the need to rebuild a home following damage to a home not otherwise covered by homeowner's insurance, e.g., as a result of a natural

disaster); or other similar extraordinary and unforeseeable circumstances arising as a result of events beyond the control of the Participant or Beneficiary. For example, the imminent foreclosure of or eviction from the Participant's or Beneficiary's primary residence may constitute an unforeseeable emergency. In addition, the need to pay for medical expenses, including non-refundable deductibles, as well as for the cost of prescription drug medication, may constitute an unforeseeable emergency. Finally, the need to pay for the funeral expenses of a spouse or a dependent (as defined in Code Section 152, and, for taxable years beginning on or after January 1, 2005, without regard to Code Section 152(b)(1), (b)(2), and (d)(1)(B)) of the Participant or Beneficiary may also constitute an unforeseeable emergency. Except as otherwise specifically provided in this Section 6.08, neither the purchase of a home nor the payment of college tuition is an unforeseeable emergency.

A distribution on account of an unforeseeable emergency may not be made to the extent that such emergency is or may be relieved through reimbursement or compensation from insurance or otherwise, by liquidation of the Participant's assets, to the extent the liquidation of such assets would not itself cause severe financial hardship, or by cessation of deferrals under the Plan.

Unless otherwise elected in the Adoption Agreement, then effective as of August 17, 2006, a Participant's unforeseeable emergency includes a severe financial hardship of the Participant's primary beneficiary under the Plan, that would constitute an unforeseeable emergency if it occurred with respect to the Participant's spouse or dependent as defined under Code Section 152. For purposes of this section, a Participant's "primary beneficiary under the Plan" is an individual who is named as a Beneficiary under the Plan and has an unconditional right to all or a portion of the Participant's account balance under the Plan upon the Participant's death.

- 6.09 Transitional Rule for Annuity Payment Option Elections. If this Plan document constitutes an amendment and restatement of the Plan as previously adopted by the Employer and if a Participant or Beneficiary has commenced receiving benefits under an annuity payment option, that annuity payment option shall remain in effect notwithstanding any other provision of this Plan.
- 6.10 Participant's Election to Receive In-Service Distribution. If the Employer so elects in the Adoption Agreement, a Participant may elect to receive an in-service distribution of the total amount payable to him under the Plan if:
- (a) such amount does not exceed the dollar amount under Section 411(a)(11)(A) of the Code,
 - (b) no amount has been deferred under the Plan with respect to the Participant during the two-year period ending on the date of the distribution, and
 - (c) there has been no prior distribution under the Plan to the Participant under this Section 6.10 or under Section 6.11.
- 6.11 Distribution without Participant's Consent. If the Employer so elects in the Adoption Agreement, the total amount payable to a Participant under the Plan may be distributed to the Participant without his consent if:
- (a) such amount does not exceed \$1,000,
 - (b) no amount has been deferred under the Plan with respect to the Participant during the two-year period ending on the date of the distribution, and
 - (c) there has been no prior distribution under the Plan to the Participant under this Section 6.11 or under Section 6.10.
- 6.12 In-plan Roth Conversions. If the Employer so elects in the Adoption Agreement, Participants may elect to convert certain pre-tax Elective Deferral Contributions, Employer Contributions or rollover contributions to after-tax Roth contributions in an in-plan (taxable) conversion. Such conversion shall be accomplished through a direct rollover from the Participant's applicable pre-tax account to his Roth conversion account (such that there is no actual distribution from the Plan). In-plan Roth conversions are expressly limited to amounts that are currently distributable to the Participant under both Code Section 457(d)(1)(A) and the terms of the Plan. Rollover contributions made on or after January 1, 2006 may be converted at any time. Amounts attributable to Elective Deferral Contributions or Employer Contributions generally cannot be converted before the Participant has attained age 70½ or has had a Severance from Employment. If the Employer elects in the Adoption Agreement to allow in-service distribution of small, inactive accounts, such amounts shall also be eligible for conversion under this section. All in-plan Roth conversions shall be taxable to the Participant in the year of the conversion.
- 6.13 Distributions to Individuals Performing Service in Uniformed Services. If (and only if) elected by the Employer in the Adoption Agreement, a Participant who is deemed to have incurred a Severance from Employment on account of performing services in the uniformed services (as defined in chapter 43 of title 38, United States Code) for a period of active duty of more than 30 days may elect to receive a distribution of all or a portion of the Participant's Account under the Plan. However, the Plan will not distribute the Participant's Account without the Participant's consent.

If the Participant elects to receive a distribution under this provision, the Participant may not make an Elective Deferral Contribution or a Designated Roth Contribution to the Plan during the 6-month period beginning on the date of the distribution.

- 6.14 Eligible Retired Public Safety Officer Distribution Deduction Election. Unless the Employer elects otherwise in the Adoption Agreement, for distributions in taxable years beginning after December 31, 2006, an “Eligible Retired Public Safety Officer” may elect annually for that taxable year to have the Plan (i) deduct an amount from the distribution which the Eligible Retired Public Safety Officer otherwise would receive (and include in income) and (ii) pay such deducted amounts directly to the provider of an accident or health insurance plan or qualified long-term care insurance contract. The amount deducted (and paid to the provider) may not exceed the lesser of \$3,000 or the amount the Participant paid for such taxable year for qualified healthcare premiums, and which otherwise complies with Code Section 402(l). For purposes of this section: (i) an “Eligible Retired Public Safety Officer” is an individual who, by reason of disability or attainment of normal retirement age, has experienced a Severance from Employment as a Public Safety Officer with the Employer, (ii) a “Public Safety Officer” has the same meaning as in Section 1204(9)(A) of the Omnibus Crime Control and Safe Streets Act of 1968, and (iii) the term “qualified health insurance premiums” means premiums for coverage for the Eligible Retired Public Safety Officer, his spouse and dependents, by an accident or health plan or a qualified long-term care insurance contract (as defined in Code Section 7702B(b)).

ARTICLE VII. NON-ASSIGNABILITY

- 7.01 In General. Except as provided in Section 7.02, the interests of each Participant or Beneficiary under the Plan are not subject to the claims of the Participant’s or Beneficiary’s creditors; and no Participant or Beneficiary shall have any right to commute, sell, assign, pledge, transfer or otherwise convey or encumber the right to receive any payments hereunder or any interest under the Plan, which payments and interests are expressly declared to be non-assignable and non-transferable.

7.02 Domestic Relations Orders.

- (a) Allowance of Transfers: Notwithstanding Section 7.01, if a judgment, decree or order (including approval of a property settlement agreement) that relates to the provision of child support, alimony payments, or the marital property rights of a spouse or former spouse, child, or other dependent of a Participant is made pursuant to a State domestic relations law (“domestic relations order”), then the amount of the Participant’s Account shall be paid in the manner and to the person or persons so directed in the domestic relations order. Such payment shall be made without regard to whether the Participant is eligible for a distribution of benefits under the Plan. The Plan Administrator shall establish reasonable procedures for determining the status of any such decree or order and for effectuating distribution pursuant to the domestic relations order. Where necessary to carry out the terms of such an order, a separate Account may be established with respect to the spouse, former spouse, or child who shall be entitled to make investment selections with respect thereto in the same manner as the Participant.
- (b) Release from Liability to Participant: The Employer’s liability to pay benefits to a Participant shall be reduced to the extent that amounts have been paid or set aside for payment to a spouse, former spouse, child, or other dependent pursuant to paragraph (a) of this section. No such transfer shall be effectuated unless the Employer or Service Provider has been provided with satisfactory evidence that the Employer and the Service Provider are released from any further claim by the Participant with respect to such amounts. The Participant shall be deemed to have released the Employer and the Service Provider from any claim with respect to such amounts, in any case in which (i) the Employer or Service Provider has been served with legal process or otherwise joined in a proceeding relating to such transfer, (ii) the Participant has been notified of the pendency of such proceeding in the manner prescribed by the law of the jurisdiction in which the proceeding is pending by service of process in such action or by mail from the Employer or Service Provider to the Participant’s last known mailing address, and (iii) the Participant fails to obtain an order of the court in the proceeding relieving the Employer or Service Provider from the obligation to comply with the judgment, decree, or order. The Participant shall also be deemed to have released the Employer or Service Provider if the Participant has consented to the transfer pursuant to the terms of a property settlement agreement and/or a final judgment, decree, or order as described in paragraph (a).
- (c) Participation in Legal Proceedings: The Employer and the Service Provider shall not be obligated to defend against or seek to have set aside any judgment, decree, or order described in paragraph (a) or any legal order relating to the garnishment of a Participant’s benefits, unless the full expense of such legal action is borne by the Participant. In the event that the Participant’s action (or inaction) nonetheless causes the Employer or Service Provider to incur such expense, the amount of the expense may be charged against the Participant’s Account and thereby reduce the Employer’s obligation to pay benefits to the Participant. In the course of any proceeding relating to divorce, separation, or child support, the Employer and Service Provider shall be authorized to the extent permitted by

applicable laws to disclose information relating to the Participant's Account to the Participant's spouse, former spouse, or child (including the legal representatives of the spouse, former spouse, or child), or to a court.

- (d) Effective April 6, 2007, a domestic relations order will not fail to be a domestic relations order (1) solely because the order is issued after, or revises, another domestic relations order; or (2) solely because of the time at which the order is issued, including issuance after the annuity starting date or after the Participant's death. A domestic relations order described in this paragraph is subject to the same requirements and protections that apply to domestic relations orders.

ARTICLE VIII. TRANSFERS AND ROLLOVERS

8.01 Transfers. This Plan shall accept and allow transfers, pursuant to Code Section 457, of amounts deferred by an individual under this Plan or another eligible deferred compensation plan meeting the requirements of Section 457(g) of the Code, provided the conditions of this Section 8.01 are met.

- (a) Directed by Individual Participant or Beneficiary. A transfer from this Plan to another eligible governmental deferred compensation plan or from another eligible governmental deferred compensation plan to this Plan is permitted only if the transferor plan provides for transfers, the receiving plan provides for the receipt of transfers, the Participant or Beneficiary whose amounts deferred are being transferred shall have an amount deferred immediately after the transfer at least equal to the amount deferred with respect to that Participant or Beneficiary immediately before the transfer, and in the case of a transfer for a Participant, the Participant whose amounts deferred are being transferred has had a severance from employment with the transferring employer and is performing services for the employer maintaining the transferee plan. Upon the transfer of assets from this Plan under this paragraph (a), the Plan's liability to pay benefits to the Participant or Beneficiary under this Plan shall be discharged to the extent of the amount so transferred for the Participant or Beneficiary.

Any such transferred amount shall not be treated as a deferral subject to the limitations of Section 2.18, except that, for purposes of applying the limit of Section 2.18, an amount deferred during any taxable year under the plan from which the transfer is accepted shall be treated as if it had been deferred under this Plan during such taxable year and compensation paid by the transferor employer shall be treated as if it had been paid by the Employer.

- (b) Permissive Service Credit Transfers. Subject to any limitations imposed by an investment provider, if a Participant is also a participant in a tax-qualified defined benefit governmental plan (as defined in Code Section 414(d)) that provides for the acceptance of plan-to-plan transfers with respect to the Participant, then the Participant may elect to have any portion of the Participant's Account transferred to the defined benefit governmental plan. A transfer under this paragraph (b) may be made before the Participant has had a Severance from Employment.

A transfer may be made under this paragraph (b) only if the transfer is either for the purchase of permissive service credit (as defined in Code Section 415(n)(3)(A)) under the receiving defined benefit governmental plan or a repayment to which Code Section 415 does not apply by reason of Code Section 415(k)(3).

8.02 Rollovers. A Participant may elect to roll an Eligible Rollover Distribution to an Eligible Retirement Plan. The Participant shall be provided with a description of available rollover rights and rules in advance of such a distribution. A distribution that is an Eligible Rollover Distribution and that is paid in a form other than a rollover shall be subject to mandatory withholding of 20%, or such other mandatory withholding rate as may be imposed under the Code from time to time. This Plan shall be permitted to accept a rollover distribution from an Eligible Retirement Plan (including a distribution from an IRA) to this Plan, subject to any administrative restrictions imposed by the Plan or by the investment provider. To the extent required under the Code, the Plan shall separately account for any rollover contributions it receives. Rollover contributions to the Plan before January 1, 2006, shall be subject to the same restrictions on distributions applicable to other amounts held under the Plan. Rollover contributions to the Plan on or after January 1, 2006, shall not be subject to the same restrictions on distributions applicable to other amounts held under the Plan, and such rollover contributions may be distributed at any time.

8.03 Non-spousal Beneficiary Rollovers.

- (a) For distributions after December 31, 2009, and unless otherwise elected in the Adoption Agreement, for distributions between January 1, 2007 and December 31, 2009, a non-spouse Beneficiary who is a "designated beneficiary" under Code Section 401(a)(9)(E) and the regulations thereunder, may roll over, by a direct trustee-to-trustee transfer ("direct rollover"), all or any portion of his distribution to an individual retirement account the Beneficiary establishes for purposes of receiving the distribution. In order to roll over the distribution, the distribution otherwise must satisfy the definition of an Eligible Rollover Distribution.

- (b) Although a non-spouse Beneficiary may roll over directly a distribution as provided in paragraph (a) above, any distribution made prior to January 1, 2010, is not subject to the direct rollover requirements of Code Section 401(a)(31) (including Code Section 401(a)(31)(B), the notice requirements of Code Section 402(f) or the mandatory withholding requirements of Code Section 3405(c)). If a non-spouse Beneficiary receives a distribution from the Plan, the distribution is not eligible for an indirect "60-day" rollover.
- (c) If the Participant's named Beneficiary is a trust, the Plan may make a direct rollover to an individual retirement account on behalf of the trust, provided the trust satisfies the requirements to be a "designated beneficiary" within the meaning of Code Section 401(a)(9)(E).
- (d) A non-spouse Beneficiary may not roll over an amount which is a required minimum distribution, as determined under applicable Treasury regulations and other Internal Revenue Service guidance. If the Participant dies before his required beginning date and the non-spouse Beneficiary rolls over to an IRA the maximum amount eligible for rollover, the Beneficiary may elect to use either the 5-year rule or the life expectancy rule, pursuant to Section 1.401(a)(9)-3, A-4(c) of the regulations, in determining the required minimum distributions from the IRA that receives the non-spouse Beneficiary's distribution.

ARTICLE IX. LOANS

If the Employer so elects under the Adoption Agreement, loans shall be made available to all Participants on a reasonably equivalent basis, but only to the extent permitted under the Annuity Contract or other Plan investment and the provisions of this Article. No loan shall be made available under this Plan unless it satisfies all of the requirements of Code Section 72(p) and any other applicable regulatory guidance, including the limitations on the total of a Participant's non-taxable loans from all plans of the Employer for treatment as a tax-free loan. The making of loans under this Plan shall be subject to written guidelines set forth in a separate document (or under the Annuity Contract), which guidelines shall govern the availability, terms and procedures for Participants to obtain loans under this Plan. The availability of loans under this Plan may be suspended, terminated or modified at any time.

ARTICLE X. AMENDMENT OR TERMINATION OF PLAN

- 10.01 Amendment or Termination. The Employer may at any time amend this Plan or terminate this Plan and distribute the Participants' Accounts in conformity with the Code; provided, however, that such amendment or termination shall not impair the rights of Participants or their Beneficiaries with respect to any compensation deferred before the date of the amendment or termination of this Plan except as may be required to maintain the tax status of the Plan under the Code. In the event that the Plan is terminated, amounts deferred under the Plan (and all Plan assets) shall be distributed to all Plan Participants and Beneficiaries as soon as administratively practicable after the termination of the Plan.
- 10.02 Amendment and Restatement of Previously Adopted Plan. If this Plan document constitutes an amendment and restatement of the Plan as previously adopted by the Employer, the amendments contained herein shall be effective as of the Effective Date, and the terms of the preceding plan document shall remain in effect through such date.

ARTICLE XI. USERRA

An Employee whose employment is interrupted by qualified military service under Code Section 414(u) or who is on a leave of absence for qualified military service under Code Section 414(u) may defer additional Compensation upon resumption of employment with the Employer equal to the maximum amount of Compensation that could have been deferred during that period if the Employee's employment with the Employer had continued (at the same level of Compensation) without the interruption of leave, reduced by the amount of Compensation, if any, actually deferred during the period of the interruption or leave. This right applies for five years following the resumption of employment (or, if sooner, for a period equal to three times the period of the interruption or leave).

ARTICLE XII. MISTAKEN CONTRIBUTIONS

If any contribution (or any portion of a contribution) is made to the Plan by a good faith mistake of fact, then within one year after the payment of the contribution, and upon receipt in good order of a proper request approved by the Plan Administrator, the amount of the mistaken contribution (adjusted for any income or loss in value, if any, allocable thereto) shall be returned directly to the Participant or, to the extent required or permitted by the Plan Administrator, to the Employer.

ARTICLE XIII. RELATIONSHIP TO OTHER PLANS

This Plan serves in addition to any other retirement, pension or benefit plan or system presently in existence or hereinafter established.

ARTICLE XIV. PARTICIPATING EMPLOYERS

- 14.01 Adoption of Plan. With the consent of the Employer, the Plan may be adopted by any other governmental entity described in Code Section 457(e)(1)(A), and each such adopting entity shall be known as a Participating Employer. Such adoption of the Plan shall be evidenced by completion of a Participation Agreement signed by both the Employer and the Participating Employer.
- 14.02 Participating Employer's Plan. Each Participating Employer shall be treated as the sponsor of its own separate governmental Code Section 457(b) eligible deferred compensation plan, subject to the terms and conditions of this Plan document. Accordingly, although the assets of the Plan may be held in a single trust (or annuity contract or custodial account that is treated as a trust), the assets attributable to the Employer and to each Participating Employer shall be accounted for separately. Except as provided below, wherever a right or obligation is imposed upon the Employer by the terms of the Plan, the same shall extend to each Participating Employer under the Plan, and shall be separate and distinct from that imposed upon the Employer.
- 14.03 Participating Employer's Participation. Except as otherwise provided below, it is the intention of the Employer that each Participating Employer shall be a party to the Plan and shall be treated in all respects as the Employer thereunder, with its employees to be considered as Employees or Participants, as the case may be, under the Plan. However, the participation of a Participating Employer in the Plan shall in no way diminish, augment, modify, or in any way affect the rights and duties of the Employer or its Employees under the Plan.
- 14.04 Severance from Employment. For purposes of Section 2.22 (Severance from Employment), the term Employer means the governmental entity that the Participant was employed by (or under contract with) at the time of his termination of employment.
- 14.05 Plan Administrator. For purposes of Article III (Administration), each Participating Employer shall serve as (or appoint another person to serve as) the Plan Administrator of such Participating Employer's plan. Each Participating Employer (or the person designated by such Participating Employer as the Plan Administrator of that Participating Employer's plan) shall have full power to adopt, amend, and revoke such rules and regulations consistent with and as may be necessary to implement, operate and maintain its participation in the Plan and to make discretionary decisions affecting the rights or benefits of its own Participants under the Plan.
- 14.06 Investments and Administrative Services. Only the Employer shall have the right to enter into contracts or agreements with investment providers or other companies providing administrative services to the Plan. The Employer shall act as the agent of each Participating Employer with respect to such investment contracts and/or services agreements. The Employer's choice of investment and administrative service providers shall be binding on each Participating Employer and, by signing the Participation Agreement, the Participating Employer agrees to be bound by the terms and conditions of any such investment contracts and/or services agreements.
- 14.07 Amendment or Termination of the Plan. Only the Employer shall have the right to amend or terminate the Plan under Article X. The Employer's amendment or termination of the Plan shall be binding on each Participating Employer and, by signing the Participation Agreement, the Participating Employer agrees to be bound by the terms and conditions of any such amendment or termination of the Plan.
- 14.08 Revocation of Participation. A Participating Employer may at any time (by written notice to the Employer) revoke its participation in the Plan, in which case the Participating Employer must adopt its own plan document and provide its own trust or other funding arrangement for the assets attributable to its Participants. If a Participating Employer revokes its participation in the Plan, the Employer shall direct the Trustee of the Plan's trust (and/or the issuer of any annuity contract or the custodian of any custodial account holding Plan assets) to transfer the Plan assets attributable to the Participating Employer's Participants to such separate funding arrangement as soon as administratively practicable following the Participating Employer's revocation of its participation in the Plan.

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016

CONSENT AGENDA
ITEM 10

Accept Customer Supplied 20-Year Water Demand Projections

Recommended Action - **Motion** to accept Customer provided demand projections for 2017 through 2036.

Each year Authority customers are required to provide the Authority with an updated 20-year water demand (annual average, peak month, maximum day) projection and identify the portion of their demand they require the Authority to fulfill. The Customers 2016 submittals (reflecting the 2017-2036 planning period) requested delivery of 31.53 MGD (average daily flow) from the Authority in 2017. Customer demand projections (in aggregate) for the 20-year planning period show average daily water demands increasing about 1.8% per year, from 79.9 MGD in 2017 to about 111.7 MGD in 2036.

Current average day supply capacity for the Authority and Customers is approximately 105 MGD. Analysis of Customer projections and existing supply capacity using the methodology established in the Authority's *Water Supply Master Plan 2015* shows need for development of an additional 26 MGD in supply capacity in the region during the next 20 years, with the first new supply needed in 2023. Customer projections identify development 17 MGD in new local supplies, with the first of those supplies being completed in 2023 (by North Port). In addition, Manatee County has indicated a potential need for 5 MGD in new regional supply in the 2034 timeframe. Assuming this Customer proposed/requested 22 MGD capacity (17 MGD local + 5 MGD Regional) is completed, an additional 4 MGD in new capacity must still be developed to meet demand and supply capacity targets within the 20-year planning period. Staff memorandum is attached.

Budget Action - None

MEMORANDUM

DATE: April 6, 2016

TO: Pat Lehman, P.E., Executive Director

FROM: Mike Coates, P.G. Deputy Director

RE: 20-Year Water Demand & Supply Projections (2017 – 2036)

Overview:

Authority Customers have requested average regional delivery in FY 2017 of 31.5 MGD, an increase of 7% from quantities requested for FY 2016. That 7% increase is primarily associated with improvements that increased treatment capacity in 2015 at the Peace River Facility enabling increased Master Water Supply Contract capacity allocations.

Customer submittals for 2017-2036 show average daily water demand for all areas served by Authority Customers is projected to increase about 1.8% per year for the 20 year planning period, rising from 79.7 MGD in 2017 to 111.7 MGD in 2036. By comparison Bureau of Economic and Business Research (BEBR) medium and high population projections for the region show annual population increases for the 20 year planning period at 1.3% and 1.8% respectively.

Analysis of Customer projections and existing supply capacity using the methodology established in the Authority's *Water Supply Master Plan 2015* shows a need for development of an additional 26 MGD in supply capacity in the region during the next 20 years, with the first new supply needed in 2023. The recent projections indicate that Customers intend to develop 17 MGD in new local supplies, with the first of those supplies being completed in 2023. In addition, Manatee County has identified a potential need for 5 MGD in new supply from the Authority in the 2034 timeframe. Assuming this Customer proposed/requested 22 MGD capacity (17 MGD local + 5 MGD Regional) is completed, an additional 4 MGD in new capacity must still be developed to meet demand and supply capacity targets.

Background:

Each year Authority Customers are required to provide the Authority with an updated 20-year water demand (annual average, peak month, maximum day) projection and identify the portion of their demand they require the Authority to fulfill. These submittals support annual budgeting and enable the Authority to plan and develop adequate sources and facilities to meet demand. Authority Customer demand and supply projections for the 2017 through 2036 planning period were received and are discussed in this memo.

The October 5, 2005 Master Water Supply Contract (MWSC) includes an allocation of capacity for Authority Customers from the Peace River Facility (PRF). These allocations are identified in “Exhibit B” of the MWSC. Future Water Allocations, over and above those listed in “Exhibit B” are identified in “Exhibit C” of the MWSC. “Exhibit C” provides for a rolling 7-year lock-in on Future Water Allocations which is intended to provide adequate time for the Authority to develop or procure new supply capacity required by Customers.

“Exhibit B” and “Exhibit C” of the MWSC were amended in August 2015. The amendment to “Exhibit B” increased capacity allocations for Sarasota County and North Port in conjunction with improvements at the PRF that increased treatment capacity. The Amendment to “Exhibit C” eliminated all previously requested Future Water Allocations. The current “Exhibit B” average annual allocations are shown in Table 1 below.

Table 1 (Exhibit B Annual Average Day Water Allocations)

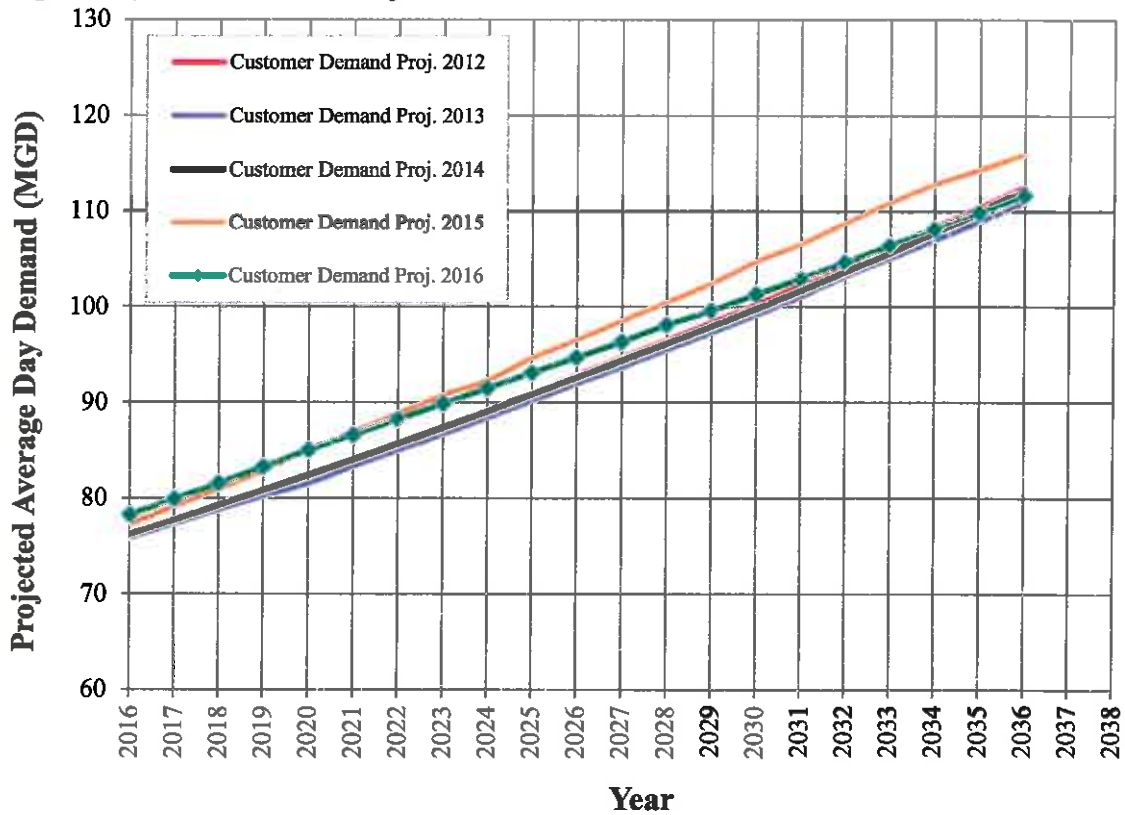
Contract FY	Charlotte	DeSoto	Sarasota	North Port	Total
2005	12.525	0.535	3.048	1.192	17.300
2006	12.758	0.550	3.500	1.192	18.000
2007	12.758	0.550	3.500	1.192	18.000
2008	12.758	0.550	3.500	1.192	18.000
2009	13.895	0.593	6.808	1.705	23.001
2010	15.031	0.635	10.116	2.218	28.000
2011	16.100	0.675	13.225	2.700	32.700
2012	16.100	0.675	13.225	2.700	32.700
2013	16.100	0.675	13.225	2.700	32.700
2014	16.100	0.675	13.225	2.700	32.700
2015	16.100	0.675	13.225	2.700	32.700
2016	16.100	0.675	15.060	2.865	34.700
Remaining Years	16.100	0.675	15.060	2.865	34.700

20-Year Customer Regional Demand Projections

The 2016 submittal (covering the 2017-2036 planning period) projects that Authority Customers water demand will reach 112 MGD in 2036, an increase of about 32 MGD during the 20-year planning period. This represents an average annual increase of 1.8%. Customers total projected water demands are shown in Figure 1 for the past five years of demand projection submittals. All prior projections have been extended through 2036 for comparative purposes.

For comparison; the University of Florida Bureau of Economic and Business Research (BEBR) January 29, 2016 population medium and high projections show our four-county regional population growing at an average annual rate of 1.1% and 1.8% respectively through 2036. The 2015 population in the region is estimated at 943,342. BEBR medium projections for the region show a 2036 population of about 1,193,000, an increase of nearly 250,000 residents.

Figure 1 (Total Demand Projections Based on Customer Submittals - - Past 5 Years)



Individual Customer Demand and Supply Projections

Demand and supply projections for each of the Authority’s five Customers are reviewed below. Pursuant to the August 5, 2015 “Second Amendment to the Peace River/Manasota Regional Water Supply Authority Master Water Supply Contract”, Exhibit C of the MWSC was amended to show no new water supply quantities requested from the Authority through 2022. The most recent Customer demand projection submittals did not include any requested “Exhibit C” quantities (new water) for the next 7 years (through 2023).

Charlotte County Demand and Supply Projections

Charlotte County has two separate water service areas: One north of the Peace River served by the Authority’s regional facilities, and the other known as “Burnt Store” in the southwestern part of the County, which is served by a County-owned brackish groundwater reverse osmosis (RO) facility.

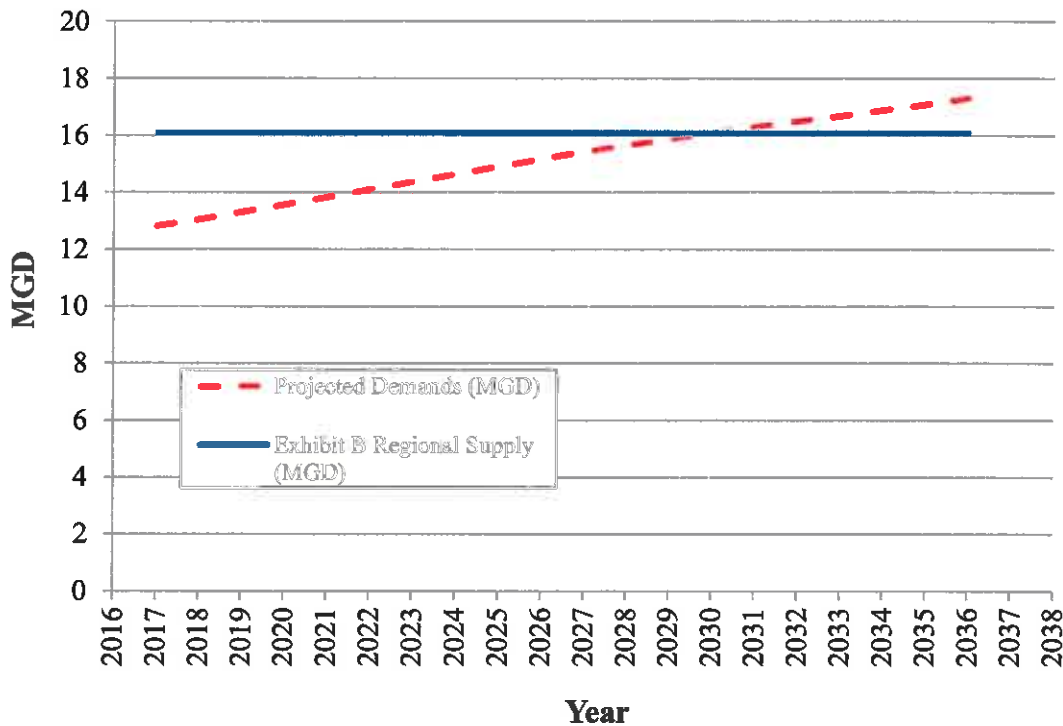
Burnt Store service area is not connected to the regional water supply system. The sole source of supply here is a County-owned RO facility with finished water capacity of 3.2 MGD. Water demand in the Burnt Store service area is projected by the County to

increase at a rate of 4.6% annually, going from 1.35 MGD in 2017 to 3.15 MGD in 2036. Based on this information, County supply capacity at Burnt Store appears adequate to meet the projected service area demand through 2036. Burnt Store demands and supply capacity were not included in the remainder of this evaluation since this service area is not interconnected to the Region.

In the Authority-supplied portion of the County’s water service area north of the Peace River, County projections show water demand increasing on average nearly 1.6% per year during the planning period, going from 12.8 MGD in 2017 to 17.3 MGD in 2036. This results in a 4.5 MGD demand increase by 2036. For comparison, BEBR annual medium, and high projected population increases for Charlotte County were 1% and 1.7% respectively during the 20-year planning period.

Charlotte County has a 16.1 MGD “Exhibit B” allocation in supply capacity from the Peace River Facility. County projections submitted for the 2017 - 2036 planning period show that beginning in 2031 additional supplies will be needed to meet County demand in this portion of their service area, and by 2036 the County will require an additional 1.2 MGD in supply to meet projected needs (see Figure 3).

Figure 3 (Charlotte County Demand & Supply Projections)

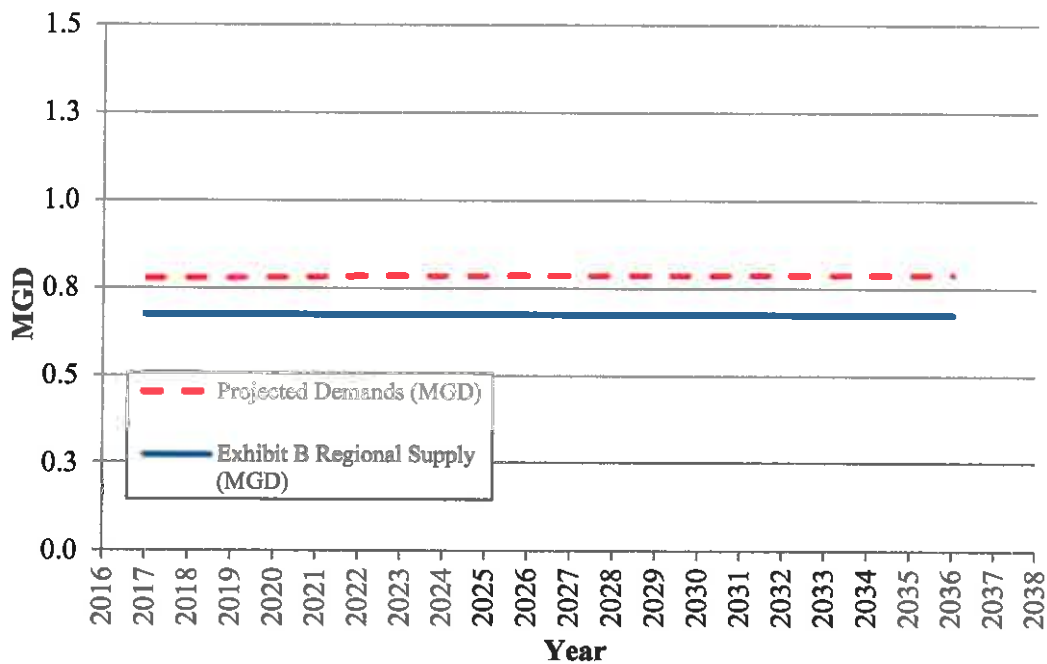


DeSoto County Demand and Supply Projections

DeSoto County water demand is projected by the County to increase at an average of 0.08% per year for the next 20 years. Demand is projected to rise from 0.78 MGD in 2017 to about 0.79 MGD in 2036, an increase of 0.01 MGD during the 20 year planning period. For comparison, BEBR (medium) projected population increase for DeSoto County is about 0.4% annually during the 20 year planning period.

DeSoto County is an *Exclusive Provider Customer* for the Authority and as such the Authority is obligated to meet all new demands for the County. The County's current "Exhibit B" allocation in Authority facilities is 0.675 MGD. County demand and supply conditions are shown in Figure 4. Supplies required to meet increased County needs are currently available through unallocated supply capacity at the Peace River Facility, and projected Pool Water. If pool water capacity is reduced through time new supply capacity may need to be allocated, developed or acquired to meet the County's future needs.

Figure 4 (Demand & Supply Projections for DeSoto County)

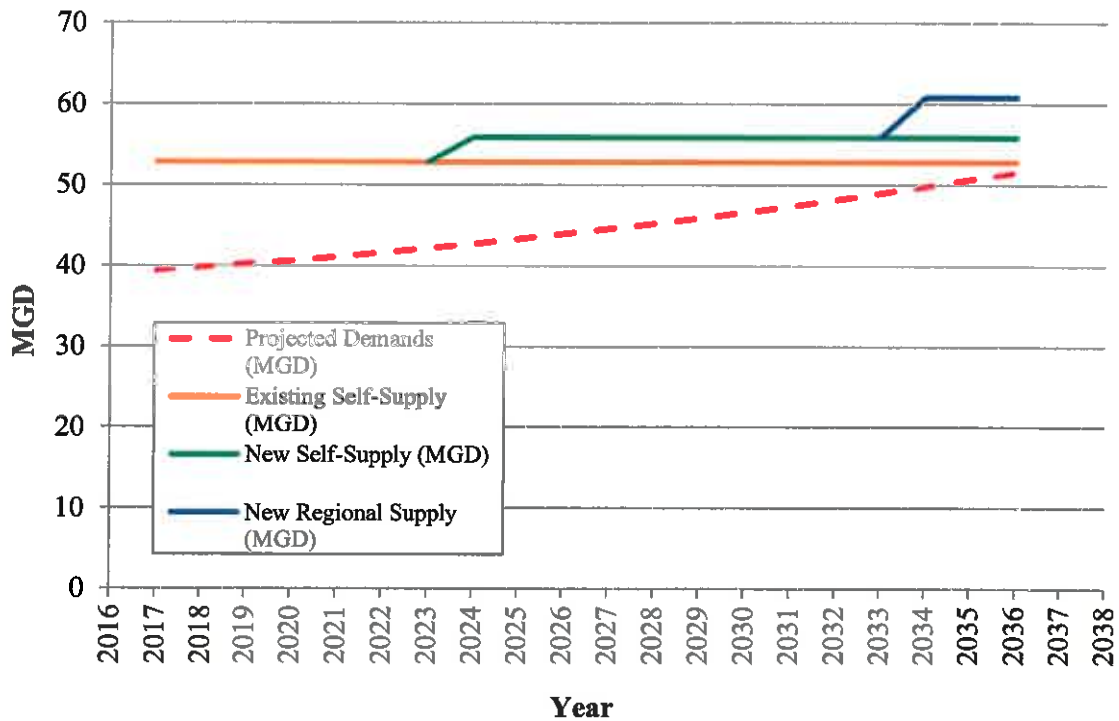


Manatee County Demand and Supply Projections

Manatee County’s projections show water demand increasing an average of 1.4% per year from 2017 to 2036. Demand on County facilities is projected to rise from 39.4 MGD in 2017 to 51.6 MGD in 2036, a 12.2 MGD increase during the 20-year period. Demands associated with the Manatee contract-supply to Sarasota County are not included here since they are included with the Sarasota County demands. Manatee County also supplies water to coastal cities including Palmetto, Longboat Key and Bradenton. Projected supply to these coastal cities is included in Manatee County’s demand projections. For comparison, BEBR (medium) projected population increase for Manatee County is about 1.4% annually during the planning period.

Manatee County’s current average daily production capacity is about 52 MGD. An additional 3 MGD in new County developed groundwater supply is projected in 2024. Manatee County does not currently receive water from the Authority, however their projections show 5 MGD in new Authority water supply required by the County beginning in or around 2034. County demand and supply projections are shown in Figure 5 below. These data indicate that the County will, through a combination of existing local, future local, and future regional supplies, have adequate supply capacity to meet projected needs through 2036.

Figure 5 (Manatee County Demand & Supply Projections)



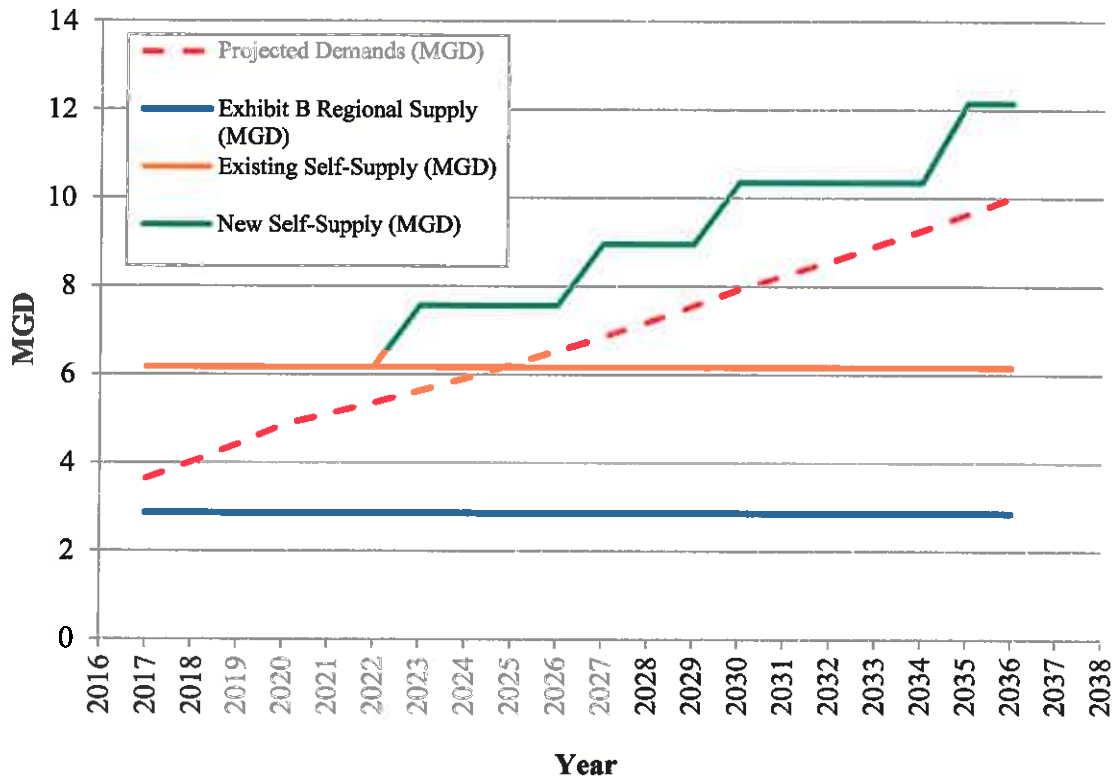
City of North Port Demand and Supply Projections

City of North Port demand projections show water demand increasing by an average of 5.5% annually from 2017 through 2036. City water demand is projected to rise from 3.7 MGD in 2017 to 10 MGD in 2034, an increase of 6.3 MGD. BEBR projected population change for Sarasota County includes (collectively) all municipalities within the county, and as such population change specific to the City of North Port was not provided for the 20 year planning period.

North Port currently has 3.3 MGD in production capacity from the combination of Myakkahatchee Creek surface water treatment facility (MCWTF) and a recently completed brackish groundwater reverse osmosis (RO) facility at the MCWTF site. City projections also show their intent to develop new local supply capacity beginning in 2023. A total of 6.0 MGD in new groundwater supply is planned for incremental development by the City during the 2017-2036 planning period.

The City has a 2.865 MGD “Exhibit B” allocation in supply capacity from the Peace River Facility. Figure 6 shows City of North Port projected demand and supply development. City projections indicate that through timely development of new supplies discussed above, the City will have adequate capacity to meet projected demand through the 20-year planning period.

Figure 6 (North Port Demand & Supply Projections)



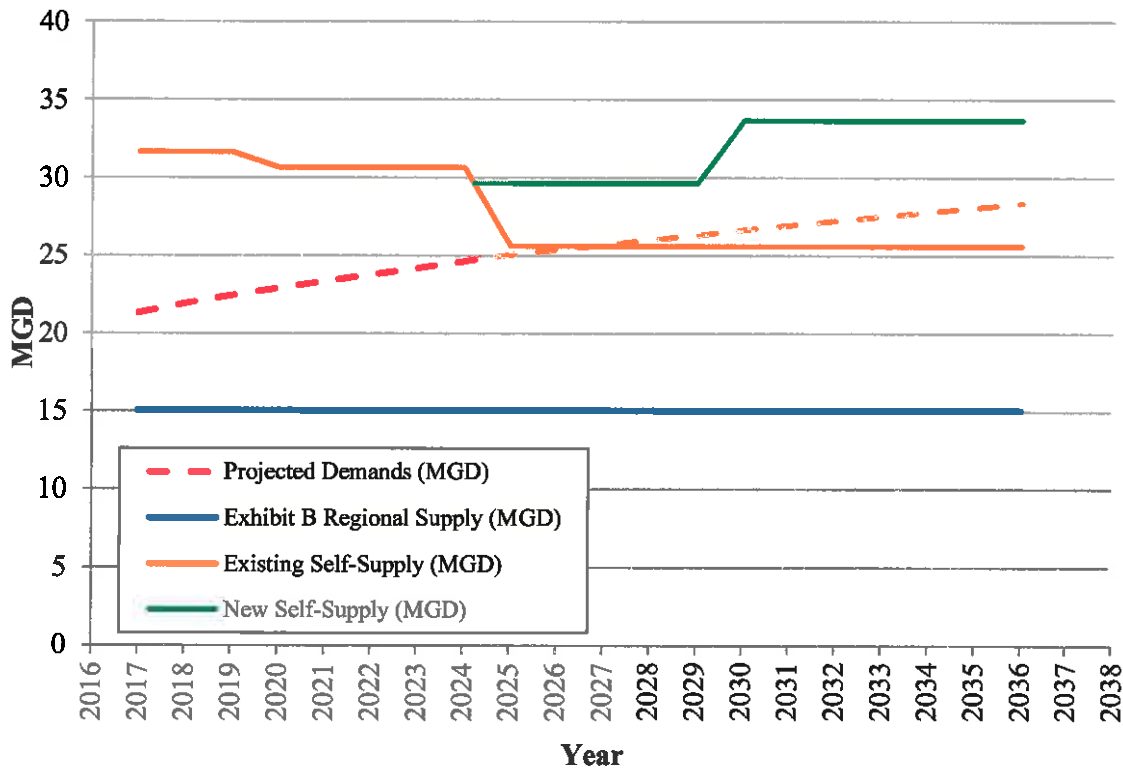
Sarasota County Demand and Supply Projections

Sarasota County projections show demand increasing an average of 1.5% per year during the 20-year planning period with County water demand projected to rise from 21.4 MGD in 2017 to 28.4 MGD in 2036, (an increase of 7 MGD). For comparison, BEBR (medium) projected population increase for Sarasota County is slightly more than 1% annually during the 20-year planning period.

In addition to the Authority supply, the County currently has a total of 10.6 MGD in average daily supply capacity from the Carlton, Venice Gardens and University brackish groundwater facilities, and a contract to purchase up to 6 MGD from Manatee County. As currently structured the Manatee contract is reduced to 5 MGD in 2020, and terminates at the end of 2024. Sarasota County’s demand projections show their intent to develop new supply capacity incrementally beginning in 2025, constructing a total of 8 MGD in new supply capacity by 2036.

The County’s “Exhibit B” allocation in the Peace River Facility is 15.06 MGD. Figure 7 shows Sarasota County projected demand and supply development. Note that the reductions in existing capacity through time (orange line) correspond with changes in allocation from the Manatee County supply contract. These data indicate that the County will, through the combination of existing regional and local supplies, and development of new supply, have adequate capacity to meet projected needs through 2036.

Figure 7 (Sarasota County Demand & Supply Projections)



Demand Projections and Supply Needs

The Authority's *Water Supply Master Plan 2015* advanced a methodology for determining when new supply development should occur. The methodology establishes a 6% production capacity reserve above total regional demand, and in addition recommends that new supplies be brought on line when regional demand plus the 6% reserve reaches (or is projected to reach) 90% of Authority and Customer average day supply capacity. Applying this methodology to the Customers 2017-2036 demand projections, and the current regional average day supply capacity of 105 MGD indicates a need for new supply capacity beginning in 2023, and development of a total 26 MGD in new supply capacity by 2036 (see Figure 8 below).

Authority Customers, in their recent projections show expected development of 22 MGD in new supply capacity by 2036. The Customers are proposing to develop 17 MGD in new local supplies, and Manatee County has indicated a probable need for 5 MGD in new supply from the Authority in the 2034 timeframe. The new supply development schedule advanced by the Customers is shown in Figure 9, with the first local supply proposed for completion in 2023.

Employing the *Water Supply Master Plan 2015* methodology, an additional 4 MGD in supply capacity, above that proposed or requested by Authority Customers for the 2017-2036 planning period will be needed to meet demand and production capacity targets.

Figure 8 (Projection of Regional Demand and New Supply Need)

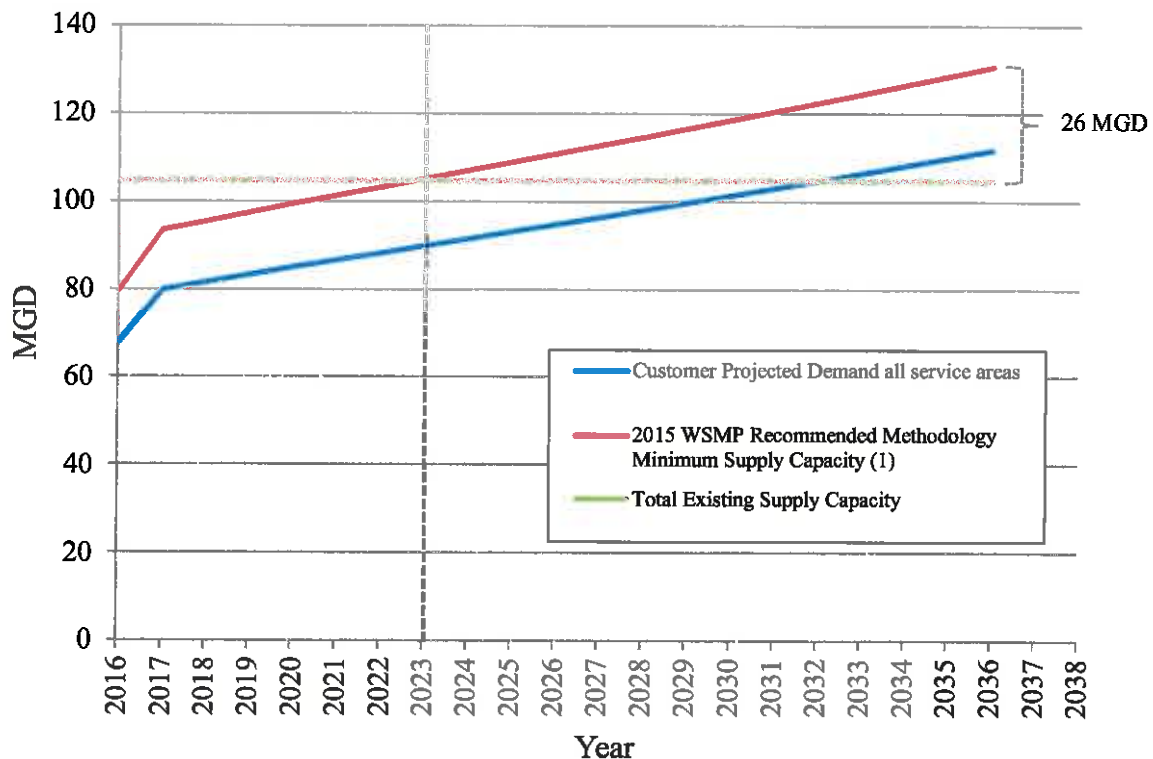
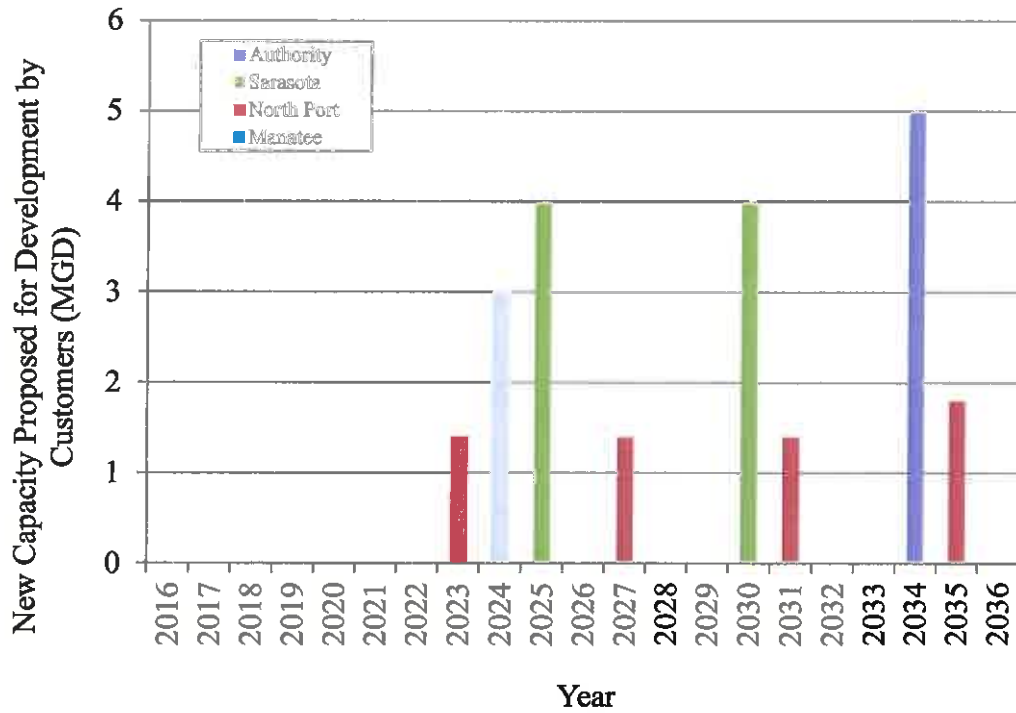


Figure 9 (Customer Proposed New Supply Development Schedule)



Conclusions

Water demand in the four-county region is projected to grow modestly during the next 20 years at about 1.8% annually, increasing from about 78 MGD in 2017 to 112 MGD in 2036. Individual Customer-projected growth in demand during the 20-year planning period ranged from 0.08% to 5.5% annually. Current supply capacity is sufficient to meet projected demand and maintain recommended rotational capacity until 2023. Completion of new (additional) supply capacity totaling 26 MGD is proposed between 2023 and 2036. Authority Customers have proposed to construct 17 MGD in new local supply capacity during this timeframe. Supply development by the Authority during this timeframe would include 5 MGD to meet a Manatee County projected need in the 2034 timeframe, and an additional 4 MGD to meet demand and capacity targets established in the *Water Supply Master Plan 2015*.

**Customer 2014 Projected Demand
2015-2034 Planning Period**

**Charlotte County
2017-2036 Water Demand Projections**



Charlotte County Government

"To exceed expectations in the delivery of public services"

www.CharlotteCountyFL.gov

February 9, 2016

Mr. Patrick J. Lehman, P.E.
Executive Director
Peace River/Manasota Regional Water Supply Authority
9415 Town Center Parkway
Bradenton, FL 34202

Subject: Annual Water Demand Projections

Dear Pat:

In accordance with Section 11 "Future Water Supply Procedure" of the Peace River/Manasota Regional Water Supply Authority Master Water Supply Contract, attached you will find Charlotte County's (FY2016-2037) twenty-year water demand projections approved by Charlotte County Board of County Commissioners on Tuesday, January 26, 2016, including that portion of the Total 20 Year Demand that should be reflected in Exhibit C of the Contract for New Water Supply Demands and the basis of our water demand projections.

Additionally, after a careful review of our water demand projections for the next ten (10) years as well as recent business development proposals being entertained by the County, Charlotte County would like to submit the enclosed Available Water Quantities Schedule for transfer into the Redistribution Pool, for purchase by all Authority customers in FY 2016-2025. We have updated the schedule to reflect the new projected demand numbers. We will revisit this issue annually and look for an opportunity to transfer additional water to the Pool, if possible.

If you have any questions, please feel free to contact me at (941) 764-4502.

Sincerely,

A handwritten signature in blue ink that reads "Gary M. Hubbard".

Gary M. Hubbard
Utilities Director

c: Ray Sandroock, County Administrator
Marilyn Miller, Assistant County Attorney

UTILITIES

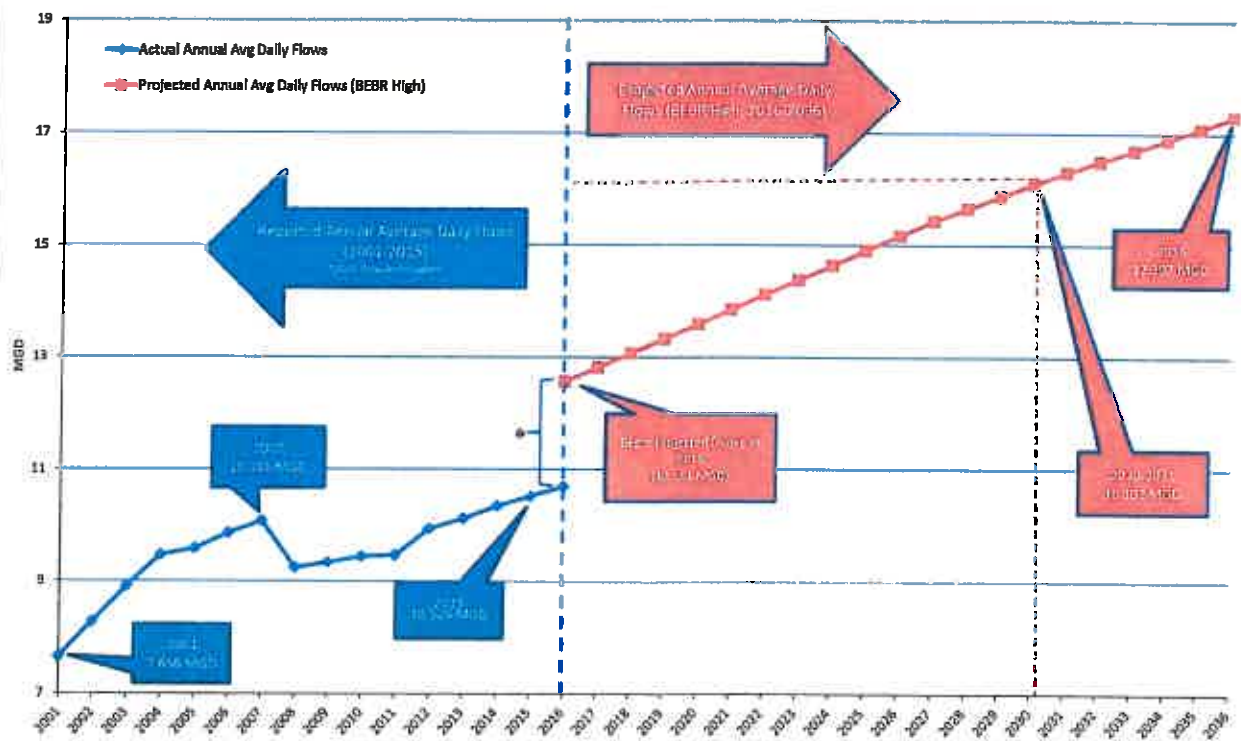
Administration | Business Services
Engineering Services | Operations
25550 Harbor View Road, Suite 1 | Port Charlotte, FL 33980-2503
Phone: 941.764.4300 | Fax: 941.764.4319

**Charlotte County
Available Water Quantities Schedule
For Transfer into Redistribution Pool**

FISCAL YEAR	PRF ALLOCATION (AADF- MGD)	PROJECTED DEMAND (AA DF-MGD)	AVAILABLE WATER (AAD F-MGD)	WATER FOR REDISTRIBUTION POOL (MGD)
FY2016	16.1	12.561	3.539	2.5
FY2017	16.1	12.815	3.285	2.5
FY2018	16.1	13.072	3.028	2.0
FY2019	16.1	13.331	2.769	Not known
FY2020	16.1	13.592	2.508	Not known
FY2021	16.1	13.851	2.249	Not known
FY2022	16.1	14.112	1.988	Not known
FY2023	16.1	14.375	1.725	Not known
FY2024	16.1	14.641	1.459	Not known
FY2025	16.1	14.909	1.191	Not known

January 26, 2016

Charlotte County Peace River Actual and Projected Flows 2001-2036
 (2001-2015: Actual Peace River Flows as Reported to SWFWMD)
 (2016-2036: Projected Flows based on BEBR High Population Projections)



* Difference = Level Of Service (225 gpd/ERC) vs Actual (188 gpd/ERC)

**Charlotte County
Available Water Quantities Schedule
For Transfer into Redistribution Pool**

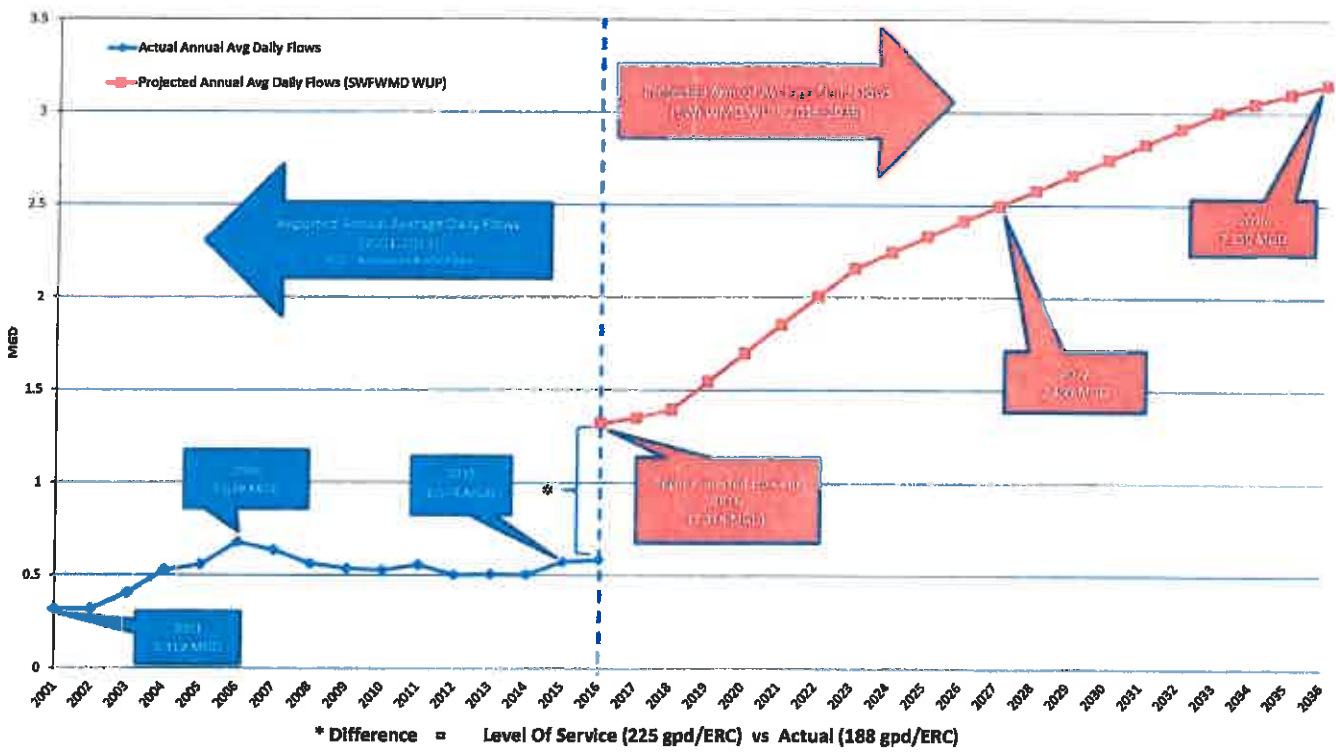
FISCAL YEAR	PRE ALLOCATION (AADF-MGD)	PROJECTED DEMAND (AADF-MGD)	AVAILABLE WATER (AADF-MGD)	WATER FOR REDISTRIBUTION POOL (MGD)
FY2016	16.100	12.561	3.539	2.500
FY2017	16.100	12.815	3.285	2.500
FY2018	16.100	13.072	3.028	2.000
FY2019	16.100	13.331	2.769	Not Known
FY2020	16.100	13.592	2.508	Not Known
FY2021	16.100	13.851	2.249	Not Known
FY2022	16.100	14.112	1.988	Not Known
FY2023	16.100	14.375	1.725	Not Known
FY2024	16.100	14.641	1.459	Not Known
FY2025	16.100	14.909	1.191	Not Known

January 28, 2016

Charlotte County Peace River Projected Flows			
Based on 2016-2036 EBR High Projections			
Year	Annual Avg Flows (MGD)	Peak Month Flows (1:20 times Annual Avg)	Max Day Flows (1.50 times Annual Avg)
2016	12.561	15.073	18.841
2017	12.815	15.378	19.223
2018	13.072	15.686	19.608
2019	13.331	15.997	19.996
2020	13.592	16.310	20.388
2021	13.851	16.621	20.776
2022	14.112	16.934	21.168
2023	14.375	17.251	21.563
2024	14.641	17.569	21.962
2025	14.909	17.891	22.364
2026	15.171	18.205	22.758
2027	15.434	18.521	23.151
2028	15.653	18.784	23.480
2029	15.873	19.048	23.810
2030	16.094	19.313	24.141
2031	16.305	19.565	24.457
2032	16.500	19.800	24.749
2033	16.695	20.034	25.043
2034	16.891	20.269	25.336
2035	17.087	20.504	25.631
2036	17.307	20.768	25.961

January 28, 2016

**Charlotte County
Burnt Store Actual and Projected Flows 2001-2036
(2001-2015: Actual Burnt Store Well Field Withdrawals as Reported to SWFWMD)**



January 26, 2016

Charlotte County Projected Burnt Store Flows			
2019-2036 SWFWMD WHP Projections			
Year	Annual Avg Flows (MGD)	Peak Month Flows (1:20 times Annual Avg)	Max Day Flows (1:10 times Annual Avg)
2016	1.318	1.582	1.977
2017	1.351	1.622	2.027
2018	1.395	1.674	2.092
2019	1.547	1.856	2.321
2020	1.700	2.040	2.550
2021	1.852	2.222	2.778
2022	2.004	2.405	3.006
2023	2.167	2.588	3.235
2024	2.243	2.692	3.365
2025	2.330	2.796	3.496
2026	2.413	2.895	3.619
2027	2.495	2.994	3.742
2028	2.577	3.082	3.865
2029	2.659	3.191	3.989
2030	2.742	3.290	4.113
2031	2.827	3.383	4.241
2032	2.913	3.486	4.370
2033	2.999	3.599	4.499
2034	3.049	3.659	4.573
2035	3.099	3.719	4.648
2036	3.150	3.780	4.726

January 26, 2016

Charlotte County Utilities Department Service Area 2015 vs 2016 Demand Projection Comparison
 (Excludes Burnt Store Service Area)

Year	2015 Utilities BEBR Projections				2016 Utilities BEBR Projections			
	BEBR Utilities Population Projections	Annual Avg Daily Water Demand (MGD)	Peak Month (@1.20 times Annual Avg) (MGD)	Max Day (@1.50 times Annual Avg) (MGD)	BEBR Utilities Population Projections	Annual Avg Daily Water Demand (MGD)	Peak Month (@1.20 times Annual Avg) (MGD)	Max Day (@1.50 times Annual Avg) (MGD)
2015	119,577	12.572	15.087	18.859	117,068	12.308	14.770	18.463
2016	122,015	12.829	15.394	19.243	119,488	12.561	15.073	18.841
2017	124,475	13.087	15.705	19.631	121,888	12.815	15.378	19.223
2018	126,958	13.348	16.018	20.022	124,326	13.072	15.686	19.608
2019	129,459	13.611	16.334	20.417	126,789	13.331	15.997	19.996
2020	131,984	13.877	16.652	20.815	129,272	13.592	16.310	20.388
2021	134,447	14.138	16.963	21.204	131,736	13.851	16.621	20.776
2022	136,931	14.397	17.278	21.595	134,220	14.112	16.934	21.168
2023	139,437	14.660	17.593	21.991	136,727	14.375	17.251	21.563
2024	141,964	14.926	17.911	22.389	139,255	14.641	17.569	21.962
2025	144,514	15.194	18.233	22.791	141,804	14.909	17.891	22.364
2026	146,999	15.455	18.547	23.183	144,290	15.171	18.205	22.756
2027	149,505	15.719	18.863	23.578	146,798	15.434	18.521	23.151
2028	151,579	15.937	19.124	23.906	148,881	15.653	18.784	23.480
2029	153,861	16.156	19.387	24.234	150,971	15.873	19.048	23.810
2030	155,750	16.376	19.651	24.563	153,070	16.094	19.313	24.141
2031	157,876	16.599	19.919	24.899	155,075	16.305	19.565	24.457
2032	159,851	16.807	20.188	25.210	156,930	16.500	19.800	24.749
2033	161,829	17.015	20.418	25.522	158,789	16.695	20.034	25.043
2034	163,811	17.223	20.668	25.835	160,651	16.891	20.269	25.336
2035	165,797	17.432	20.918	26.148	162,517	17.087	20.504	25.631
2036	167,852	17.648	21.178	26.472	164,809	17.307	20.768	25.961

January 26, 2016

**Charlotte County Utilities Department Service Area
2015 vs 2016 Annual Average Demand Projection Comparison
(Excludes Burnt Store Service Area)**

Year	2015 Utilities BEBR Projections		2016 Utilities BEBR Projections	
	BEBR Utilities Population Projections	Annual Avg Daily Water Demand (MGD)	BEBR Utilities Population Projections	Annual Avg Daily Water Demand (MGD)
2015	119,577	12.572	117,088	12.308
2016	122,015	12.829	119,466	12.561
2017	124,475	13.087	121,886	12.815
2018	126,956	13.348	124,326	13.072
2019	129,459	13.611	126,789	13.331
2020	131,984	13.877	129,272	13.592
2021	134,447	14.136	131,736	13.851
2022	136,931	14.397	134,220	14.112
2023	139,437	14.660	136,727	14.375
2024	141,964	14.926	139,255	14.641
2025	144,514	15.194	141,804	14.909
2026	148,999	15.455	144,290	15.171
2027	149,505	15.719	146,798	15.434
2028	151,579	15.937	148,881	15.653
2029	153,661	16.156	150,971	15.873
2030	155,750	16.376	153,070	16.094
2031	157,876	16.599	155,075	16.305
2032	159,851	16.807	156,930	16.500
2033	161,829	17.015	158,789	16.695
2034	163,811	17.223	160,651	16.891
2035	165,797	17.432	162,517	17.087
2036	167,852	17.648	164,609	17.307

January 26, 2016

Charlotte County Utilities Department Service Area
2015 vs 2016 BEBR Population Projection
Comparison
 (Excludes Burnt Store Service Area)

Year	*2015 BEBR Utilities Population Projections	**2016 BEBR Utilities Population Projections
2015	119,577	117,068
2016	122,015	119,486
2017	124,475	121,866
2018	126,956	124,326
2019	129,459	126,789
2020	131,984	129,272
2021	134,447	131,738
2022	136,931	134,220
2023	139,437	136,727
2024	141,964	139,255
2025	144,514	141,804
2026	146,999	144,290
2027	149,505	146,798
2028	151,579	148,881
2029	153,661	150,971
2030	155,750	153,070
2031	157,876	155,075
2032	159,851	156,930
2033	161,829	158,789
2034	163,811	160,651
2035	165,797	162,517
2036	167,852	164,609

January 28, 2016

**DeSoto County
2017 – 2036 Water Demand Projections**

**DESOTO COUNTY UTILITIES DEPARTMENT
2016 - 2036
WATER NEEDS PROJECTIONS
(PRMRWSA)**

	BOCC Approved 2015-2035 20 Yr Projected Needs (MGD)			BOCC Recommended 2016-2036 20 Yr Projected Needs (MGD)
	0.650			0.775
Fiscal Year		Fiscal Year	% Increase	
FY2015	0.686	FY2016	0.05%	0.775
FY2016	0.713	FY2017	0.75%	0.781
FY2017	0.735	FY2018	1.00%	0.789
FY2018	0.746	FY2019	1.00%	0.797
FY2019	0.753	FY2020	1.75%	0.811
FY2020	0.753	FY2021	2.00%	0.827
FY2021	0.754	FY2022	1.75%	0.842
FY2022	0.754	FY2023	1.50%	0.854
FY2023	0.755	FY2024	1.25%	0.865
FY2024	0.755	FY2025	0.05%	0.865
FY2025	0.755	FY2026	0.05%	0.866
FY2026	0.756	FY2027	0.05%	0.866
FY2027	0.756	FY2028	0.05%	0.867
FY2028	0.756	FY2029	0.05%	0.867
FY2029	0.757	FY2030	0.05%	0.867
FY2030	0.757	FY2031	0.05%	0.868
FY2031	0.758	FY2032	0.05%	0.868
FY2032	0.758	FY2033	0.05%	0.869
FY2033	0.758	FY2034	0.05%	0.869
FY2034	0.759	FY2035	0.05%	0.870
FY2035	0.760	FY2036	0.05%	0.870

**Manatee County
2017-2036 Water Demand Projections**



MANATEE COUNTY
FLORIDA

Peace River Manasota
Regional Water Supply Authority

FEB - 4 2016

RECEIVED

January 26, 2016

Mr. Patrick J. Lehman, P.E., Executive Director
Peace River/Manasota Regional Water Supply Authority
9415 Town Center Parkway
Lakewood Ranch, Florida 34202

COPY

Re: *Manatee County 2015 Projected Water Demands and Sources of Supply*

Dear Mr. Lehman:

The purpose of this letter is to provide the annual update of projected water demand for at least the next 20 years, and identify that portion of the demand that the PRMRWSA is to fulfill in accordance with Section 11 of the Master Water Supply Contract. These projections are essentially the same as those submitted last year, though they have been slightly adjusted based on 2015 data. They extend to the year 2035, which meets the 20 year requirement. The current estimate is that Manatee County may need to purchase 5 MGD from the PRMRWSA beginning in the year 2034. In accordance with Sec. 11 of the Master Water Supply Contract, the Board of County Commissioners has ratified this annual submittal at their meeting of January 26, 2016.

Please find attached two (2) tables and two (2) figures which provide the 2015 Projected Water Demands for the Manatee County Water System and the planned implementation of new water sources as needed to meet the projected demand. These schedules have been developed following review of both the SWFWMD Regional Water Supply Plan and the PRMRWSA Draft Integrated Regional Water Supply Master Plan. These Projections indicate that Manatee County will likely need water supply from the PRMRWSA beginning in 2034 at the earliest. It should be noted that the Southwest Florida Water Management District is in the process of setting a Minimum Flow schedule for the Manatee River and indications are that it will require the release of additional water downstream of Lake Manatee. This may affect the safe yield of this source and possibly result in an acceleration of supply needed from the PRMRWSA. Manatee County Planning will again recalculate projected populations during 2016 and we will evaluate the projected effect on the schedule of needed supply from the PRMRWSA. Any such revisions will be included in the update for next year. In accordance with the Master Water Supply Contract, Manatee County will revisit these source development schedules annually and submit updates to the PRMRWSA each year.

As noted in Table 2, the implementation schedule is based on Annual Average Day demand (AADD). For planning purposes, maximum day demand for new sources is planned at 1.5 times AADD and peak month daily demand is planned at 1.33 times AADD.

Board of County Commissioners
1112 Manatee Avenue West, Bradenton, FL 34205
Website: www.mymanatee.org * Phone: 941.745.3700 * FAX: 941.745.3790

LARRY BUSTLE * CHARLES B. SMITH * JOHN R. CHAPPIE * ROBIN DISABATINO * VANESSA BAUGH * CAROL WHITMORE * BETSY BENAC
District 1 District 2 District 3 District 4 District 5 District 6 District 7

If you have any questions concerning this information, please contact Mark Simpson, Water Division Manager, MCUD, at 941-792-8811 ext 5258.

Manatee County is pleased to be a member of the PRMRWSA and looks forward to working with the PRMRWSA members and staff to benefit all members and citizens in the region.

Sincerely,

**BOARD OF COUNTY COMMISSIONERS
MANATEE COUNTY, FLORIDA**



Vanessa Baugh,
Chairman

cc: Board of County Commissioners
Ed Hunzeker, County Administrator
C. Mike Gore, Director, Utilities Department
Mark Simpson, Water Division Manager, UD

TABLE 1
Demand Projections Based on Dec 2015 Projections

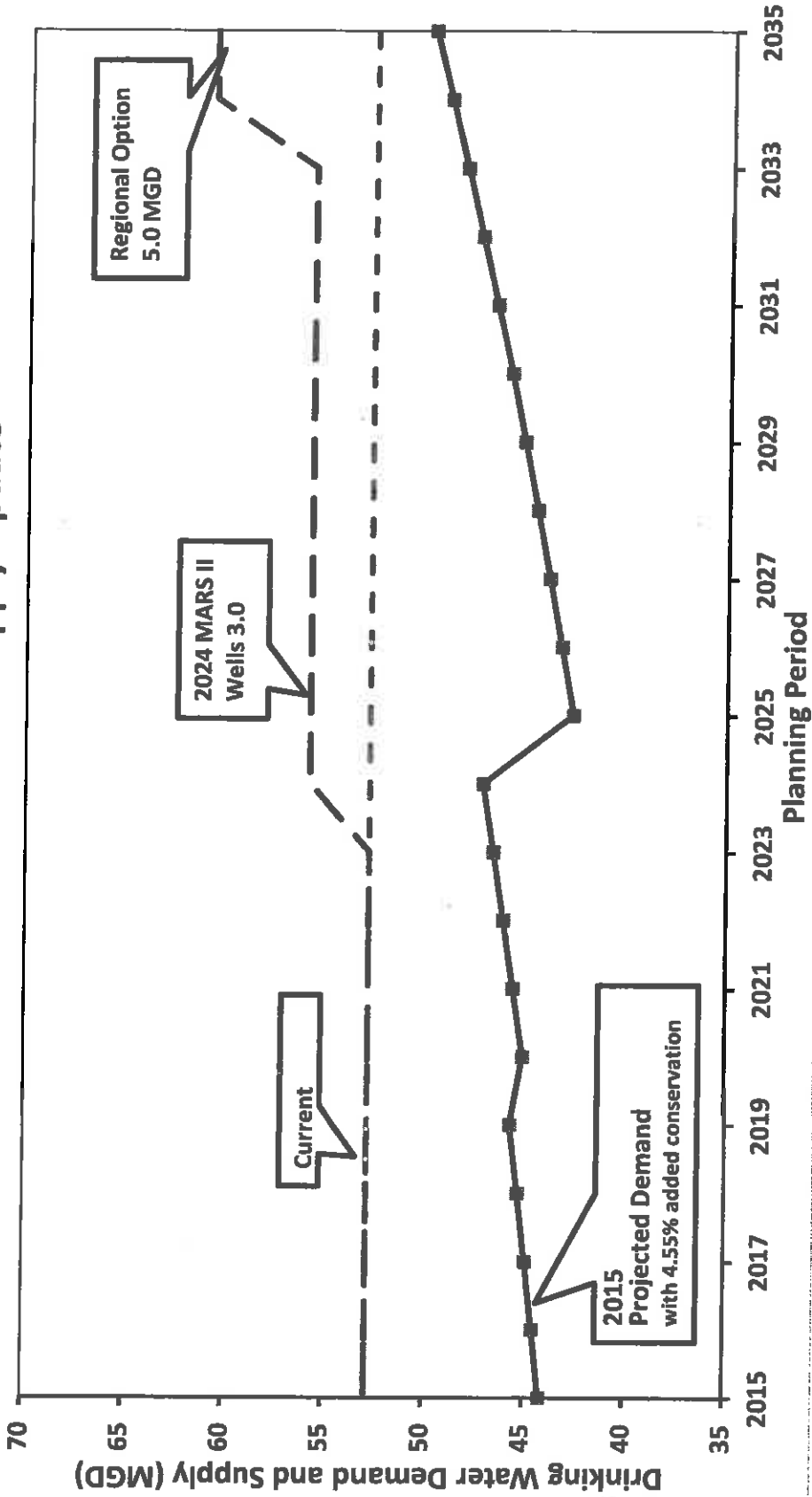
Year	Funct. Pop.	Flow Rate (G/C/D) Comp Plan LOS	Manatee Cnty Flow (gal/day)	Bradenton Reserve Flow (gal/day)	Longboat Key Reserve Flow (gal/day)	Palmetto Reserve Flow (gal/day)	Sarasota Contract Flow (gal/day)	Significant Users (gal/day)	Total Average Daily Flow (gal/day)	Total Reserve and Contract Flow (gal/day)	Peak Flow Manatee County Comp Policy Manatee (gal/day)	Peak Flow Reserve and Contracts Comp Policy (gal/day)	Peak Flow Wholesale Contracts (gal/day) No-Penalty Daily limits	Total Peak Flow Comp Policy (gal/day)
2015	285,750	105	30,003,745	500,000	2,500,000	2,000,000	6,000,000	3,564,445	41,568,189	11,000,000	45,005,617	13,750,000	11,000,000	58,755,617
16	289,350	105	30,381,758	500,000	2,500,000	2,000,000	6,000,000	3,609,353	41,391,111	11,000,000	45,572,637	13,750,000	11,000,000	59,322,637
17	292,731	105	30,736,743	500,000	2,500,000	2,000,000	6,000,000	3,651,525	45,288,268	11,000,000	46,105,115	13,750,000	11,000,000	59,855,115
18	296,186	105	31,099,518	500,000	2,500,000	2,000,000	6,000,000	3,694,923	45,784,144	11,000,000	46,649,277	13,750,000	11,000,000	60,399,277
19	299,718	105	31,470,342	500,000	2,500,000	2,000,000	6,000,000	3,738,677	46,289,919	11,000,000	47,205,513	13,750,000	11,000,000	60,955,513
2020	303,328	105	31,849,488	500,000	2,500,000	2,000,000	5,000,000	3,783,719	46,833,207	10,000,000	47,774,232	12,500,000	10,000,000	60,274,232
21	307,689	105	32,307,306	500,000	2,500,000	2,000,000	5,000,000	3,838,108	46,145,414	10,000,000	48,460,959	12,500,000	10,000,000	60,960,959
22	312,155	105	32,776,292	500,000	2,500,000	2,000,000	5,000,000	3,893,824	46,870,116	10,000,000	49,164,439	12,500,000	10,000,000	61,664,439
23	316,732	105	33,256,894	500,000	2,500,000	2,000,000	5,000,000	3,950,919	47,233,213	10,000,000	49,885,341	12,500,000	10,000,000	62,385,341
24	321,424	105	33,749,510	500,000	2,500,000	2,000,000	5,000,000	4,009,442	47,758,952	10,000,000	50,624,285	12,500,000	10,000,000	63,124,285
2025	326,234	105	34,254,557	500,000	2,500,000	2,000,000	0	4,069,441	48,323,999	5,000,000	51,381,836	6,250,000	5,000,000	57,631,836
26	331,523	105	34,809,898	500,000	2,500,000	2,000,000	0	4,135,416	48,945,313	5,000,000	52,214,846	6,250,000	5,000,000	58,464,846
27	336,945	105	35,379,178	500,000	2,500,000	2,000,000	0	4,203,046	49,592,255	5,000,000	53,068,767	6,250,000	5,000,000	59,318,767
28	342,504	105	35,962,876	500,000	2,500,000	2,000,000	0	4,272,390	48,235,289	5,000,000	53,944,314	6,250,000	5,000,000	60,194,314
29	348,204	105	36,561,462	500,000	2,500,000	2,000,000	0	4,343,502	48,994,884	5,000,000	54,842,193	6,250,000	5,000,000	61,092,193
2030	354,052	105	37,175,427	500,000	2,500,000	2,000,000	0	4,416,441	48,581,326	5,000,000	55,763,141	6,250,000	5,000,000	62,013,141
31	360,642	105	37,867,388	500,000	2,500,000	2,000,000	0	4,498,646	47,955,024	5,000,000	56,801,082	6,250,000	5,000,000	63,051,082
32	367,411	105	38,578,108	500,000	2,500,000	2,000,000	0	4,583,079	48,151,187	5,000,000	57,867,162	6,250,000	5,000,000	64,117,162
33	374,364	105	39,308,184	500,000	2,500,000	2,000,000	0	4,669,812	48,977,996	5,000,000	58,962,276	6,250,000	5,000,000	65,212,276
34	381,507	105	40,058,268	500,000	2,500,000	2,000,000	0	4,758,922	49,317,191	5,000,000	60,087,402	6,250,000	5,000,000	66,337,402
2035	388,848	105	40,829,038	500,000	2,500,000	2,000,000	0	4,850,490	50,578,528	5,000,000	61,243,557	6,250,000	5,000,000	67,493,557

Based on 2015 Population Projections with revised Water Supply Plan and additional conservation gain of 5 gpcpd (4.55% reduction)

**TABLE 2. MANATEE COUNTY UTILITIES PLANNED IMPLEMENTATION SCHEDULE FOR WATER SUPPLY SOURCES
 ANNUAL AVERAGE DAY SUPPLY IN MGD**

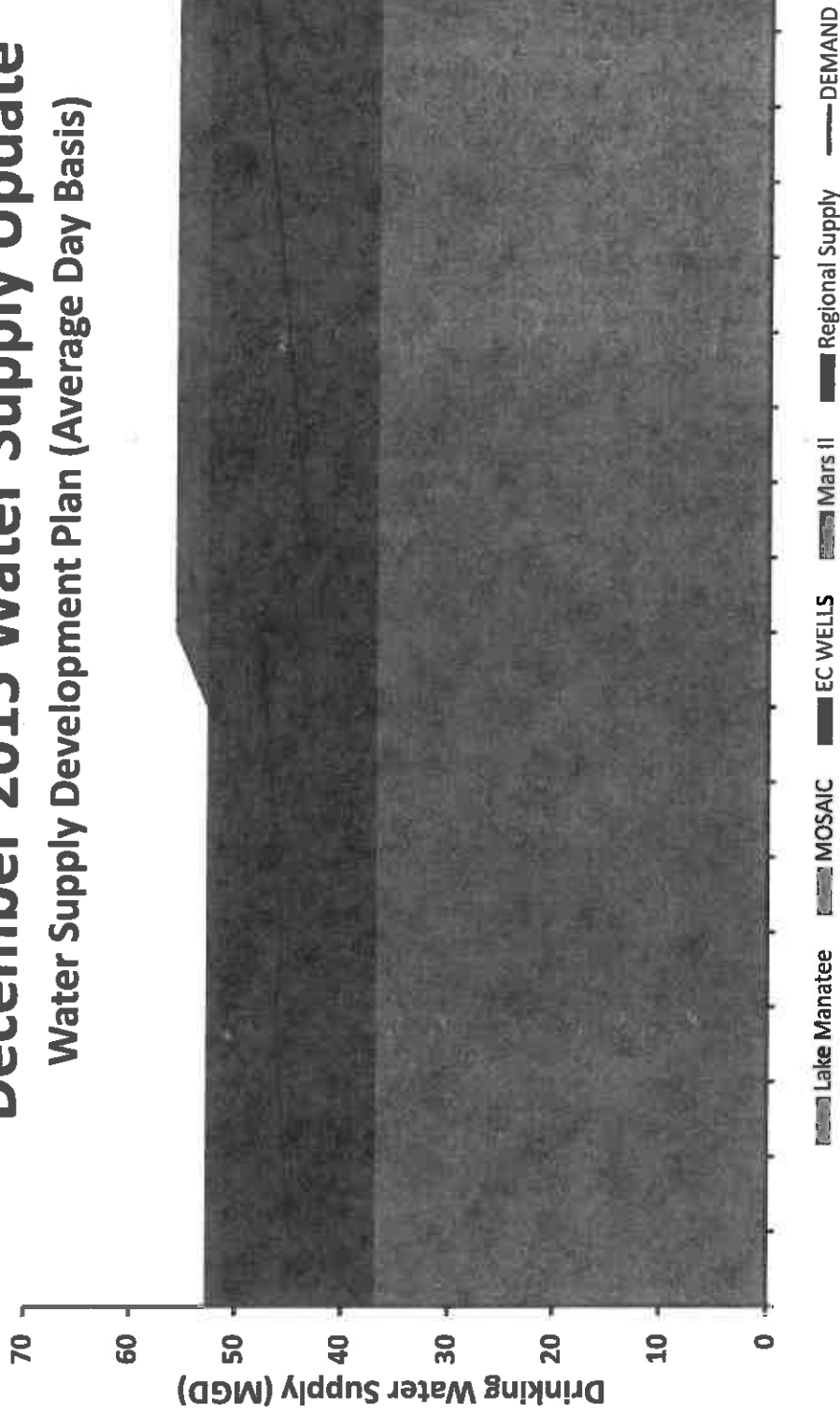
YEAR	MOSAIC WELLS MGD	EC WELLS MGD	LAKE MANATEE MGD	MARS WELLS MGD	REGIONAL SUPPLY MGD	TOTAL SUPPLY MGD	TOTAL DEMAND MGD
2015	1.96	15.99	34.90	0.00	0.00	52.85	37.24
2016	1.96	15.99	34.90	0.00	0.00	52.85	44.99
2017	1.96	15.99	34.90	0.00	0.00	52.85	45.39
2018	1.96	15.99	34.90	0.00	0.00	52.85	45.79
2019	1.96	15.99	34.90	0.00	0.00	52.85	46.21
2020	1.96	15.99	34.90	0.00	0.00	52.85	45.63
2021	1.96	15.99	34.90	0.00	0.00	52.85	46.15
2022	1.96	15.99	34.90	0.00	0.00	52.85	46.67
2023	1.96	15.99	34.90	0.00	0.00	52.85	47.21
2024	1.96	15.99	34.90	3.00	0.00	55.85	47.76
2025	1.96	15.99	34.90	3.00	0.00	55.85	43.32
2026	1.96	15.99	34.90	3.00	0.00	55.85	43.95
2027	1.96	15.99	34.90	3.00	0.00	55.85	44.58
2028	1.96	15.99	34.90	3.00	0.00	55.85	45.24
2029	1.96	15.99	34.90	3.00	0.00	55.85	45.90
2030	1.96	15.99	34.90	3.00	0.00	55.85	46.59
2031	1.96	15.99	34.90	3.00	0.00	55.85	47.37
2032	1.96	15.99	34.90	3.00	0.00	55.85	48.16
2033	1.96	15.99	34.90	3.00	0.00	55.85	48.98
2034	1.96	15.99	34.90	3.00	5.00	60.85	49.82
2035	1.96	15.99	34.90	3.00	5.00	60.85	50.68

2015 Water Demand and Supply Update



December 2015 Water Supply Update

Water Supply Development Plan (Average Day Basis)



**Sarasota County
2017-2036 Water Demand Projections**



Sarasota County Annual Water Supply Demand Projections



Water Projection Tool

Sarasota County Water Demand and Supply Projections

December 2016

Development Levels

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
County Projection (MGD) ⁽¹⁾	21.40	22.00	22.60	23.20	23.80	24.40	24.95	25.50	26.05	26.60	27.15	27.70	28.25	28.80	29.35	29.90	30.45	31.00	31.55	32.10	32.65
Annual Average Day	21.40	22.00	22.60	23.20	23.80	24.40	24.95	25.50	26.05	26.60	27.15	27.70	28.25	28.80	29.35	29.90	30.45	31.00	31.55	32.10	32.65
Peak Month Average Day ⁽²⁾	25.05	26.40	27.75	29.10	30.45	31.80	33.15	34.50	35.85	37.20	38.55	39.90	41.25	42.60	43.95	45.30	46.65	48.00	49.35	50.70	52.05
Maximum Day ⁽³⁾	32.10	33.00	33.75	34.47	35.11	35.74	36.38	37.01	37.65	38.28	38.91	39.54	40.17	40.80	41.43	42.06	42.69	43.32	43.95	44.58	45.21

Annual Average Day Supplies

Other County Supplies	22.50	23.00	23.50	24.00	24.50	25.00	25.50	26.00	26.50	27.00	27.50	28.00	28.50	29.00	29.50	30.00	30.50	31.00	31.50	32.00	32.50
Florida Water Supply Agreement	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Sarasota County Supply Agreement	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GAP Contract (MGD)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	38.00	39.00	40.00	41.00	42.00	43.00	44.00	45.00	46.00	47.00	48.00	49.00	50.00	51.00	52.00	53.00	54.00	55.00	56.00	57.00	58.00

Water for Redistribution Pool

Water for Redistribution Pool	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Available GAP Supply ⁽⁴⁾	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50

Other County Supplies

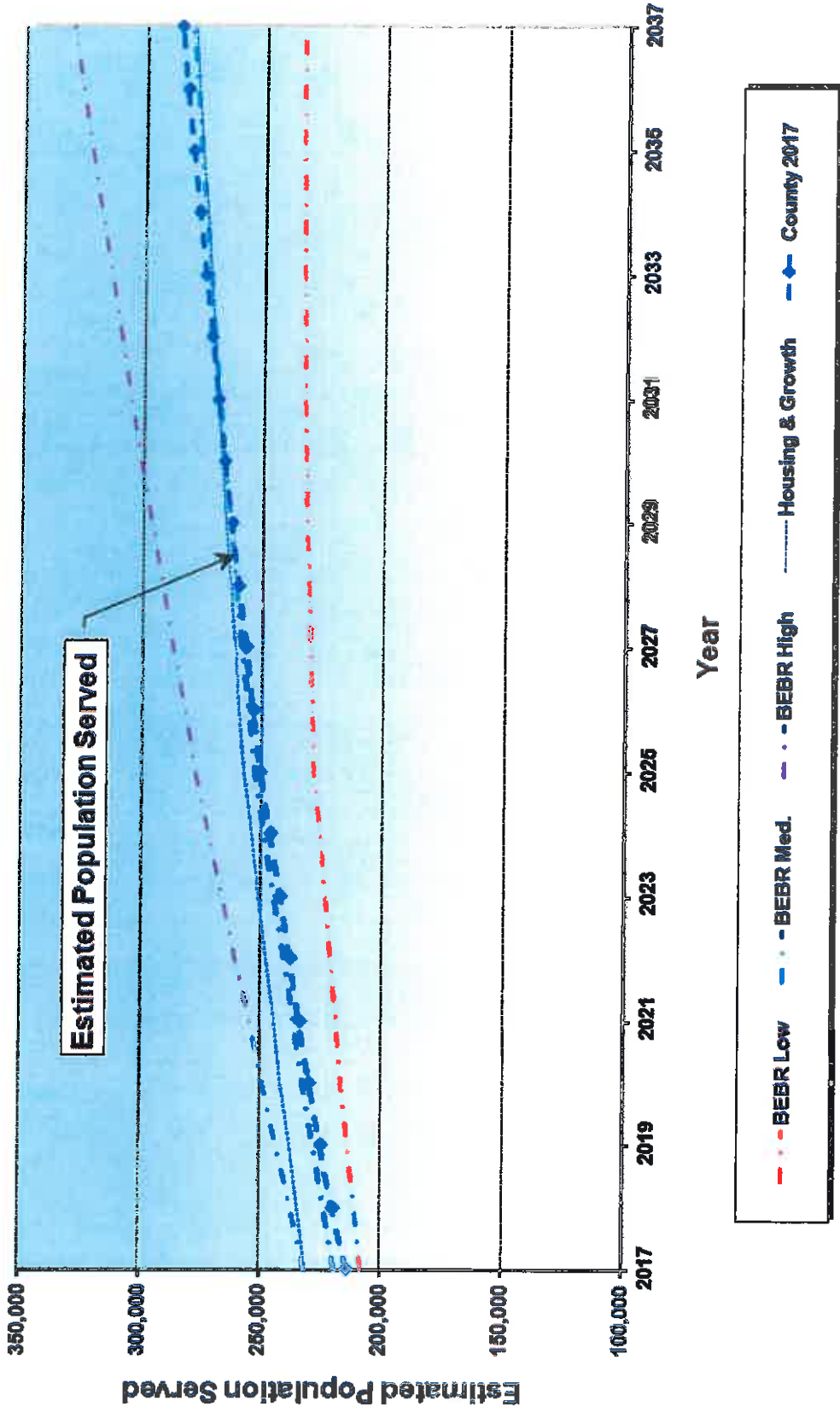
Manatee County Contract	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Existing Carlton WTF ⁽⁵⁾	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50
Seaside Geosol WTF	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75
Unkarly Well	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
GAP Supply ⁽⁶⁾	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Florida Water Supply ⁽⁷⁾	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Bay Phase I ⁽⁸⁾	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00

Notes

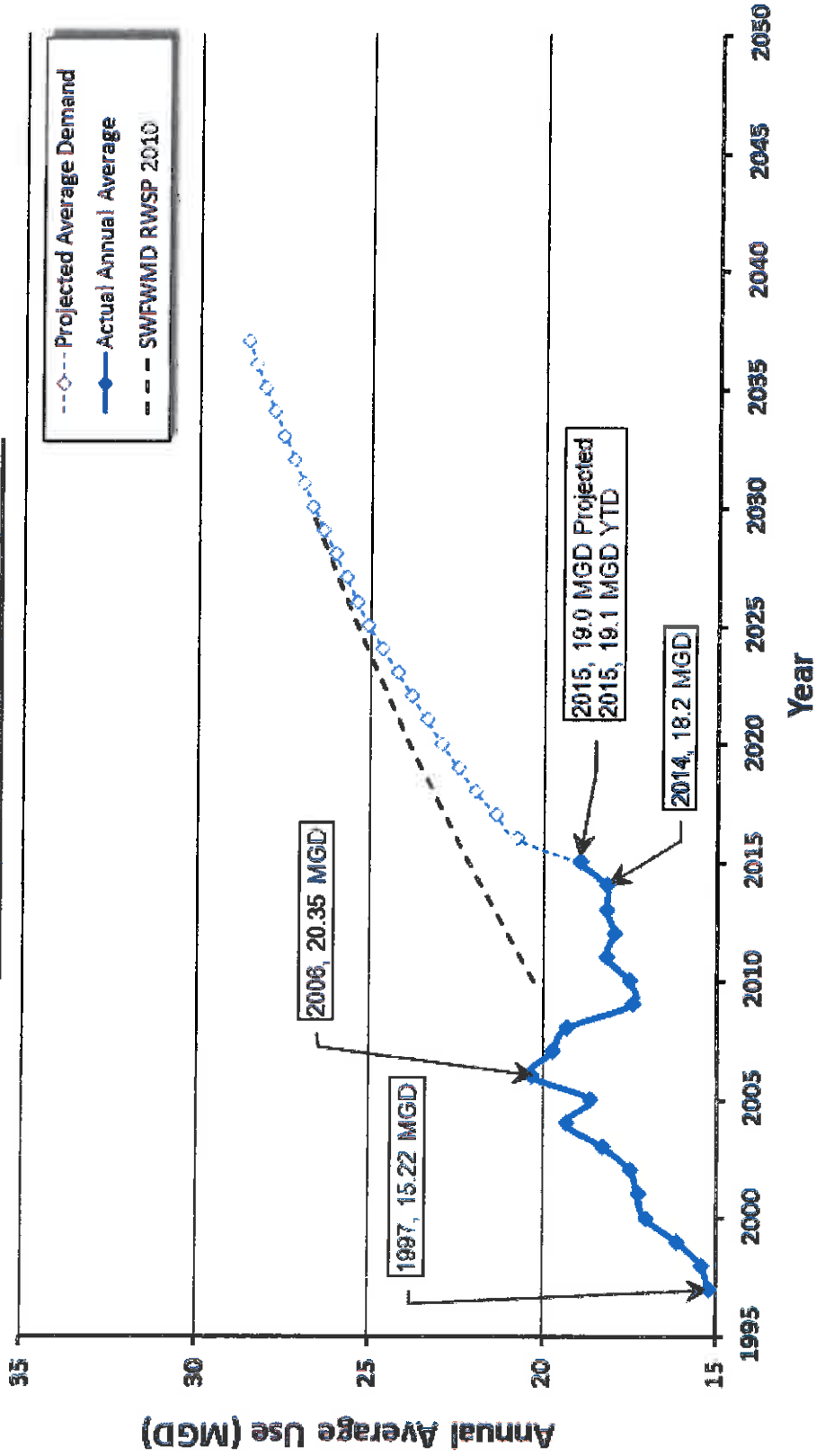
- Reference Water Demand & Water Supply Projection Tool Version 2.0 (Prepared by Sarasota County dated October, 2015).
- Peak Month = AADF * 1.20
- Minimum Day = AADF * 1.50
- Storage Supply Agreement obligates the Authority to supply Sarasota County with 1,920 billion gallons of potable water until October 1, 2019.
- GAP quantity established back to Carlton. GAP agreement requires modification.
- Florida Water Supply Agreement, Indian Carlton WTF location.
- Other Bay Phase I (MGD) Peak = 4 MGD Average

Population Served

Water Service Area Population



Annual Average Demand Projection



**City of North Port
2017-2036 Water Demand Projections**



City of North Port

Office of the City Manager
4970 City Hall Boulevard
North Port, Florida 34286

COPY

www.cityofnorthport.com

(941)429-7077

Fax: (941) 429-7079

December 14, 2015

Mr. Patrick J. Lehman
Executive Director
Peace River/Manasota Regional Water Supply Authority
9415 Town Center Parkway
Lakewood Ranch, FL 34202

Peace River Manasota
Regional Water Supply Authority

DEC 14 2015

RECEIVED

RE: City of North Port Annual Water Demand Projections

Dear Mr. Lehman:

Pursuant to the PRMRWSA Master Water Supply Contract, North Port is required prior to January 15th of each contract year, to submit a report which identifies the following:

- 1) Total projected water demand by Contract Year for the next 20 years;
- 2) That portion of the total 20 year demand the customer requires the PRMRWSA to fulfill in terms of Annual Average Daily Quantity; and
- 3) The basis for each projection.

Attachment one provides the information required for total projected water demand and amount required of PRMRWSA in annual average daily quantity. Attachment two provides the amount required of PRMRWSA in Peak Month Average Daily Quantity. Attachment three provides the amount required of PRMRWSA in Maximum Daily Quantity. We have also included a graphical presentation of North Port Water Demand and Supply Projections.

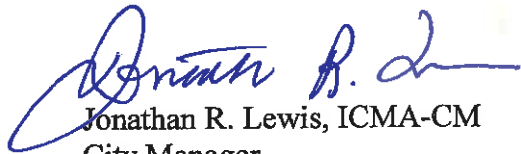
Staff has reviewed BEBR projections, the City's Planning Department's current planned projections and SWFWMD projections as well as considering current developer growth as a basis for the current year's demand projections.

Due to conservation efforts and education, managing the new Reverse Osmosis plant more efficiently and a reduction in flushing, slightly lower demands are expected over the projection period. We also estimate for the next four years, we will have water available for the redistribution pool. The table below identifies our estimates.

Contract Year	Water available for redistribution pool (MGD)
2017	.50
2018	.50
2019	.50
2020	.50
2021	.00
2022	.00

North Port remains committed to providing the water needs of our community and looks forward to continuing our close relationship with the PRMRWSA on this important issue.

Sincerely,



Jonathan R. Lewis, ICMA-CM
City Manager

JRL/jd/mg

Attachments:

1. 2016 Annual Water Demand/Supply Sources Projections-Annual Average
2. 2016 Annual Water Demand/Supply Sources Projections-Peak Month
3. 2016 Annual Water Demand/Supply Sources Projections-Peak Day
4. North Port Water Demand and Supply Projections Graph

CC: Honorable Mayor and City Commission
Daniel P. Schult, Assistant City Manager
Rick Newkirk, Utilities Director
Mark Moriarty, City Attorney
Helen Raimbeau, City Clerk
Thomas A. Harmer, Sarasota County Administrator
Ed Hunzeker, Manatee County Administrator
Mandy Hines, DeSoto County Administrator
Ray Sandrock, Charlotte County Administrator

Attachment 1

2016 Annual Water Demand/Supply Sources Projection							
	Year	Average Day Demand (MGD)	Supply Sources - Annual Average				
			Northeast Water Treatment Plant (MGD)	Southwest Water Treatment Plant (MGD)	Myakkahatchee Creek Water Treatment Plant (MGD)	Peace River Schedule B (MGD)	Peace River Schedule C (MGD)
Actual →	2015	2.798	0	0	3.3	2.7	0
Projected →	2016	3.330	0	0	3.3	2.865	0
↓	2017	3.660	0	0	3.3	2.865	0
↓	2018	4.030	0	0	3.3	2.865	0
↓	2019	4.430	0	0	3.3	2.865	0
↓	2020	4.870	0	0	3.3	2.865	0
↓	2021	5.120	0	0	3.3	2.865	0
↓	2022	5.370	0	0	3.3	2.865	0
↓	2023	5.640	0	1.4	3.3	2.865	0
Years 8 - 20 as requested for planning purposes in section 11.1 of the Master Water Supply Contract							
↓	2024	5.920	0	1.4	3.3	2.865	0
↓	2025	6.220	0	1.4	3.3	2.865	0
↓	2026	6.530	0	1.4	3.3	2.865	0
↓	2027	6.860	1.4	1.4	3.3	2.865	0
↓	2028	7.200	1.4	1.4	3.3	2.865	0
↓	2029	7.560	1.4	1.4	3.3	2.865	0
↓	2030	7.940	1.4	1.4	3.3	2.865	0
↓	2031	8.250	1.4	2.8	3.3	2.865	0
↓	2032	8.580	1.4	2.8	3.3	2.865	0
↓	2033	8.930	1.4	2.8	3.3	2.865	0
↓	2034	9.280	1.4	2.8	3.3	2.865	0
↓	2035	9.650	3.2	2.8	3.3	2.865	0
↓	2036	10.040	3.2	2.8	3.3	2.865	0

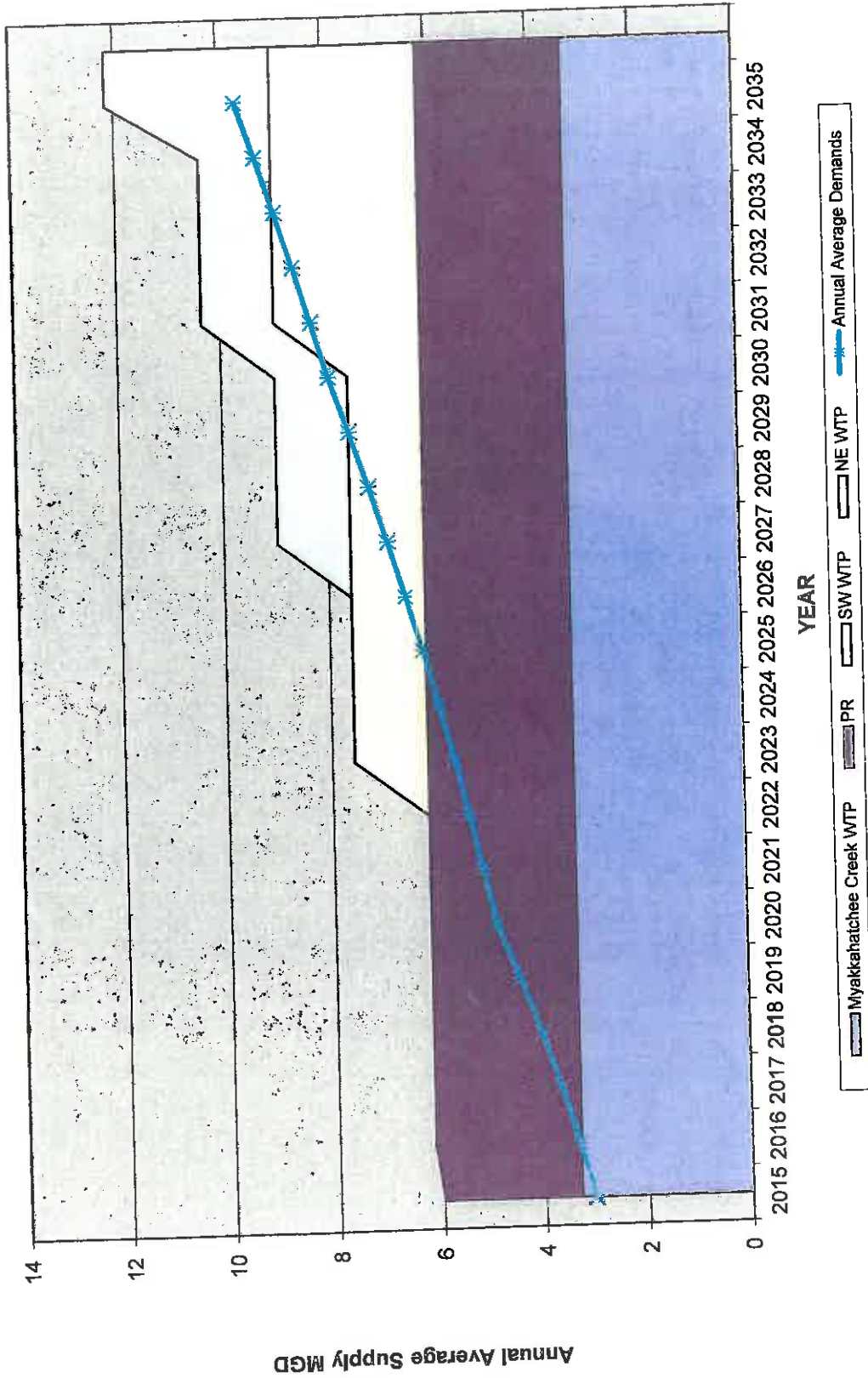
Attachment 2

2016 Annual Water Demand/Supply Sources Projection							
	Year	Peak Month Demand (MGD)	Supply Sources - Peak Month				
			Northeast Water Treatment Plant (MGD)	Southwest Water Treatment Plant (MGD)	Myakkahatchee Creek Water Treatment Plant (MGD)	Peace River Schedule B (MGD)	Peace River Schedule C (MGD)
Actual →	2015	3.358	0	0	3.96	3.146	0
Projected→	2016	3.996	0	0	3.96	3.438	0
↓	2017	4.392	0	0	3.96	3.438	0
↓	2018	4.836	0	0	3.96	3.438	0
↓	2019	5.316	0	0	3.96	3.438	0
↓	2020	5.844	0	0	3.96	3.438	0
↓	2021	6.144	0	0	3.96	3.438	0
↓	2022	6.444	0	0	3.96	3.438	0
↓	2023	6.768	0	2.1	3.96	3.438	0
Years 8 - 20 as requested for planning purposes in section 11.1 of the Master Water Supply Contract							
↓	2024	7.104	0	2.1	3.96	3.438	0
↓	2025	7.464	0	2.1	3.96	3.438	0
↓	2026	7.836	0	2.1	3.96	3.438	0
↓	2027	8.232	2.1	2.1	3.96	3.438	0
↓	2028	8.640	2.1	2.1	3.96	3.438	0
↓	2029	9.072	2.1	2.1	3.96	3.438	0
↓	2030	9.528	2.1	2.1	3.96	3.438	0
↓	2031	9.900	2.1	4.2	3.96	3.438	0
↓	2032	10.296	2.1	4.2	3.96	3.438	0
↓	2033	10.716	2.1	4.2	3.96	3.438	0
↓	2034	11.136	2.1	4.2	3.96	3.438	0
↓	2035	11.580	4.8	4.2	3.96	3.438	0
↓	2036	12.048	4.8	4.2	3.96	3.438	0

Attachment 3

2016 Annual Water Demand/Supply Sources Projection							
	Year	Peak Day Demand (MGD)	Supply Sources - Peak Day				
			Northeast Water Treatment Plant (MGD)	Southwest Water Treatment Plant (MGD)	Myakkahatchee Creek Water Treatment Plant (MGD)	Peace River Schedule B (MGD)	Peace River Schedule C (MGD)
Actual →	2015	3.917	0	0	4.62	3.78	
Projected →	2016	4.662	0	0	4.9	4.011	0
↓	2017	5.124	0	0	4.9	4.011	0
↓	2018	5.642	0	0	4.9	4.011	0
↓	2019	6.202	0	0	4.9	4.011	0
↓	2020	6.818	0	0	4.9	4.011	0
↓	2021	7.168	0	0	4.9	4.011	0
↓	2022	7.518	0	0	4.9	4.011	0
↓	2023	7.896	0	2.8	4.9	4.011	0
Years 8 - 20 as requested for planning purposes in section 11.1 of the Master Water Supply Contract							
↓	2024	8.288	0	2.8	4.9	4.011	0
↓	2025	8.708	0	2.8	4.9	4.011	0
↓	2026	9.142	0	2.8	4.9	4.011	0
↓	2027	9.604	2.8	2.8	4.9	4.011	0
↓	2028	10.080	2.8	2.8	4.9	4.011	0
↓	2029	10.584	2.8	2.8	4.9	4.011	0
↓	2030	11.116	2.8	2.8	4.9	4.011	0
↓	2031	11.550	2.8	5.6	4.9	4.011	0
↓	2032	12.012	2.8	5.6	4.9	4.011	0
↓	2033	12.502	2.8	5.6	4.9	4.011	0
↓	2034	12.992	2.8	5.6	4.9	4.011	0
↓	2035	13.510	6.4	5.6	4.9	4.011	0
↓	2036	14.056	6.4	5.6	4.9	4.011	0

North Port Water Demand and Supply Projections



PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016

CONSENT AGENDA
ITEM 11

**Approve Work Order No. 16-05 to MWH for
Reservoir No. 2 Seepage Collection System Toe Drain Inspection**

Recommended Action -

Motion to approve and authorize Executive Director to execute Work Order 16-05 to MWH for Reservoir No. 2 Seepage Collection System Toe Drain Inspection at a cost not to exceed \$99,977.

Work Order No. 16-05 will authorize the designer of the Reservoir No. 2, MWH, to perform a video survey of conditions in the Reservoir No. 2 Embankment internal seepage collection toe drain system. Work will be conducted under the existing continuing services contract with MWH for Engineering Services.

The Reservoir No. 2 toe drain consists of 24,000 feet (4.6 miles) of PVC pipe ranging in size from 8 inches to 16 inches in diameter. The pipes are buried approximately 15 feet below ground surface with access via manholes located at the toe of the embankment. The video inspection is performed by a robotic camera lowered into the pipe through a manhole or other access point. All video is digitally recorded for evaluation. Observations at man-holes and discharge locations for this system indicate that groundwater has deposited iron bacteria within sections of the pipe and the extent of this deposition, and the general condition of the toe drains needs to be evaluated. Follow-up work in 2017 to clean sections of the toe drain may be required based on the video work.

The seepage collection system consists of a chimney drain, a blanket drain and a toe drain. These components are embedded within the earthen embankment that surrounds the water stored in the reservoir. Seepage from the reservoir pool is collected by the chimney drain and the blanket drain which then flows into the toe drain before being discharged to either Reservoir #1 or to the perimeter toe ditch. A properly functioning seepage collection system is critical to maintaining a safe, functional reservoir embankment.

Staff recommends approval of Work Order No. 16-05 to MWH for Reservoir No. 2 Seepage Collection System Toe Drain Inspection at a cost not to exceed \$99,977. Work is scheduled to be completed in approximately three months. Staff memorandum and Work Order No. 16-05 are attached.

Budget Action – None.

MEMORANDUM

DATE: April 6, 2016
TO: Patrick J. Lehman, Executive Director
FROM: Mike Coates, Deputy Director
RE: Work Order 16-05 to MWH for Reservoir 2 Seepage Collection System Toe Drain Inspection

Recommendation

Approve Work Order 16-05 to MWH for Reservoir 2 Seepage Collection System Toe Drain Inspection at a cost not to exceed \$99,977. Work will include inspection and evaluation of approximately 24,000 feet (4.6 miles) of PVC pipe ranging in size from 8 inches to 16 inches in diameter. The pipes are buried approximately 15 feet below ground surface with access via manholes located at the toe of the embankment. The video inspection is performed by a robotic camera lowered into the pipe through a manhole or other access point. Follow-up work may be required to clean sections of the toe-drain based on video inspection. Any follow-up efforts are expected to occur in 2017.

Background

The Reservoir #2 seepage collection system consists of a chimney drain, a blanket drain and a toe drain. These components are embedded within the earthen embankment that surrounds the water stored in the reservoir. Seepage from the reservoir pool is collected by the chimney drain and the blanket drain which then flows into the toe drain before being discharged to either Reservoir #1 or to the perimeter toe ditch (see Figure 1- reservoir embankment cross-section).

The seepage collection toe drain circumscribes the perimeter of the embankment. The toe drain consists of 24,000 feet (4.6 miles) of PVC pipe of ranging in size from 8 inches to 16 inches in diameter. The pipes are buried approximately 15 feet below ground surface. Access to these pipes is via manholes located at the toe of the embankment. Observations at man-holes and discharge locations for this system indicate that groundwater has deposited iron bacteria within sections of the pipe. The extent of these bacterial deposits, and the general condition of the toe drains needs to be evaluated. The Reservoir No. 2 Operations and Maintenance Plan recommends periodic internal inspection of the toe-drain system.

The Reservoir No. 2 seepage collection system is critical to maintaining a safe, functional reservoir embankment. The purpose of this system is to collect water seeping through the embankment and control groundwater levels at the exterior toe of the embankment. Management of seepage and groundwater promotes the stability of the dam and reduces maintenance of the embankment slopes. The ability of the toe drain to effectively collect and discharge water from the embankment is integral to the successful performance of this system.

Video inspection is a cost effective and valuable way of assessing the condition of a buried pipe. These efforts can reveal blockages due to debris and roots as well as documenting cracks, breaks or deterioration of a pipe. The video inspection is performed by a robotic camera that is lowered

into the pipe through a manhole or other access point. The camera is attached to a cable that runs back to a television truck where technicians digitally record and document a visual image of a pipeline's interior. The cable allows the camera to travel as much as 500-900 feet down a pipe depending on conditions before it must be moved to another manhole further downstream. The camera can also be fitted with a variety of wheels or tracks that allow the camera to travel easily through the pipe.

Proposed Work Order

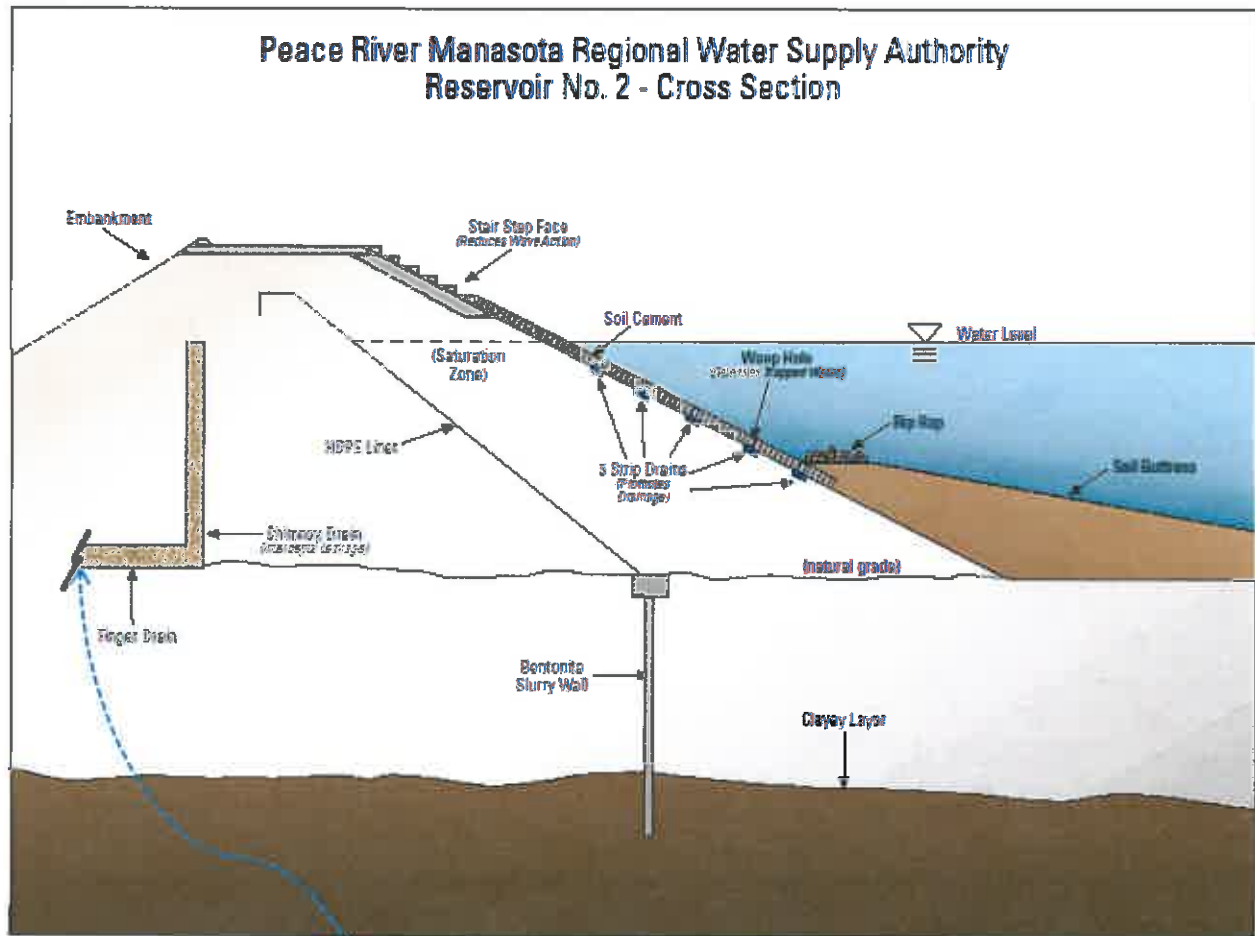
Staff is seeking authorization to contract MWH Americas, Inc. (MWH) for inspection of the perimeter toe drain pipe that is part of the Reservoir #2 seepage collection system. Based on references and knowledge of the work performed, MWH identified three regional Contractors capable of performing submerged pipe inspections. Two of those contractors, Altair Environmental Group and Shenandoah Construction expressed interest in reviewing the project requirement in consideration of submitting a bid. Both contractors participated in a site visit, where they were provided plans for the project and a tour of the work area. Both contractors provided written estimates for the work. The estimates were reviewed and both contractors were contacted again to address questions on the information submitted. Altair was not responsive to the additional information request. A summary of the written estimates provided is given below.

Name	Estimate
Altair Environmental Group	\$108,455
Shenandoah Construction	\$73,350

Based on the above evaluation Shenandoah was deemed to be the best selection based on price, approach and responsiveness.

MWH has developed a cost estimate for engineering services to coordinate this inspection with Authority staff, conduct necessary project meetings as well as observe and document Contractor activities during the inspection. MWH will generate a project specification for the work to be performed by the Contractor as well as review Contractor submittals. MWH's staff will also perform observation and monitoring of the area under inspection to identify potential impacts on the performance of the toe drain pipe. Work Order 16-05 for the Reservoir 2 Seepage Collection System Toe Drain Inspection is attached. The work effort is expected to be completed in three months. The proposed lump sum budget for this service is \$99,977.00.

Figure 1 – Reservoir 2 Embankment Cross Section



Blanket & Finger drains extend laterally and connect with Toe-Drain system near the outside toe of the embankment

**REGIONAL RESERVOIR OPERATIONS SUPPORT
RESERVOIR #2 DAM SAFETY PROGRAM
WORK ORDER NO. 16-05
Seepage Collection System Toe Drain Inspection**

INTRODUCTION

Work Order No. 16-05 entered into this __ th day of April, 2016 is to be attached to and incorporated by reference to the Agreement for General Professional Engineering Services between the Peace River Manasota Regional Water Supply Authority (AUTHORITY) and MWH Americas Inc. (CONSULTANT), approved by the AUTHORITY on December 2, 2015 and entered into on February 1, 2016 for services to support the AUTHORITY's regional public water supply and delivery system.

The regional public water supply system includes the AUTHORITY's Reservoir #2 located at the Peace River Facility in DeSoto County near Ft Ogden, Florida. Reservoir #2 consists of an above grade, off-line, 6 billion gallon raw surface water reservoir, a 66-inch diameter raw water pipeline, an inlet/outlet tower, and an emergency auxiliary spillway for Reservoir # 1. This reservoir is the storage component associated with the Regional Expansion Program (REP) designed to expand the AUTHORITY's allocated delivery capacity for the Peace River Facility from 18 to nearly 33 million gallons per day.

In accordance with the requirements of the Reservoir #2 Reservoir Operation and Maintenance (O&M) Plan (dated June 2009), pipe inspection is recommended every five years after first fill. In addition maintenance recommendations in the O&M Plan include periodic flushing of the seepage collection system toe drain. CONSULTANT proposes to subcontract toe drain video inspection to Shenandoah Construction. Shenandoah will provide equipment, labor and incidental materials to conduct a video inspection of the entire perimeter of the Reservoir #2 toe drain pipe for this work order. A future work order(s) may include incidental jet cleaning to dislodge and remove accumulated sediment or organic sludge materials from the pipe, if present. The proposed video inspection will be evaluated to identify locations where the future jet cleaning should be performed.

Video inspection of buried pipelines is an appropriate method for assessing the condition of the pipe. It can reveal blockages due to debris and roots as well as documenting cracks, breaks or deterioration of a pipe. The video inspection is performed by a robotic camera that is lowered into the pipe through a manhole or other access point. The camera is attached to a cable that runs back to a television truck where crew members can control the camera's speed, move it forward or back, pan and tilt camera head, and digitally record and document a visual image of a pipeline's interior. The camera will be capable of radial view for inspection of the top, bottom, and sides of pipe and for looking up lateral connections. The cable allows the camera to travel as much as 500-900 feet down a sewer line depending on conditions before it must be moved to another manhole further downstream. The camera can also be fitted with a variety of wheels or tracks to improve the movement of the camera through the pipe.

In the course of preparing this work order, MWH identified regional Contractors that are capable of performing submerged pipe inspections. Contractors that provide this service were asked to submit information on pricing to inspect and clean the Reservoir #2 toe drain pipe. Information was received from two Contractors that was subject to further evaluation for selection of a preferred candidate. Shenandoah Construction was selected based on price, approach and responsiveness. Upon receipt of Notice to Proceed from the AUTHORITY the CONSULTANT will begin contract discussions with Shenandoah (Contractor).

This effort, Work Order No. 16-05 – ‘Seepage Collection System Toe Drain Inspection’, will provide professional engineering services requested by the AUTHORITY to perform a condition assessment of the Reservoir #2 seepage collection system toe drain pipe.

SCOPE OF WORK

The scope of services for this work order is subdivided into the following tasks:

1. Project Management;
2. Specification and Work Plan Development;
3. Toe Drain Inspection; and
4. Inspection Report

Each of these tasks is expanded upon in the sections to follow. The CONSULTANT agrees to provide the following services as described below.

Task 1 – Project Management

CONSULTANT’s responsibilities under project management will consist of:

- A. Scheduling and coordinating project staffing.
- B. Subcontract generation and subcontract management.
- C. Planning and implementation of Project Standards and internal Quality Control Program.
- D. Interface and Coordination with FDEP’s Independent 3rd Party Dam Inspector during the term of this project as required.
- E. Client meetings to discuss project progress and budget status. Meetings may vary from informal discussions of budget and status to formal presentations of progress. Up to 3 meetings are assumed in the scope of work. Each meeting is assumed to be up to 1 hour in length conducted by telephone or video conferencing as appropriate. On-site meetings with site staff will be performed as needed.
- F. Project invoicing and routine status reporting.

Task 2 – Specification and Work Plan Development

CONSULTANT's responsibilities under this task will consist of:

- A. Perform evaluation to verify loading is within the service load capacity of the pipe.
- B. Generate a Contractor Specification based on the above evaluations.
- C. Develop a Monitoring and Communications Plan for oversight of inspection activities.
- D. Develop a site specific Health and Safety Plan for MWH staff during the inspection.

CONSULTANT will perform evaluations to ascertain potential impacts and issues with the performance of the inspection. Calculations will be completed to estimate potential loads imposed on the toe drain pipe for comparison to pipe ratings and information provided during installation. Potential impacts of pipe diameter, pipe bends and layout will also be evaluated.

CONSULTANT will generate a Contractor's Pipe Inspection Specification to describe the scope of work, limitations to be imposed on the work at all locations of the perimeter toe drain. The Specification will identify required Contractor submittals prior to, during and after the work is complete. The specification will address work sequencing, data collection and reporting of results to the CONSULTANT. The specification will also address temporary removal of the seepage flume monitoring sensors by the Contractor to prevent damage during inspection.

CONSULTANT will generate a Monitoring and Communications Plan to identify observations to be made by CONSULTANT's staff during the inspection. Monitoring will include observations of site conditions within the reach under evaluation, site instrumentation as well as observation of water volumes exiting the seepage outfalls as the work progresses. Information to be provided by the Contractor during implementation of the work will also be integrated into this plan.

CONSULTANT will generate a project specific Health and Safety Plan to identify and mitigate potential safety hazards that may be encountered during the course of the work. The Contractor will be responsible for generation of a safety plan for their staff. Both plans will be placed on file with the AUTHORITY. The Contractor's Health and Safety Plan will include confined space entry requirements for work to be completed within the manholes.

Task 3 – Toe Drain Inspection

CONSULTANT's responsibilities under this task will consist of:

- A. Coordination with AUTHORITY staff.
- B. Review of Contractor submittals
- C. Organize and lead a Project Kickoff Meeting with the Contractor's project and field staff
- D. Video inspection of perimeter toe drain.
- E. Oversight and coordination of Contractor activities during inspection.
- F. Visual inspection of site condition and monitoring site instrumentation, lamp holes and seepage outlet pipes during the work.
- G. Documentation of observations.

CONSULTANT will receive and review Contractor submittals identified in the project

specification. Information provided that is not in accordance with the requirements of the specification will be returned for revision and resubmittal.

CONSULTANT will generate an agenda for a project kick off meeting with AUTHORITY and Contractor's staff. CONSULTANT will chair the meeting and generate a meeting summary documenting decisions for distribution to all attendees.

CONSULTANT will provide field personnel to oversee and document Contractor activities during the inspection. CONSULTANT will request periodic support from AUTHORITY staff for this activity as they become available to assist. The project is expected to require up to four weeks to complete the field portion of the work. CONSULTANT's scope assumes one person on-site part time supplemented by Authority staff as needed.

Contractor shall provide labor equipment and material necessary to inspect the seepage collection toe drain installed within the downstream toe of the Reservoir #2 embankment via closed-circuit television. Equipment provided by the Contractor shall be appropriate for the pipe sizes to be encountered. The Contractor's activities will be structured to maximize coordination with the AUTHORITY and the CONSULTANT. Contractor activities will include data collection on the current condition of the pipe as well as identification of the location of anomalies, cracks and debris within the toe drain system.

Task 4 – Inspection Report

CONSULTANT's responsibilities under this task will consist of:

- A. Review, evaluate and interpret data collected from the inspection
- B. Compile and generate a draft report for review and comment by AUTHORITY staff.
- C. Incorporate changes based on comments received from AUTHORITY staff.

Data Interpretation and Analysis

- CONSULTANT will review the pipe inspection video and record of observations generated by the Contractor during the inspection. Contractor's information will be referenced to the reservoir embankment stationing.
- CONSULTANT will compare the video obtained during the pipe inspection with information obtained during toe drain installation.
- CONSULTANT will evaluate and interpret the pipe inspection video to identify any anomalous features providing a textual and graphical description of each target found, as appropriate.

Deliverables

- CONSULTANT will submit a draft and final report of findings detailing field observations, data review, interpretation and findings of anomalous features.
- The report will include a database of anomalous features identified within the reservoir's seepage collection system toe drain pipe.
- In addition to the final report, CONSULTANT will submit a copy of the video record of the pipe inspection.

EXCLUSIONS TO THE SCOPE OF WORK

The following tasks are not included in this Scope of Work:

- A. Coordination with funding agencies,
- B. Preparation of bid documents, conducting bid openings,
- C. Meetings with AUTHORITY, SWFWMD, FDEP, or engineers for reasons beyond the scope of work identified herein,
- D. Permit application fees,
- E. Corrective Action Plans and reports,
- F. Sinkhole investigation or sinkhole remediation plans and reports, and
- G. Work performed by others contracted directly to the AUTHORITY.

The above services and other additional services may be added by amendment. To the extent that work by others is required as part of one of CONSULTANT's deliverables under this agreement, we will coordinate with that supplier to facilitate including the report or information into our deliverable.

ASSUMPTIONS USED TO DEVELOP THE PROPOSED SCOPE OF WORK

In addition to the assumptions included above in the scope of services tasks our proposed scope of services is based on:

- A. Notice to proceed will be given within 10 days of the AUTHORITY accepting this scope of work.
- B. CONSULTANT and Contractor will work with the AUTHORITY to schedule the operations so that optimal conditions exist during inspection operations, including having the AUTHORITY identify and/or remove any existing infrastructure or operations that may impeded Contractor's operations.

OWNER RESPONSIBILITIES

The AUTHORITY agrees to:

- A. AUTHORITY staff will be responsible for removing existing infrastructure within Reservoir #2 that may impede the performance of the toe drain inspection
- B. AUTHORITY staff will collect and provide requested information and will report such data to the CONSULTANT in a mutually agreed electronic format.
- C. Assist with the coordination of the work of others contracted directly to the AUTHORITY for portions of the scope included in permit required actions (if any) on this project.
- D. Provide the performance monitoring data in a timely manner that supports and facilitates observations and monitoring of Contractor activities.

SCHEDULE

CONSULTANT agrees to begin these services within 10 days of receipt of notice to proceed.

CONSULTANT will complete the pipeline inspection as quickly as possible based on Contractor availability, Contractor's adherence with the project schedule and weather conditions. Subcontracting with Shenandoah Construction will begin upon receipt of a Notice to Proceed from the AUTHORITY.

Anticipated schedule of services is:

- CONSULTANT will develop project work plans and specifications within 3 weeks of Notice to Proceed.
- Toe drain inspection is anticipated to require up to 30 days to complete the field work. Weather, environmental conditions, and conditions at the reservoir will dictate production and may cause operations to exceed this estimate.
- Data processing, interpretation, analysis and final report preparation (including all deliverables described above) will be completed and submitted within one (1) month following the successful completion of field data collection.

CONSULTANT anticipates these services will be provided for a duration not to exceed three (3) months.

COMPENSATION

The AUTHORITY agrees to compensate CONSULTANT for this scope of services as shown on EXHIBIT A, attached. CONSULTANT's invoices will be submitted monthly. Lump sum task billings will be based on CONSULTANT's estimated percent complete.

IN WITNESS WHEREOF, the parties hereto have executed this Work Order as of the day and year first written above.

PEACE RIVER/MANASOTA REGIONAL
WATER SUPPLY AUTHORITY

Patrick J. Lehman, P.E.
Executive Director

MWH Americas, Inc.



Jason E. Hedien
Vice President

RESERVOIR #2 DAM SAFETY PROGRAM
WORK ORDER No. 16-05
Seepage Collection System Toe Drain Inspection
EXHIBIT A - COMPENSATION

Task	Tasks	Basis	Compensation
1	Project Management	LS	\$6,148.00
2	Specification and Work Plan Development	LS	\$10,710.00
3	Toe Drain Inspection	LS	\$74,152.50
4	Inspection Report	LS	\$8,966.00
	TOTAL		\$99,976.50

CONSULTANT is authorized to reallocate funds between tasks if such adjustment does not result in an increase to the total fee amount. The above total budgeted amount is not to be exceeded without prior written approval of the AUTHORITY's Executive Director or by amendment of this agreement by the AUTHORITY.

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016

CONSENT AGENDA
ITEM 12

**Novation of Contract from United Systems Computer Group, Inc. to
Entech United, LLC**

Recommended Action -

Motion to approve and authorize Executive Director to execute novation of existing contract from United Systems Computer Group, Inc. to Entech United, LLC.

The Authority currently has a professional services contract with 'United Systems Computer Group, Inc.' dated June 5, 2013. The attached March 11, 2016 correspondence serves notice that 'United Systems Computer Group, Inc.' has merged with another firm and changed its name to 'Entech United, LLC'.

Since the Authority's current contract is with 'United Systems Computer Group, Inc.' this change will require novation of the current contract to 'Entech United, LLC'. The attached correspondence from Entech pledges that the novation will not result in changes in personnel or interruption of continuity of service and that all contractual obligations will continue to be satisfied with this name change. Staff recommends approval for novation of current from 'United Systems Computer Group, Inc.' to 'Entech United, LLC'.

Budget Action – None



615 67th St Cir. East, Suite 201 | Bradenton, FL 34208
Telephone: (941) 721-6423 | Fax: (941) 721-6073
Email: info@entechUS.com | www.entechUS.com

March 11, 2016

Peace River Manasota Regional Water Supply Authority
Attn: Mr. Pat Lehman, Executive Director
9415 Town Center Parkway
Lakewood Ranch, FL 34202

RE: Corporate Name Change

Dear Mr. Lehman,

United Systems Computer Group, Inc. values the Water Supply Authority as a client and I am excited to inform you that in an effort to better serve the needs of our clients in this region, we have merged our interests with another firm to pool our collective resources. Moving forward, our corporate identity will change from "United Systems Computer Group Inc." to "Entech United, LLC".

However, this change will in no way result in changes in personnel or interruption of continuity of service, and all contractual obligations will continue to be satisfied with this name change. If you should have any questions about this matter or concerns at any other time, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Spire", with a large, stylized flourish at the end.

David L. Spire
Vice President

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 06, 2016

REGULAR AGENDA
ITEM 1

Water Supply Conditions
Staff Report

Presenter - Richard Anderson, System Operations Manager

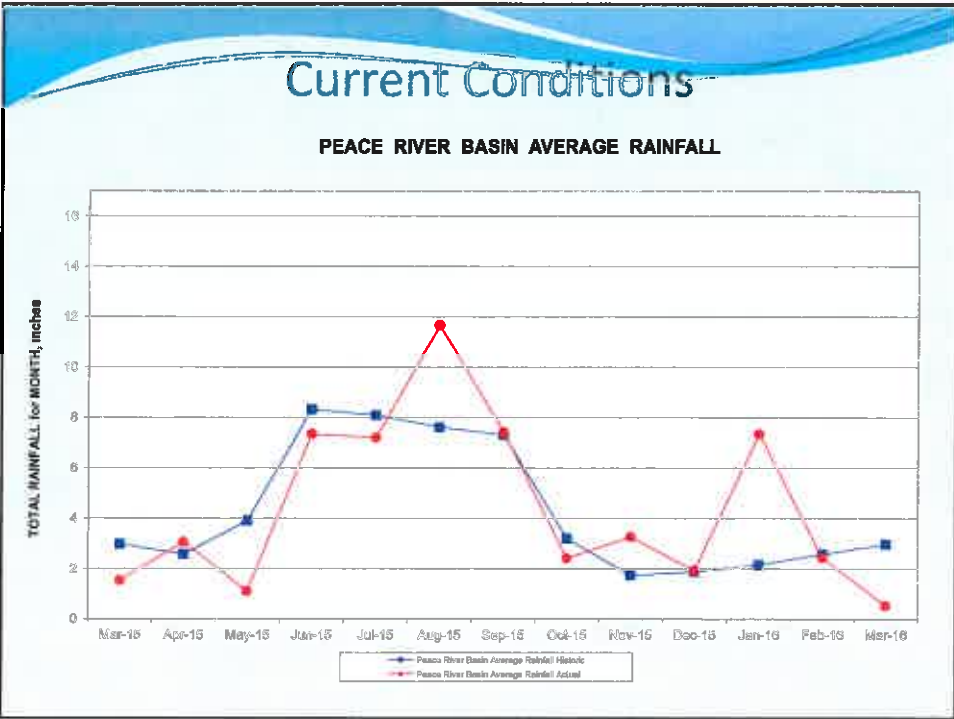
Recommended Action - **Status Report.** This item is presented for the Board's information and no action is required.

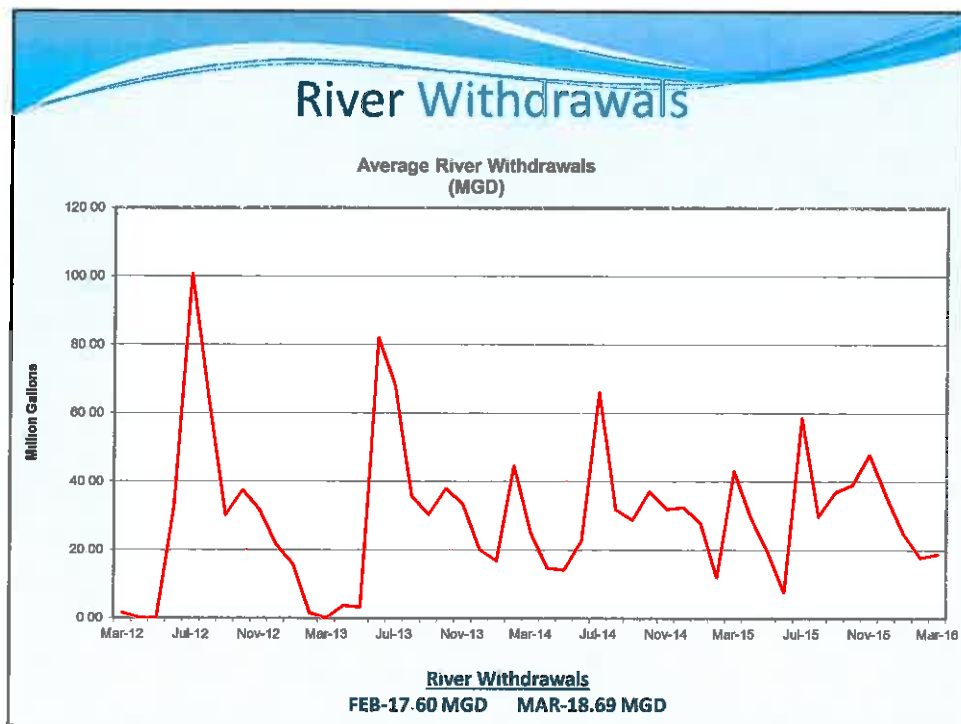
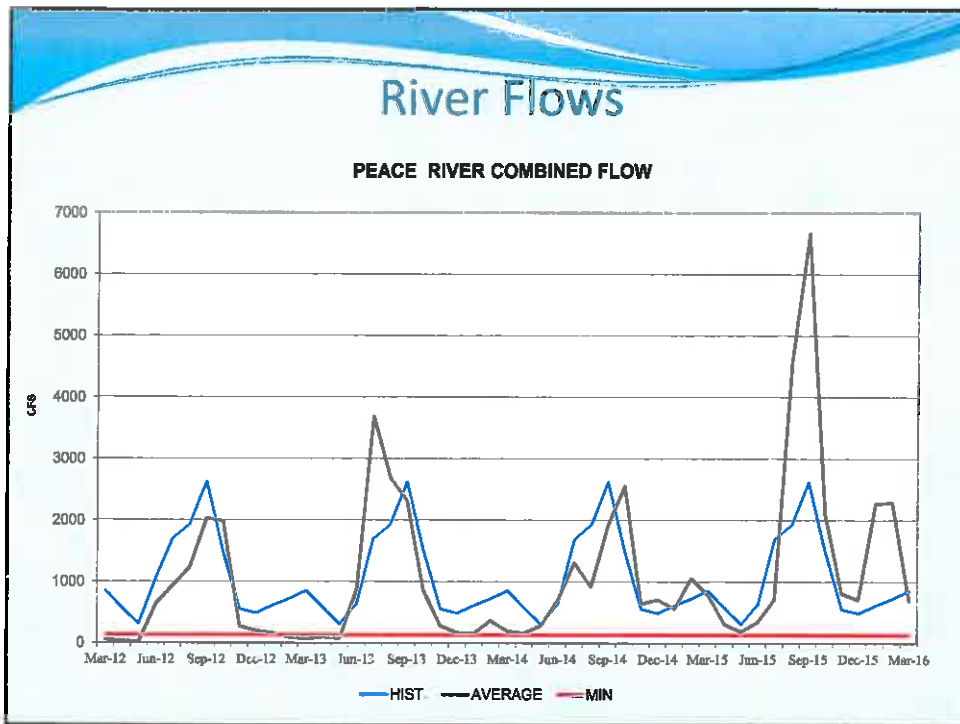
Water Supply Conditions at the Peace River Facility as of March 20, 2016.

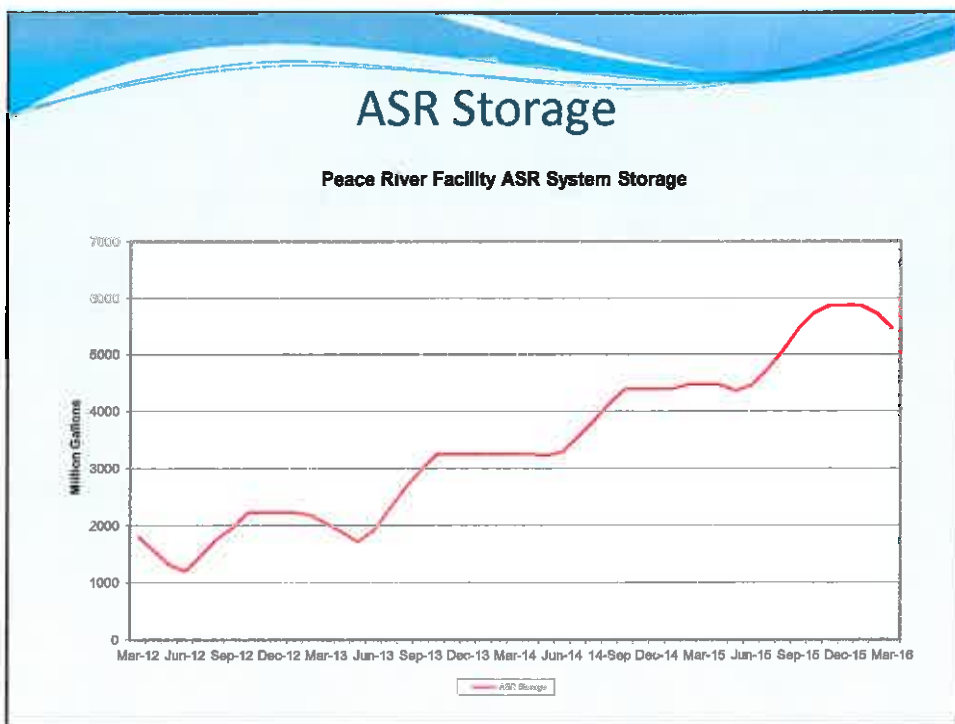
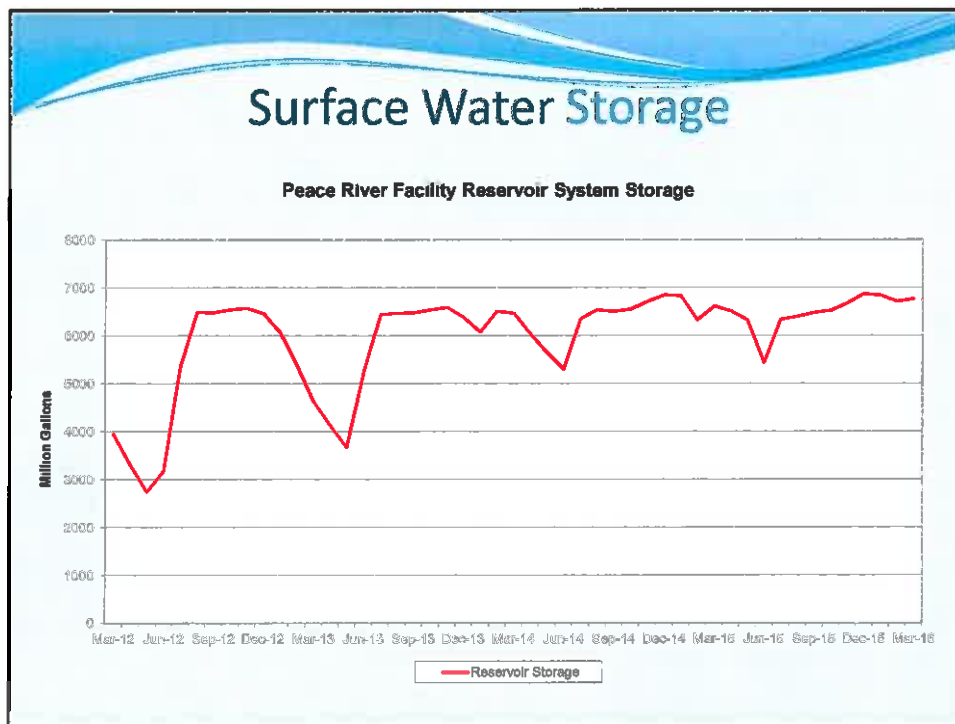
- Water Supply Quantity: Excellent
- Treated Water Quality: Excellent

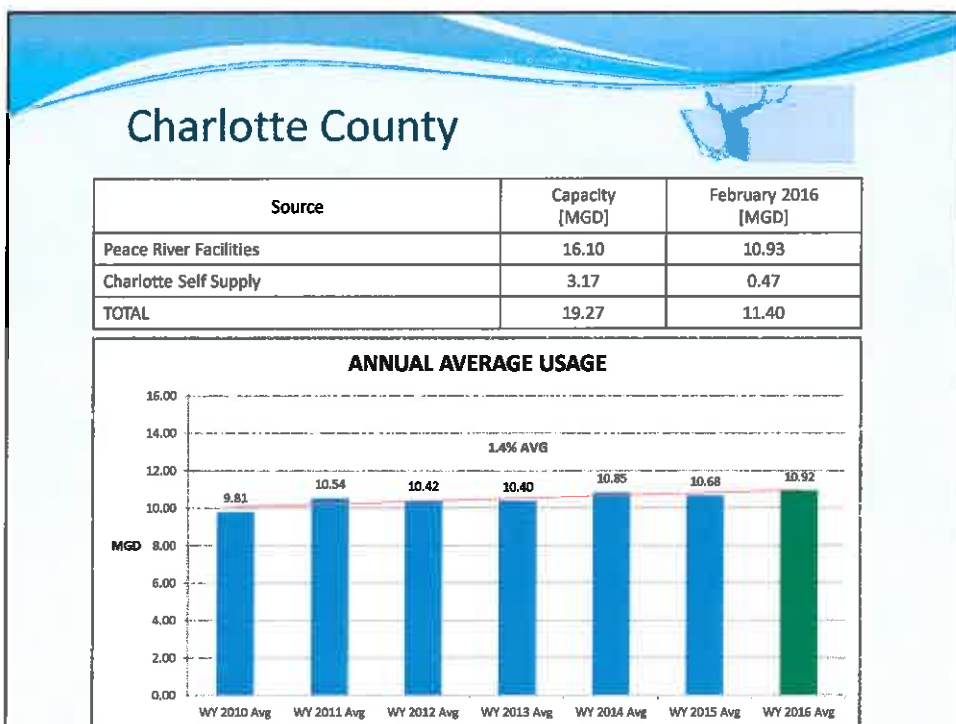
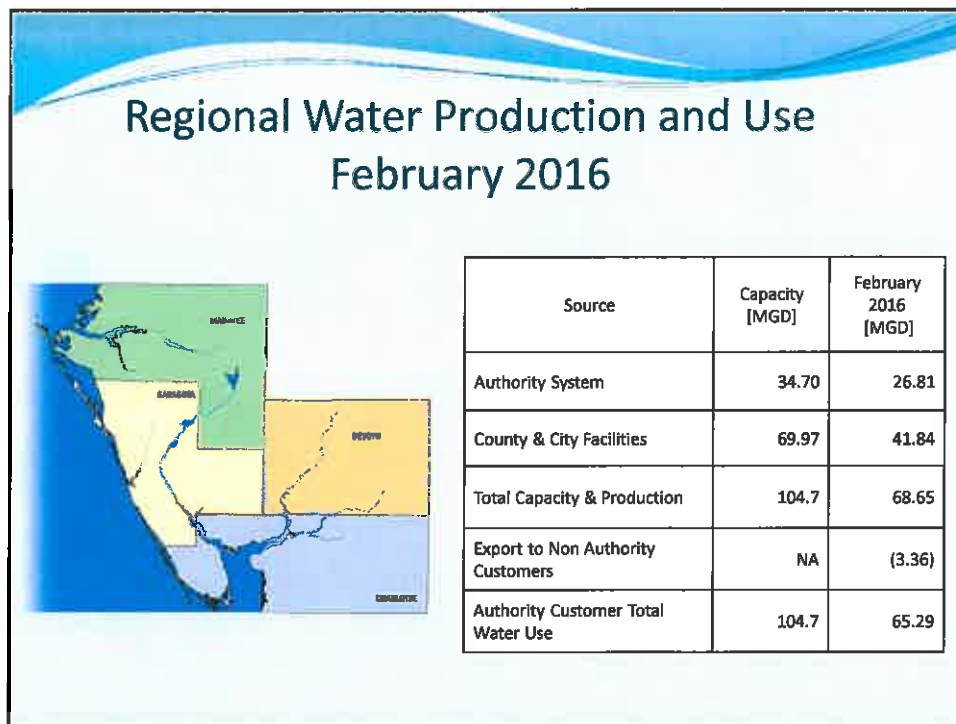
March Water Demand	27.92 MGD
March River Withdrawals	18.69 MGD
<u>Storage Volume:</u>	
Reservoirs	6.75 BG
ASR	<u>5.47 BG</u>
Total	12.22 BG

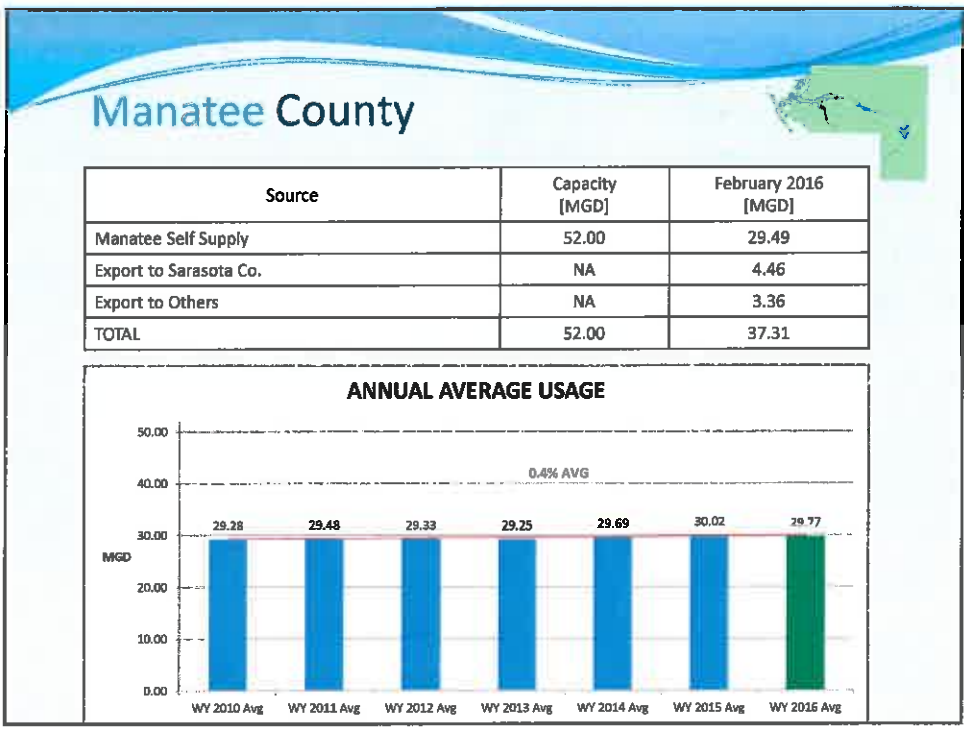
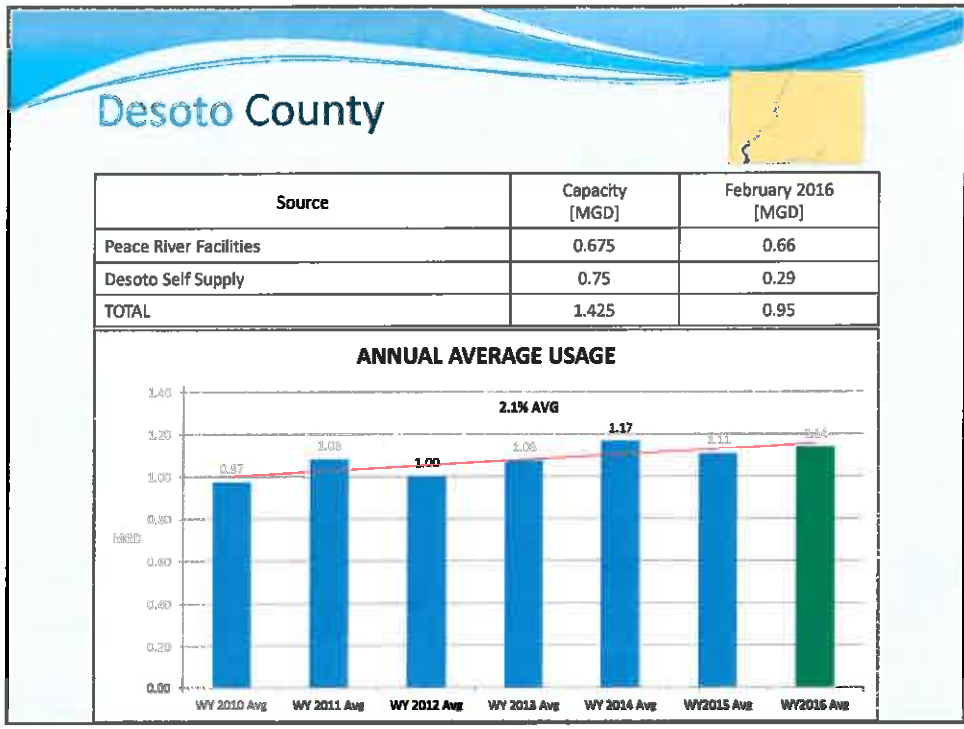
Budget Action – None

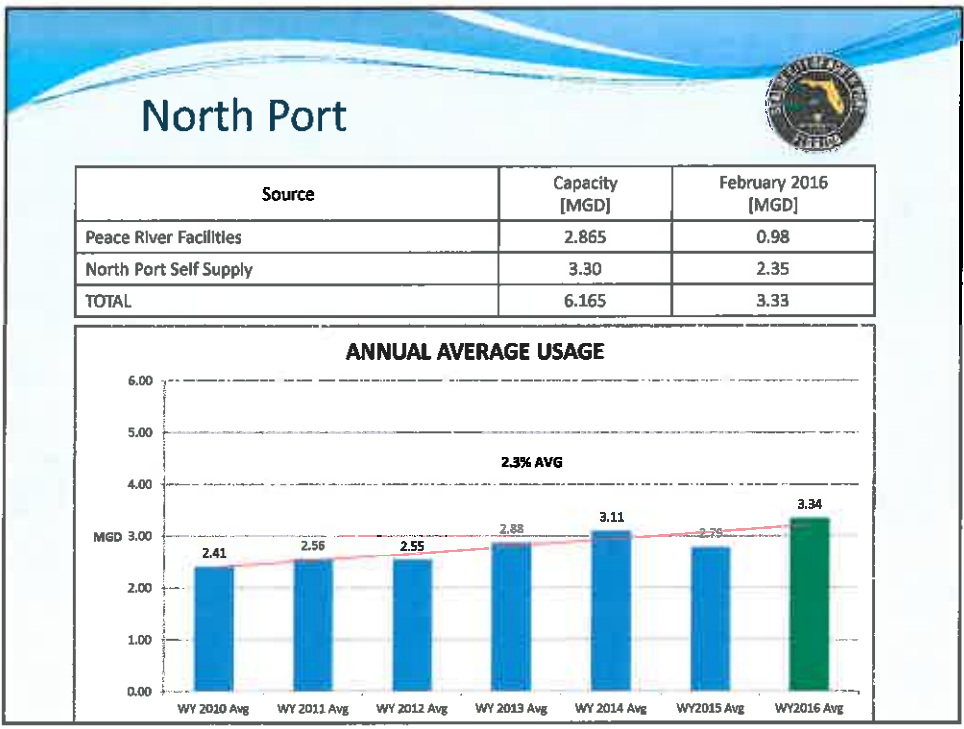
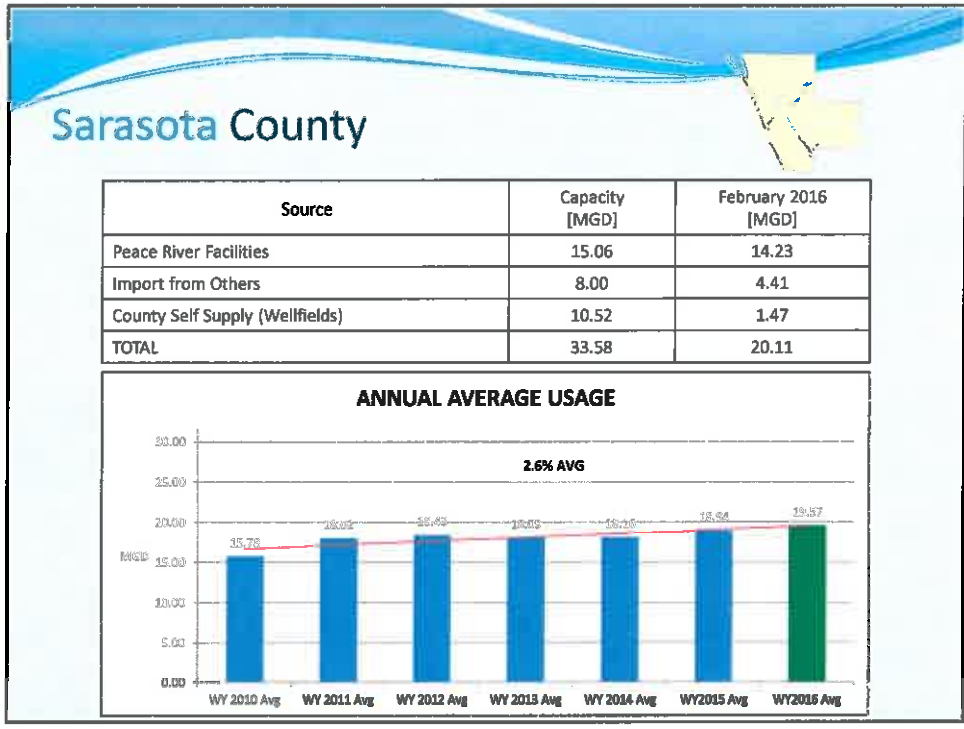


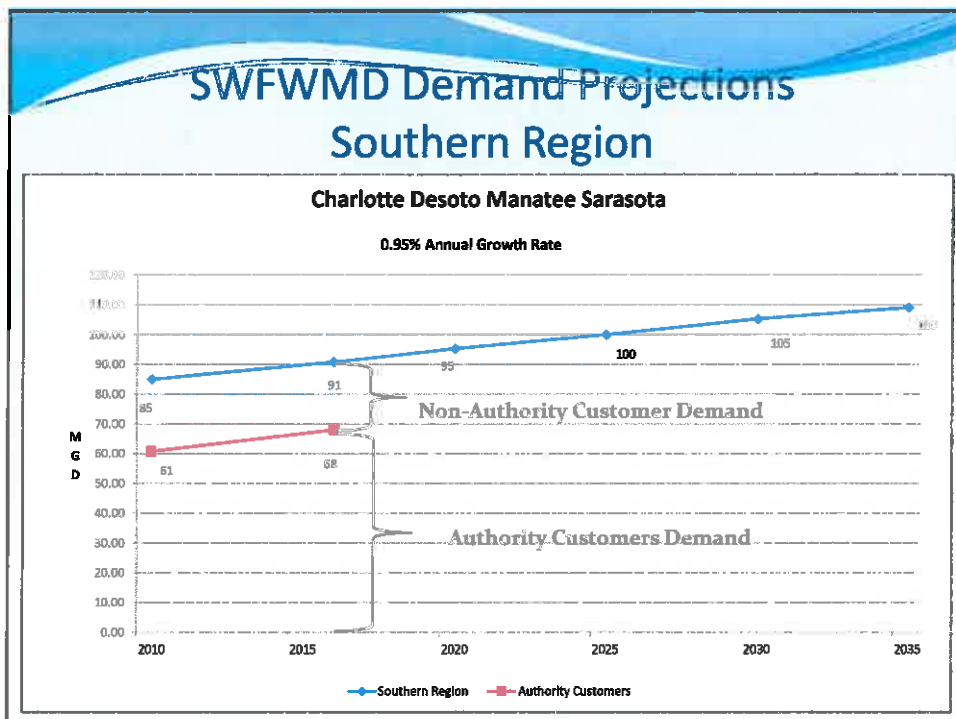
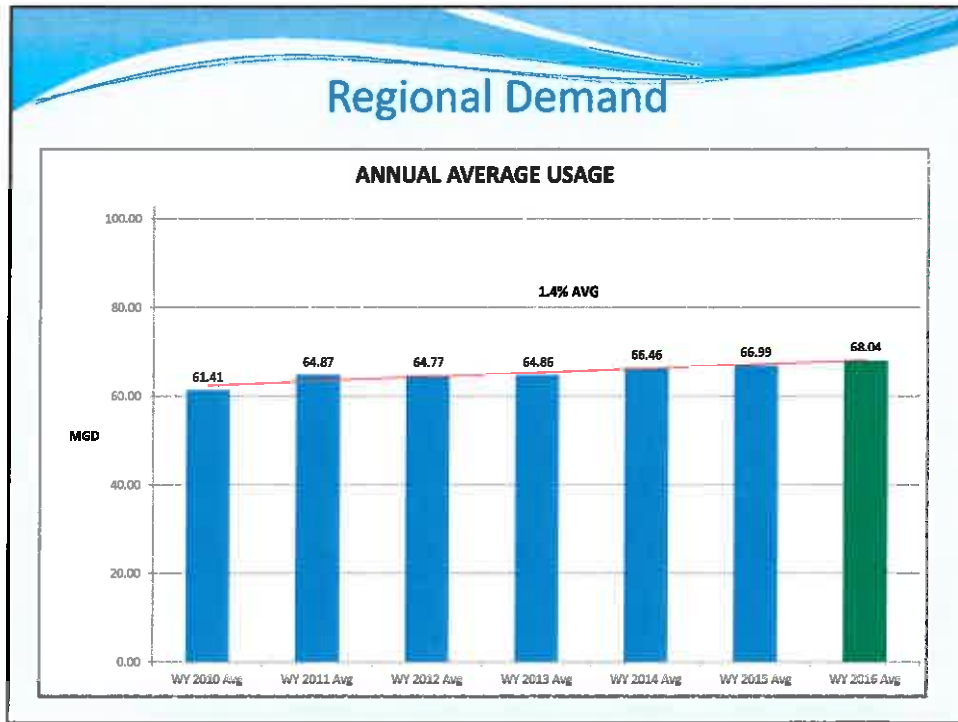


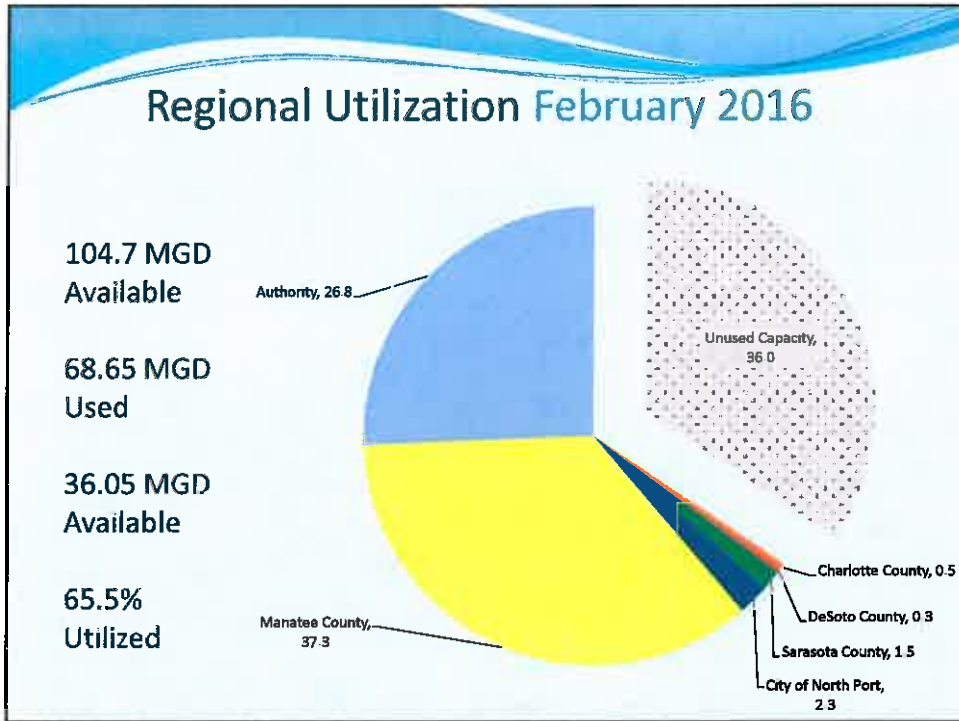












PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016

REGULAR AGENDA
ITEM 2

Regional Integrated Loop System Phase 3B Interconnect [SR 681 to Clark Road]

Presenter - Mike Coates, Deputy Director

Recommended Action - **Status Report** This item is presented for the Board's information and no action is required.

The Phase 3B Interconnect project (State Road 681 to Clark Road) will include installation of about 4.2 miles of 48-inch diameter pipeline from the northern terminus of the existing Phase 3A Regional Interconnect, north to Clark Road (see attached location map). The project will support Sarasota County's water needs from Clark Road north, and serve to extend the regional system toward a future interconnection with Manatee County. Design work for the project was initiated in February 2016. Estimated total project cost (design and construction) is \$27M, and project completion is scheduled in 2020.

a. Status of Interlocal Agreement between the Authority and Sarasota County

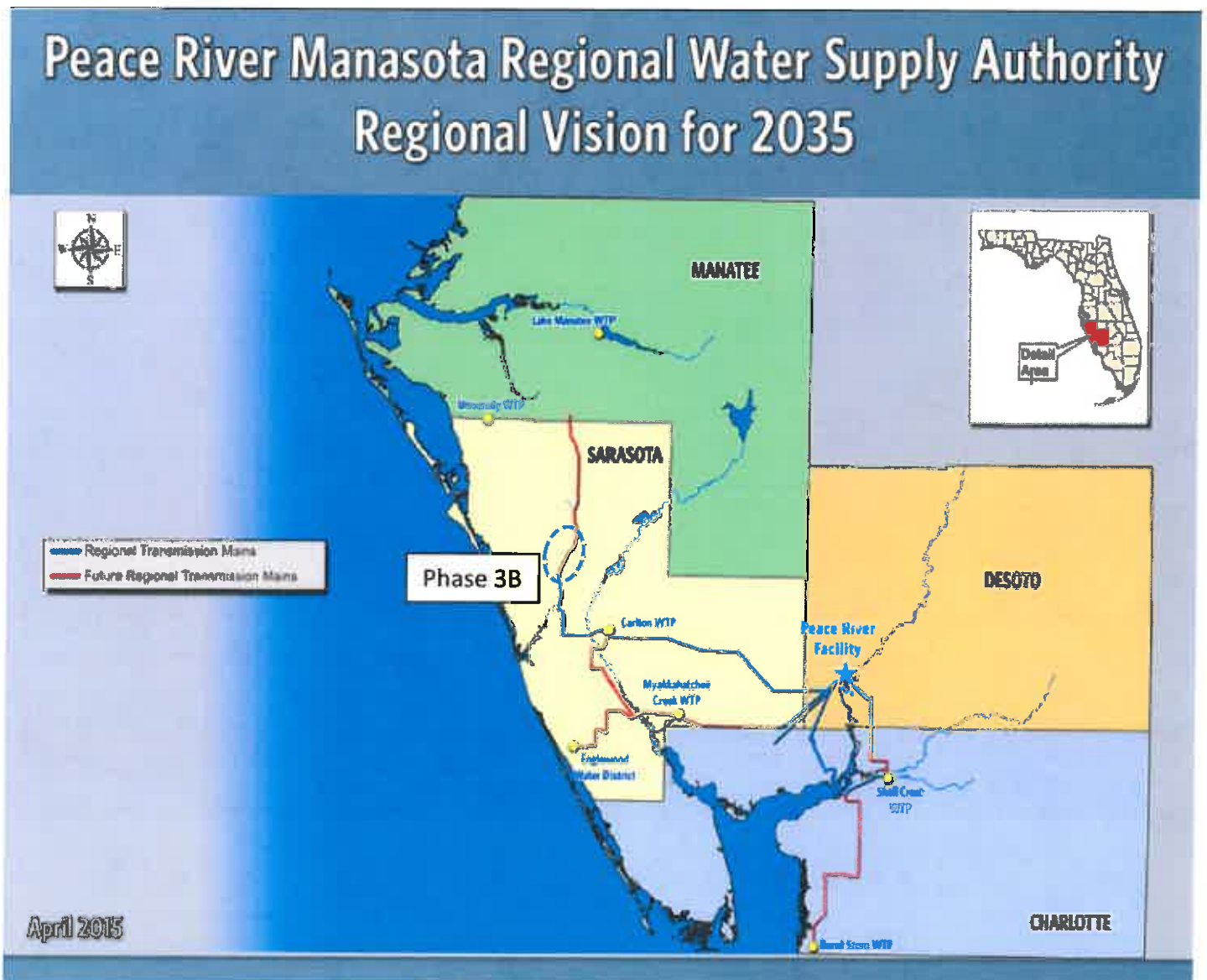
An Interlocal Agreement is required between Sarasota County and the Authority for development of the Phase 3B Regional Interconnect. The Agreement covers financial, ownership, capacity, property use, coordination and other pertinent requirements of the project. The Authority and the County are currently developing the Interlocal Agreement for the Phase 3B Interconnect. The target date for approval by the County and the Authority is June 1, 2016 in time to positively affect SWFWMD ranking of the project for FY 2017 co-funding.

b. Status of Out-of-Cycle Funding Request to SWFWMD for Phase 3B Preliminary Design Services

In September the Authority submitted a FY 2017 cooperative funding application to SWFWMD for the Phase 3B Regional Interconnect Project. While the application included project costs by year from FY 2016 through projected completion in 2020, only the FY 2017 and later costs are being considered by SWFWMD as part of that September application. In order to include 2016 project costs the Authority submitted an out-of-cycle funding request to SWFWMD on February 3, 2016 for FY 2016 activities (Preliminary Design work) on the Phase 3B Interconnect. The request was for 50% of the contracted \$397,958 Preliminary Design cost. SWFWMD Board action on the request is scheduled for April 26, 2016 and SWFWMD Staff recommendation is for approval.

Budget Action – None at this time.

Regional Phase 3B Interconnect Project Location Map



PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016

REGULAR AGENDA
ITEM 3

SWFWMD FY 2017 Cooperative Funding Applications

Presenter - Mike Coates, Deputy Director

Recommended Action - **Status Report.** This item is presented for the Board's information and no action is required.

In September the Authority submitted FY 2017 co-funding applications for the three regional pipeline projects listed below. An update on each project and co-funding application is provided. A project location map is attached.

1) Phase 3B Interconnect (S.R. 681 to Clark Road)

The Phase 3B Interconnect project (State Road 681 to Clark Road) will include installation of about 4.2 miles of 48" diameter pipeline from the northern terminus of the existing Phase 3A Regional Interconnect, north to Clark Road. The Authority's 2015 Water Supply Master Plan (WSMP) estimated total project cost is \$27M, and completion scheduled in 2020. Preliminary design work commenced in February 2016. An Interlocal Agreement between the Authority and Sarasota County for the project is in development and targeted for completion by June 1, 2016. Current SWFWMD ranking for the project is "low", but would be favorably revised with timely completion of the aforementioned Interlocal Agreement.

2) Phase 3D Interconnect (Fruitville Road to Manatee)

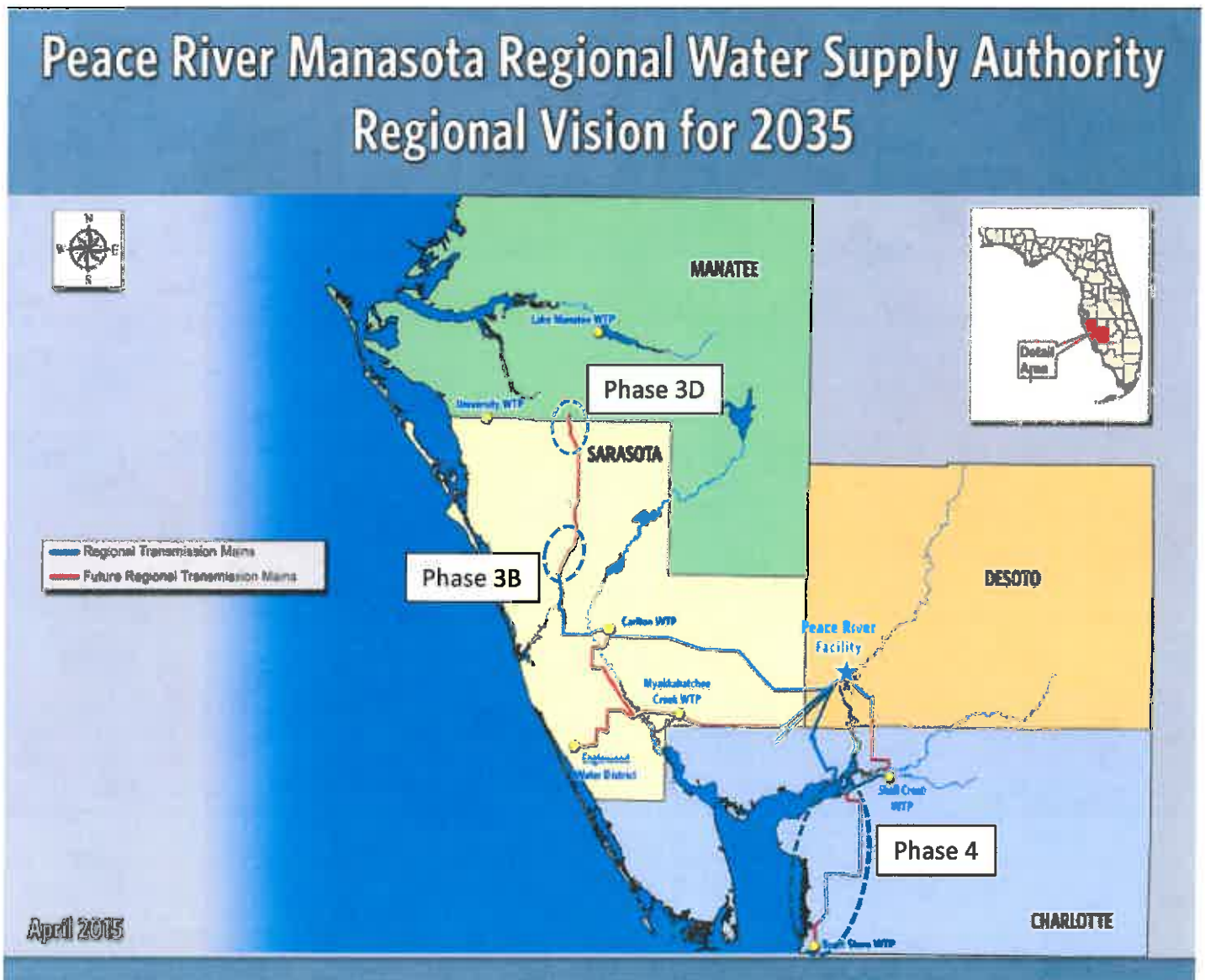
The Phase 3D Interconnect project (Fruitville Rd. to Manatee County) will include installation of about 3.6 miles of 24" diameter pipeline from Fruitville Road north along the Loraine Road corridor to the Manatee County line. The pipeline is to be installed by Schroeder Manatee Ranch (SMR), the developer of Lakewood Ranch, as part of the Loraine Road corridor improvements. Project design is complete. The Authority's 2015 WSMP estimated total project cost is \$15.5M and project completion is scheduled in 2018. Sarasota County and SMR have developed a draft agreement providing for SMR installation of the future regional pipeline facilities, then sale/conveyance of those facilities to the County. Thereafter the County and the Authority must work out terms for Authority acquisition for the pipeline. Current SWFWMD ranking for the project is "low", but could be favorably revised with timely completion of an Interlocal Agreement between the Authority and Sarasota County for Authority acquisition/ownership of this infrastructure.

3) Phase 4 Interconnect (Burnt Store WTP to Phase 1A)

The Phase 4 Interconnect project (Burnt Store to Phase 1A) will include installation of about 15.4 miles of 24" diameter pipeline from Burnt Store WTP in south Charlotte County to the Phase 1A regional facilities along U.S. 17 east of Punta Gorda. The Authority's 2015 WSMP estimated cost is \$28M and completion timeframe is approximately five (5) years. The Authority and Charlotte County continue discussions on the timing for the Phase 4 Interconnect. Current SWFWMD ranking for the project is "low", but could be favorably revised with timely completion of an Interlocal Agreement between the Authority and Charlotte County on the Phase 4 Interconnect.

Budget Action – None

Regional Phase 3B, Phase 3D & Phase 4 Interconnect Project Locations



PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016

REGULAR AGENDA
ITEM 4

Partially Treated Water Aquifer Storage & Recovery Concept

Presenter - Mike Coates, Deputy Director

Recommended Action - **Status Report** This item is presented for the Board's information and no action is required.

The Authority owns and operates the largest Aquifer Storage and Recovery (ASR) System in the eastern United States. The system has been installed incrementally over more than 30 years and now includes 21 ASR production wells and 24 monitoring wells. While this system is a critical storage component, contributing to the yield and reliability of the Peace River Facilities, it is operationally expensive. Water in ASR is fully treated twice to drinking water standards; first on injection in accordance with our existing operations permit for ASR; and again on recovery as water recovered from ASR is discharged to the raw water reservoir system because of naturally occurring arsenic picked up during storage in the limestone aquifer. Operationally this makes water from ASR twice as expensive as water from the reservoir system.

The Authority helped pave the way for recent regulatory changes in Florida that support the ASR concept, understanding that many of the state's water resource challenges can be addressed through use of seasonally abundant resources which requires a means to sustainably harvest and store those resources. ASR provides a viable option for the large volume storage required to effectively utilize those seasonally abundant resources.

Recently the FDEP has issued a number of permits authorizing storage or testing for partially treated ASR systems. Partial treatment may include minimal filtration and disinfection of water prior to injection for storage. The permitting concept allows a "zone of discharge" on property owner or controlled by the ASR operator, so it is conceptually very similar to the Authority's current "water quality criteria exemption" for arsenic, ensuring that arsenic above the 10 microgram/liter drinking water standard remains on Authority property. The ability to store partially treated water has potential to improve the operational viability of ASR, allowing increased storage, improved recovery efficiency and at the same time lower costs.

Staff will discuss this concept and present results from a recently completed preliminary study by the consulting firm CH2M (attached in tab a) on the viability of partially treated ASR at the Peace River site. Should the Board authorize moving ahead, the next step would be discussions with the FDEP about pilot testing partially treated ASR on a subset of wells at the Peace River Facility. Presentation materials are also attached (tab b).

Budget Action – None at this time.

TAB A
Partially Treated Surface Water ASR Study



Partially Treated Surface Water ASR Desktop Study

PREPARED FOR: Peace River Manasota Regional Water Supply Authority
PREPARED BY: CH2M and ASRus
DATE: March 24, 2016
WORK ORDER NUMBER: 15-02
REVISION: FINAL

1 Executive Summary

The Peace River Manasota Regional Water Supply Authority's (Authority's) potable water Aquifer Storage and Recovery (ASR) system has been a critical water storage component, enabling the Authority to manage seasonal demands when flows from the Peace River are too low or water quality is not acceptable for treatment. The potable water ASR system, as currently permitted and operated, requires that the stored water be fully treated prior to recharge into the aquifer and then fully treated again when the stored water is recovered. This makes storing water in the ASR system economically less favorable for the Authority than storing raw surface water in the off-stream reservoirs, which only requires treating the surface water supply once prior to delivery to its customers. Even with the higher operational cost, the potable ASR system remains an important water resource element providing the Authority with additional storage and redundancy to the off-stream reservoirs.

There is, however, the potential to operate the ASR system in a manner far more economically similar to the reservoirs. Converting the ASR system to a partially treated surface water (PTSW) ASR system (recharge with water directly from the above ground reservoir rather than potable water) would significantly reduce the treatment cost of operating the ASR system, since it would only require full treatment to drinking water standards one time, when recovered from ASR storage.

There would also be a marked benefit in water quality since the surface water treatment process adds about 75 milligrams per liter (mg/L) of inorganic salts to the water (mostly sulfate, chloride and sodium). So by skipping this rigorous treatment up front, the water being recharged would have about 25 percent lower total dissolved solids (TDS) concentrations, and the final drinking water produced would be commensurately better in quality as well.

Uncoupling ASR injection from the initial high treatment cost eliminates surplus treatment capacity as a constraint. This creates the potential for excess fresh river water which would normally flow to tide to be recharged. This could offset the impacts of groundwater withdrawals elsewhere in the region and contribute to the Southwest Florida Water Management District's recovery plan goals for the Southern Water Use Caution Area by boosting aquifer levels. This existing site represents a significant public investment in ASR-related infrastructure; this is one of the largest and longest operating ASR systems in the United States. That investment reflects 21 ASR wells, miles of pipe, a network of monitoring wells, a legacy of water quality data, the human capital/expertise and all of the related ancillary infrastructure needed to support this complex and sophisticated system in a reliable, highly controlled manner. Locations with such a constellation of success factors are rare; there is not a similar facility in the state of Florida which offers such promise and possibility for success on such a significant scale.

Increasing ASR recharge capability and improving TDS of recharged water will improve system response to drought events and increase system reliability ratings. The Authority has developed sophisticated

modeling tools to make operational decisions. These tools can also be used to evaluate a portfolio of future conditions to insure that infrastructure element capacities are properly sized to maximize system reliability. Also, over the past decade, emerging recognition of the risk of climate variability and sea level rise has compelled the Authority to infuse features into its suite of modeling tools so they can be used to quantify risk associated with various optimization and adaptation management strategies. Efforts are underway to incorporate PTSW ASR water capability into the current reliability modeling platform to quantify the expected benefits to water quality and quantity reliability into the future.

The current aquifer used as the storage zone for the ASR system is designated an underground source of drinking water (USDW) as defined by Florida Department of Environmental Protection (FDEP). A USDW is defined as groundwater with TDS concentration less than 10,000 milligram per liter (mg/L), and certain water quality standards must be met to allow injection to occur in this groundwater source. The main parameter of concern when considering PTSW ASR is total coliform which is ubiquitous in all surface water bodies. Other PTSW aquifer recharge and ASR systems have shown that coliform bacteria do not persist in the aquifer beyond a few days after injection and within a short distance from the recharge well. These data have allowed the FDEP to consider injection of PTSW into a USDW under certain circumstances.

Perhaps the most important criterion for obtaining FDEP approval to inject PTSW into a USDW is the ability to meet primary and secondary drinking water standards prior to the stored water leaving the area under control of the owner. Since the Authority has significant institutional control of land surrounding the existing ASR wellfields, the prospect of allowing a zone of discharge to the property boundary as a possible regulatory mechanism to allow injection of PTSW is a viable concept. This is the fundamental basis for the water quality criteria exemption for arsenic previously issued to the Authority for the potable ASR system.

1.1 Summary of Benefits

Advantages to the conversion of the source water for the ASR system from potable water to PTSW include:

- Significant reduction in treatment cost (currently the water must be treated twice to drinking water standards prior to use)
- Frees up treatment capacity of the Peace River Facility (PRF) during the wet season (treatment capacity used for potable water ASR during recharge events is reduced or eliminated). This would generate additional redundancy in treatment facilities, bolstering regional reliability in that sense
- Reduced operational complexity – ASR can be used as an extension of the reservoir system
- Environmentally responsible – effectively manages our surface water resources, and does so using a smaller energy footprint than the current potable water ASR system
- The ASR system would be used more often and would store larger volumes of water over time resulting in a gradual freshening of the storage zone which would further offset drought risk.
- Can be used to advance the District's Recovery Plan for the SWUCA by recharging excess fresh water to bolster regional aquifer levels
- Recharge water will be 25% lower in TDS concentration than current potable water, thus recovered water will have commensurately lower TDS levels as well provide for improved public drinking water quality upon final treatment and delivery
- Provides the regulatory framework to also cost-effectively recharge PTSW into the permeable unit underlying the ASR storage zone in the future to further improve ASR water quality and reliability by improving the quality of upconed water that has been observed in WF2
- Improved system sustainability and reliability

1.2 Summary of Proposed Implementation Plan

The proposed implementation of the PTSW ASR concept includes the following steps:

- Phase 1
 - Complete preliminary FDEP permit authorizing short-term demonstration cycle tests at ASR Wellfield No. 2 (WF2) using PTSW water for ASR recharge.
 - Install temporary piping and equipment to conduct demonstration cycle testing at two select wells at WF2. A cycle test would include a recharge event (injection), a storage period, and recovery event (withdrawal).
 - Conduct PTSW demonstration cycle tests ideally coinciding with potable water storage periods in the normal ASR operation of WF2 to prevent lateral movement of injected water caused by adjacent well operation.
 - Evaluate data and, if appropriate, apply for a permit or modification of the existing ASR permit to allow storage of PTSW as the source water for WF2. The permit should allow either PTSW or fully treated surface water into the ASR system to provide the Authority the most flexibility in future use of this system.
- Phase 2 (as applicable to Phase 1 outcome)
- Design and construct a permanent 20 mgd pump station to supply up to 20 mgd PTSW to the existing WF2 wells or allow for future expansion of the wellfield.

1.3 Examples of Other PTSW Aquifer Recharge Systems in Florida

Examples of successful PTSW aquifer recharge systems include the following:

- Marco Lakes ASR system – 6 ASR wells; 9 mgd capacity; Chloramine disinfection; Class V Operation Permit issued
- Kissimmee River ASR system – 1 ASR well; 5 mgd capacity; UV disinfection
- Hillsboro Canal ASR system – 1 ASR well; 5 mgd capacity; UV disinfection
- Taylor Creek ASR system – 1 ASR well; 5 to 10 mgd capacity; Cycle testing proposed with disinfection to resume after well sitting idle for several years; Pursuing exemption for coliform bacteria
- City of West Palm Beach ASR system – 1 ASR well; 8 mgd capacity; Cycle testing ongoing to support a Class V Operation Permit; Exemption for total coliform granted
- Suwannee River Spring Restoration Aquifer Recharge – 1 Recharge Well, surface water recharge into less than 500 mg/L TDS aquifer, no exemption required
- City of North Port ASR system – 1 ASR well; 1 mgd capacity; permitting underway to convert to a PTSW ASR system

1.4 Cost Estimate Summary

The estimated cost to implement a demonstration cycle testing program with two existing wells to confirm viability of PTSW conversion is estimated to cost up to approximately \$186,500. The cost to perform this demonstration test includes the cost of recharging an equivalent amount of potable water.

Full conversion of WF2 to a PTSW ASR system is estimated at approximately \$6.6M - \$7.5M assuming construction of a 20 mgd raw water injection pump station.

Considering the capital cost of a new pump station, debt service on a loan for this construction, new pump station maintenance costs, and reduced ASR operational costs, estimated direct savings of PTSW ASR is approximately \$334,000 - \$394,000 per year. Section 5 provides details on assumptions used in the budgetary cost estimates provided.

The Authority has a significant investment in the current ASR system, not just in the capital cost of the infrastructure and the cost of the water currently in storage, but also the considerable resources spent

collecting years of data that have led to a regulatory solution enabling the ASR system to receive an operation permit. Conversion of the potable system to a PTSW system would maximize the use of this valuable resource, allowing the Authority to see a greater return on their investment.

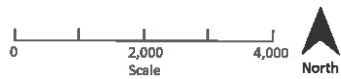
The following sections provide further background and detail on the proposed permitting, testing, and implementation of PTSW ASR at the PRF.

2 Introduction and Background

The Authority currently operates a potable water ASR system referred to as ASR Wellfield No. 1 (WF1) and ASR Wellfield No. 2 (WF2). These two wellfields are operated under permit 0136596-014-UO5Q. **Figure 1** shows the location of the PRF in southwest DeSoto County, Florida. WF1 consists of nine ASR wells located on the Peace River Regional Water Supply Facility (PRF) treatment facility property and has been in operation since the mid-1980s. Each well has the capacity to recharge or recover approximately 1 million gallons per day (mgd). WF2 consists of 12 ASR wells each with a capacity of approximately 1 mgd. WF2 is located directly south of the PRF Surface Reservoir No. 1. The 12 ASR wells in WF2 were completed in 2002 into the Suwannee Zone of the UFA. The final casing depths of the WF2 ASR wells range from 568 feet to 621 feet below land surface (bls) and the total well depths range from 883 feet to 905 feet bls. The WF2 wells were installed in a grid pattern with approximately 300 feet between each ASR well. **Figure 2** presents a site plan of WF2 showing the locations of the ASR wells and associated monitoring wells.

The Authority continuously explores various options to increase the treatment system reliability by increasing water supply or storage for drought tolerance. Repurposing WF2 as a PTSW ASR system would provide for additional storage with a significant decrease in overall potable water delivery cost from the ASR system. Rather than the current ASR operating practice of treating stored river water to potable standards twice before distributing treated water to the public (once on injection/recharge to ASR and again after recovery from ASR), the Authority would only need to treat the water once.

Replacement of potable water with PTSW for the Authority's ASR recharge program at WF2 would provide cost, efficiency, reliability, environmental, permitting and resource recovery benefits. The following sections provide an overview of the permitting, potential benefits, proposed implementation plan, and budgetary level costs related to the conversion of WF2 to a PTSW ASR system.



Note: Emergency wells not shown



FIGURE 1
Peace River Facility ASR Site Map



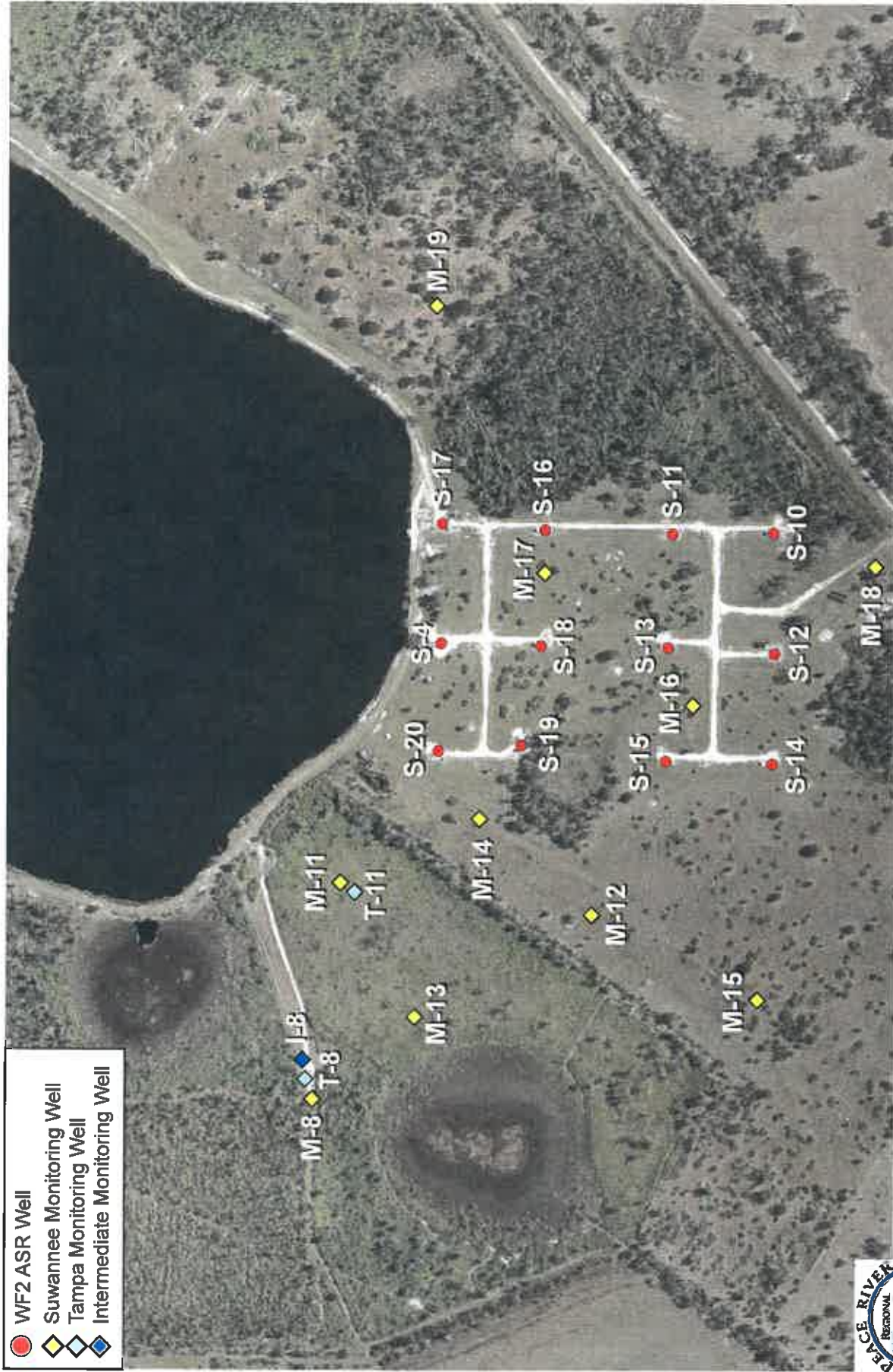


FIGURE 2
WF2 Site Layout

3 Partially Treated Surface Water ASR Conversion Evaluation

3.1 Underground Injection Control Permitting Review

3.1.1 Overview

Permitting of ASR wells is under the oversight of the Florida Department of Environmental Protection's (FDEP) Underground Injection Control (UIC) Program. Because the recovery function of the ASR system utilizes the water stored underground as an alternative water supply to the Authority, water withdrawal rates from the wellfield are permitted by the Southwest Florida Water Management District (SWFWMD) through a Water Use Permit (WUP). The concept of storing or recharging the aquifer with PTSW is not a new or unproven technology. Though regulatory constraints in the past have made implementation of PTSW ASR or aquifer recharge wells difficult, some systems are in place such as Marco Lakes, West Palm Beach, Suwannee River, as well as hundreds of drainage wells throughout Florida. In addition, the City of North Port, one of the Authority's own customers, is undergoing permitting activities to convert its ASR system to a PTSW ASR system. Currently there is more emphasis on finding sustainable and economical methods to utilize our water resources and more data are now available supporting PTSW ASR systems as a safe alternative water supply technology to help the state meet growing water supply challenges.

Regulatory precedent has shown that the use of a PTSW ASR system is acceptable to increase PTSW storage to continuously meet potable water demand during all seasonal conditions. The City of West Palm Beach instituted a surface water ASR program into a 5,000 mg/L TDS aquifer with the FDEP's approval of a Water Quality Criteria Exemption (WQCE) for total coliform. The Suwannee River Spring Restoration project has also implemented a surface water recharge program into a less than 500 mg/L TDS aquifer with approval from FDEP.

To permit WF2 for this alternative ASR operating method, the Authority would need to seek a regulatory relief mechanism for any primary or secondary drinking water quality exceedances in the PTSW. The water quality parameters that will likely require exemptions are color, turbidity and total coliform. Alternatively, FDEP may elect to issue a Zone of Discharge (ZOD) for the site that would move compliance from the individual ASR wellheads to select monitoring wells located on Authority controlled land. If a ZOD is the preferred mechanism, which it appears to be with the current FDEP position with similar projects, it would likely cover all primary and secondary drinking water standards.

While these are two possible regulatory approaches to implementing non-potable ASR operations at this location, the ultimate regulatory path would be selected after discussion with the FDEP at a pre-application meeting in Tallahassee. As a condition of full conversion to PTSW ASR at WF2, it is envisioned that FDEP will require a small scale cycle test program to demonstrate compliance of drinking water standards at select compliance monitor wells. It is presumed that out of the dozens of existing compliance monitoring wells situated onsite, there would be adequate coverage to monitor the PTSW test and the drilling of new compliance monitoring wells would not be needed.

Looking forward, while modifying the ASR system from utilizing potable water to PTSW may not require a modification to the current WUP, adding more wells to the wellfield and expanding its recovery capacity in the future will likely require the Authority's current WUP to be modified.

3.1.2 Water Quality

One of the main obstacles of advancing PTSW ASR technology in the past was the water quality of the source water, in particular total coliform which is found in all Florida surface water bodies. The groundwater standard for recharge into an aquifer classified as a USDW is 4 colony forming units per 100 milliliters (CFU/100 mL). A USDW is an aquifer that has a TDS concentration that is less than 10,000 mg/L. Even though the secondary drinking water standard for TDS is 500 mg/L, the FDEP has broadened

the salinity range for a USDW with the assumption that water with a TDS concentration less than 10,000 mg/L is economically viable for treatment through desalination technology.

A primary concern with any ASR system is the ability to recover a significant percentage of the water stored. A significant portion of stored water is intermixed with native water, therefore most ASR systems used to supplement drinking water are in aquifers that are much fresher than 10,000 mg/L TDS to assure a reasonable recovery efficiency. The PRF ASR system is constructed into an aquifer that has a native TDS concentration of approximately 1,100 mg/L. Therefore a regulatory relief mechanism must be in place to allow recharge of surface water that has a total coliform count greater than 4 CFU/100 mL. The regulatory relief mechanism should also allow elevated color levels and aluminum concentration above the secondary drinking water standard of 15 color units and 200 mg/L, respectively, since PTSW from the Peace River or from the Authority's surface reservoirs is expected to exceed these standards. Other occasional excursions in the raw source water should also be addressed in the regulatory relief implemented. Finally, the raw water has variable turbidity ranging from under 2 to as much as 10 nephelometric turbidity units (NTU). The drinking water standard for turbidity is 1 NTU, and although there is no groundwater discharge standard for turbidity, the PTSW may undergo initial screening to remove gross macro particulates, micron level filtration is generally required to remove the size range of particulates contributing to turbidity in natural waters. For the purposes of this report, a sand strainer is included in temporary and permanent piping alternatives to perform the micron level filtration.

3.1.3 Potential Regulatory Relief Mechanisms

Several regulatory mechanisms are available including an aquifer exemption, a water quality criteria exemption, or zone of discharge (ZOD). Aquifer exemptions can be difficult to receive and can take years of negotiation. The US Environmental Protection Agency (EPA) must also be involved with the determination of whether or not an aquifer exemption should be granted for an ASR system.

3.1.3.1 Water Quality Criteria Exemption

To receive a WQCE the petitioner must demonstrate that they meet the following criteria:

- 1) Granting the exemption is clearly in the public interest;
- 2) Compliance with such criteria is unnecessary for the protection of present and future potable water supplies;
- 3) Granting the exemption will not interfere with existing users or the designated use of the water or contiguous water;
- 4) The economic, environmental and social costs with the criteria outweigh the economic, environmental and social benefits of compliance;
- 5) An adequate monitoring program approved by the Department is established to ascertain the location and approximate dimensions of the discharge plume, to detect any leakage of contaminants to other aquifers or surface waters, and to detect any adverse effect on underground geologic formations or waters; and
- 6) The exemption will not present a danger to the public health, safety or welfare.

The Authority was in the past able to make this demonstration to receive a WQCE for arsenic mobilization during ASR operations. It is anticipated that the same demonstration would be possible to exempt coliform bacteria (or any other primary drinking water exceedance) introduced to the groundwater. Institutional control is a significant criteria that would weigh heavily on the FDEP's decision to grant such a system. This was a major factor in the Authority's ability to secure the WQCE for arsenic for the current potable ASR system.

3.1.3.2 Zone of Discharge

Water quality criteria exemptions such as that received by the Authority for arsenic are not currently the FDEP's preferred regulatory mechanism for dealing with permitting of aquifer recharge and ASR wells where certain drinking water standards will not be reliably met. The FDEP currently appears to prefer implementing a ZOD, when applicable, to deal with exceedances of a primary or secondary drinking water standard that will attenuate in the aquifer and not leave the area under institutional control by the ASR owner. A ZOD exists in the groundwater rule (62-520 and 62-522), however contrary to past interpretations of the rule, the FDEP is now willing to consider it for primary drinking water standards under some ASR situations.

FDEP may require that a demonstration test be completed similar to the WQCE criteria before awarding a ZOD for the PTSW ASR system. A primary criterion for this permitting strategy to be considered is the ability to demonstrate institutional control of the injected water. If the ASR system owner has significant property to demonstrate that water quality standards are not exceeded before the water leaves the land under control of the owner, the FDEP will view the site more favorably for a ZOD for a primary drinking water quality standard. Since the PRF ASR system has a large area of land under control of the Authority, PTSW ASR is a viable option worth exploring.

3.1.4 Regulatory Precedent

FDEP has recently permitted PTSW ASR and aquifer recharge into USDW aquifers, most recently West Palm Beach (approximately a 5,000 mg/L TDS aquifer) and the Suwannee River in Mallory Swamp (approximately a 300 mg/L TDS aquifer). Many other drainage wells and recharge wells constructed prior to FDEP's regulation of underground injection have been "grandfathered" into the UIC program and are still operational. Some examples of these wells are the Orlando area drainage wells, the Gainesville Lake Alice drainage well, and various drainage wells in the Ocala area. The City of West Palm Beach obtained a WQCE for coliform for their surface water ASR system that was recently issued. Also, it is our understanding that the City of North Port will be utilizing a ZOD to address water quality excursions at the ASR wellhead.

Approximately 18 years earlier, the City of West Palm Beach submitted an application for a limited aquifer exemption and, although this was signed by the FDEP Secretary, the application was denied at EPA Region IV in Atlanta. This required the City and FDEP to pursue a WQCE to allow non-disinfected water to be used during cycle testing, which is a state regulatory process that does not require federal approval. This WQCE waives the total coliform standard to a certain distance from the ASR well.

The Mallory Swamp Aquifer recharge project however was permitted as a PTSW aquifer recharge system into a fresh aquifer, with no exemptions issued. The precedent set by these two recent PTSW aquifer recharge permits suggests that the FDEP has accepted the abundance of data that suggests that microorganisms of concern do not persist underground, and that aquifer recharge and ASR projects using PTSW do not pose a threat to public health if the proper precautions are taken and there is an adequate monitoring framework in place and the system is well maintained and operated within design parameters.

3.1.5 Anticipated Permitting Path

It is likely that the FDEP will want to see data from a limited demonstration test prior to authorizing WF2 to convert from fully treated surface water to PTSW. The Authority would also want this data as a prudent step in performing due diligence on what would be a major capital project. To initiate a demonstration cycle testing program at WF2 to evaluate PTSW ASR, FDEP approval will be required. A meeting with the FDEP is recommended to determine in what form this request will need to be submitted, but it is anticipated that this will require a major existing Class V Operation Permit, permit modification and a public notice period.

Full conversion of the WF2 to a PTSW ASR system would likely require a major modification to the existing Class V Operation Permit, which expires on April 23, 2018. This would be requested once the demonstration cycle testing is completed and only if evaluation of the data supports conversion to PTSW ASR. Ideally, the renewal of the permit and major modification to the permit would occur during the same permit application process in Fall 2017.

As this project leads to a more sustainable alternative water supply on a regional level, the process of obtaining cooperative funding by SWFWMD should be explored. An application for cooperative funding to be granted by October 2017 would need to occur by October 2016. Cooperatively funded projects meet one or more of SWFWMD's areas of responsibility: water supply, flood protection, water quality, and natural systems. The conversion of WF2 to PTSW ASR is anticipated to meet the water supply area of responsibility as this conversion could vastly grow the Authority's stored water supply and could improve the Authority's current recovery efficiency. As a product of cooperative funding, a third party review of the 30 percent design, schedule, and cost estimate is required. The cost of the third party review would be shared between SWFWMD and the Authority.

If future expansion of WF2 is sought by the Authority, a major modification to the current WUP will also be required. This major modification would also require public noticing.

3.2 Qualitative Review of the PTSW ASR Concept

PTSW ASR has the potential to provide many benefits to the Authority including financial, efficiency, operational, and environmental benefits, however other considerations must also be evaluated including the ability to obtain a permit, and the cost to implement the system. The following sections provide discussion on these various considerations.

3.2.1 Potential Cost Savings

The primary benefit of an ASR system is the large volume of water that can be stored in the aquifer within a smaller footprint than a surface water reservoir, thereby saving on land and construction cost. One disadvantage of the PRF potable ASR system is that the water stored must be treated to full potable water standards before entering the ground, and then treated again after it is recovered from the aquifer directly to the surface reservoir system. This makes it operationally more costly than raw surface water stored in the above ground reservoir. By conversion to PTSW as the source water for storage in the ASR system, the water would only be treated once when it is recovered from the ASR well. This would reduce the cost of water in the ASR system and make it much more comparable to the operating cost of water stored in the surface reservoirs. Estimated cost benefits of conversion to PTSW ASR including an evaluation of capital, O&M, and debt service costs are further described in Section 5.

3.2.2 Operational Benefits

PTSW ASR would have benefits beyond treatment cost savings discussed above. Excess treatment capacity (treatment capacity above that needed to meet Customer demand) is currently required at the PRF to enable recharge of the ASR system. As Customer demand increases, the excess capacity available to recharge ASR is reduced. This severely limited ASR recharge in the past prior to the most recent plant expansion, causing the Authority to over-recover from the ASR wells resulting in less desirable water quality from the ASR system. Without expending significant funds to increase treatment plant capacity, eventually the increased Customer demand could compromise the Authority's ability to effectively recharge ASR which reduces the viability of ASR to meet storage needs. Operation of ASR as a PTSW system does not require utilization of any excess treatment capacity from the PRF, and recharge can be accomplished at high rates. The ASR system could operationally be considered an extension to the surface reservoir system, maximizing storage during periods of high river flows with favorable water quality.

The Authority has indicated that the PRF might conceptually be expanded in the future as part of a coordinated plan to meet growing regional water supply needs. The existing raw water pump station on Reservoir No. 1 was constructed in the late 1970's and cannot be significantly expanded as it sits over an engineered sheet pile wet well. It is also may not be prudent to replace the existing raw water pumps with larger units because of uncertainty of the ultimate floor slab design strength; this facility was constructed by a private developer and while some drawings remain, there is no information about the specifications of the concrete mix design, quality control information on the concrete pours made and the steel reinforcement design cannot be verified. Additionally, the deteriorating conditions of the wet well sheet pile raises concerns and a significant rehabilitation effort is planned within the next 5 – 7 years to address these issues. Why does this matter? The PTSW ASR design will require significantly sized raw water pumps so there is an opportunity to coordinate the PTSW ASR pump station design in such a fashion that those pumps can work in tandem with the existing raw water pump station to deliver water to the treatment facilities and reduce dependence on the existing pump station.

The PTSW system will require significantly higher service pressure than delivery to the treatment plant does (75 psi vs 30 psi). However, the pumps could be equipped with variable frequency drives (VFDs) so that they can be operated across a wider range of service conditions. These new pumps, located separate and apart from the existing raw water pumps would provide the benefit of distributing raw water pumping capability – eliminating what is now a critical point of failure and providing valuable redundancy and resiliency to operations. Thoughtful sequencing of the construction of this secondary pumping station could facilitate the ability to take the older pump station offline to effect the needed comprehensive rehabilitation work.

The hydraulic connection between Reservoir No. 2 and Reservoir No. 1 was designed for a maximum flow of 60 mgd. During a scenario where an expanded PRF to 70 mgd is only able to use water stored in the reservoirs for supply, the existing hydraulic connection would cause Reservoir No. 1 to drain by a rate of 10 mgd. The Alternative No. 2 pump station described in section 4.4.2 below may allow water beyond 60 mgd to be pumped from Reservoir No. 2 to Reservoir No. 1 on an as needed basis all year, thus continually supplying the Reservoir No. 1 pump station with adequate water to convey to the expanded 70 mgd PRF for treatment as needed.

3.2.3 Environmental Benefits

PTSW ASR will reduce the chemical and energy footprint for the utility as compared to a potable system making the PTSW ASR system a “greener” and more sustainable program. Additionally any stored water left in the aquifer (not recovered) could be considered an environmental benefit as the excess stored water would supplement the aquifer and mitigate future regional withdrawals from the UFA. This may allow the Authority to negotiate with SWFWMD to receive groundwater withdrawal credits for a portion of the excess water left in the aquifer to help restore regional water levels in the UFA. This could support future development of brackish groundwater supplies at the PRF. Since the cost of storing the PTSW would be significantly reduced, leaving excess water in the aquifer will not be cost prohibitive if it results in other benefits such as groundwater credits for the Authority. Obtaining groundwater credits from the SWFWMD would need to be explored further with the agency but the concept is under consideration at other recharge facilities (e.g., the SHARP project in Hillsborough County).

The PTSW recharged into the ASR wells is also anticipated to have lower ultimate dissolved oxygen (DO) and TDS concentrations than potable water. DO concentrations in surface water vary as a result of photosynthetic activity from algae, for example, at Reservoir No. 1 values as high as 12 mg/L (50% above saturation levels) have been measured during peak solar insolation periods. However, this DO would quickly be consumed by microbiological activities using TOC as a growth substrate and through chemical interaction with native water in the highly reducing environment found deep underground in ASR wells of the UFA. The lower DO concentrations may help mitigate arsenic mobilization observed at the

current ASR wells. ASR recovery efficiencies are expected to improve after conversion to PTSW due to the lower TDS in PTSW being used for recharge, and the increased volume of recharge water available.

The Authority could also explore the possibility of recharging PTSW in the Avon Park High Permeability Unit beneath WF2 to mitigate the upconing of brackish water into WF2 from below. Elevated chloride, sulfate, and TDS concentrations observed during ASR recovery events are much more influenced by upconing of brackish water from below rather than mixing with native water within the storage zone. This is expected to improve the overall quality of water recovered from WF2, thereby improving the quality of water delivered to the Authority's drinking water customers and increasing the volume and potentially the rate of water available for recovery in WF2.

3.2.4 Potential Adverse Impacts

The planned pilot cycle testing program will provide an opportunity to evaluate potential adverse impact of PTSW as the source water for storage. One concern is the potential for a reduction in specific capacity/injectivity of the wells as a result of the addition of total suspended solids (physical plugging), bio-fouling (biological plugging), or chemical precipitation (scaling or chemical plugging). These are believed to be relatively minor concerns but conducting testing initially on two wells will allow determination of the potential for adverse impacts without jeopardizing the entire wellfield. If plugging of the formation occurs, well capacity is expected to be re-established with acid washing and/or re-development of the wells. Re-development of the wells is straight-forward since each well is equipped with a vertical turbine pump. For example, if a reduced specific injectivity is related to elevated TSS, the rehabilitation may be as simple as turning on the recovery pump in the well and purging the well until any suspended solids introduced into the well have been pulled back out.

Control of TSS is an important consideration for pre-treatment of the surface water prior to recharge. The amount of suspended solids that the ASR well can accommodate is primarily a function of the amount of secondary porosity vs. primary porosity of the receiving zone. Wells with higher amounts of secondary porosity (e.g., fractures) can handle higher TSS concentrations compared to wells where primary porosity dominates.

Various filtration systems for TSS control have been evaluated and implemented at Florida's PTSW facilities. The Marco Lakes ASR program uses filter canisters to reduce TSS loading to the well. In-line filtration systems were evaluated and used for two of the CERP demonstration projects, the Hillsboro Canal ASR system, and the Taylor Creek ASR system. In West Palm Beach, an in-line filtration system was originally installed to keep large solids out of the well, but it was discovered that this system had corroded, and no effective filtration was in place at this well during the initial three ASR cycles. The City of West Palm Beach ASR system did not experience significant plugging during recharge; however, it should be noted that this site is known for a high degree of secondary porosity in the storage zone.

If TSS concentrations are relatively low in the source water from Reservoir No. 1 or Reservoir No. 2 (e.g., typically 20 mg/L or less), it is likely that plugging potential could be effectively managed with a backflushing program designed to restore capacity lost during extended aquifer recharge periods. Some ASR wells across the US have incorporated regular (up to daily) backflushes into its operating protocol and this has worked acceptably well at many sites.

Another concern is the potential for geochemical interaction, primarily the mobilization of arsenic. Mobilization of arsenic has been exhibited in the PRF potable ASR system but has shown significant improvement over years of cycle testing. A WQCE is in place to allow exceedances of arsenic, however it is still a concern that must be monitored since the arsenic standard must be met at the compliance monitor wells. The dissolved oxygen concentration of the recharge water is a major factor in the mobilization of arsenic in the aquifer, and while the PTSW is anticipated to have a similar to slightly higher initial DO concentration compared to potable water, biological activity will likely result in accelerated decay of DO resulting in a similar to improved response regarding arsenic mobilization.

However, it will be important to evaluate the effect other differences in the water chemistry has on arsenic mobilization.

Some reclaimed water ASR systems (e.g. City of St Petersburg) have shown a significant attenuation of arsenic concentrations after the initial early cycle tests and some geochemists have theorized that total organic carbon (TOC) concentrations and the native aquifer microbes may play a role in the complex interactions that are involved in arsenic mobilization and re-absorption. PTSW ASR will have a higher TOC concentration which may have a positive impact on arsenic concentrations, further reducing the attenuation rates observed at the PRF ASR system.

4 Proposed Implementation Plan

4.1 Permitting of Demonstration Test

Prior to initiating a PTSW demonstration test at WF2, approval will be needed from FDEP. This will likely be in the form of a permit modification to allow testing with PTSW for a short defined period of time with the key objective of demonstrating coliform die-off in the aquifer during storage. A pre-application meeting with FDEP is critical to determine how this request will be submitted, however a major modification and public notice requirement is anticipated to be approximately a 6-month process.

4.2 Temporary Testing Plan

4.2.1 Test Well Selection

ASR Well S-4 and S-20 at WF2 are proposed as the test wells to evaluate the feasibility of PTSW ASR at WF2. Temporarily PTSW stored in Reservoir No. 1 will be recharged in the wells and then later recovered back to the reservoir system using the existing recovery structure located at Reservoir No. 1. ASR Wells S-4 and S-20 are recommended as the pilot test wells for the following reasons:

- They are closest to Reservoir No. 1 requiring the least amount of temporary piping.
- They are some of the furthest wells from the property boundary, maximizing the buffer and the maximum possible distance to assess water quality prior to leaving entity-controlled property.
- The clustering of monitor wells near S-4 and S-20 provides a comprehensive monitoring network to evaluate water quality at different distances (travel times) from the ASR well.
- S-20 has a relatively high specific injectivity and S-4 has a relatively moderate specific injectivity that is representative of most of the other ASR wells in WF2. This will allow for the comparison of well performance regarding the effect of PTSW on a well whose capacity relies primarily on matrix primary porosity (S-4) and one with a more secondary porosity (fractured) flow profile (S-20).

4.2.2 Proposed Cycle Test Program

Table 1 is a proposed cycle testing program to evaluate PTSW ASR at WF2. Up to three cycles are proposed using S-4 and S-20. Due to the effort involved with obtaining permission to cycle test under this program, it is recommended that three cycles be included in the test plan recharging and recovering PTSW at each well simultaneously. This will give the Authority flexibility to conduct multiple tests if needed to demonstrate compliance with water quality standards at the monitoring wells without having to repeat a test authorization/permit modification process. However, the test plan will indicate that possibly less than 3 successful cycles may be conducted to demonstrate water quality compliance before submitting a request for full conversion of the ASR wellfield to PTSW.

Proposed storage volumes for each of the three cycles is 100 million gallons (MG), followed by a static storage period of 15 days subsequently followed by approximately 50 MG of recovery over a period of approximately 50 days. The intent of the cycle testing plan is to conduct the PTSW recharge and recovery event during a non-operational period of the normal potable water ASR operation. This is typically between the months of October through February.

Table 1. Proposed Cycle Testing Program
Peace River Facility WF2 PTSW ASR Demonstration Test

Cycle	Recharge Rate (MGD) ⁽²⁾	Recharge Duration (days)	Recharge Volume (MG)	Storage Duration (days)	Recovery Rate (MGD) ⁽²⁾	Recovery Duration (days)	Recovery Volume (MG)	Cumulative Storage (MG)
1	2-4	25-50	100	15	1.5-2.5	20-33	50	50
2 ⁽¹⁾	2-4	25-50	100	15	1.5-2.5	20-33	50	100
3 ⁽¹⁾	2-4	25-50	100	15	1.5-2.5	20-33	50	150

Notes:

(1) If required

(2) Rates and volumes are based on the combined rate and volumes from S-4 and S-20

(General) Testing duration, rates, and volumes are approximate and may vary due to logistical issues, mechanical breakdown, availability of water, etc.

4.2.3 Proposed Monitoring Plan

Monitoring of water quality during recharge events and during storage at multiple monitoring wells will be crucial in demonstrating the attenuation rate of total coliform viability in the groundwater as well as how other constituents may change or alter native conditions as injected water travels through and resides within the formation. Monitoring should also adequately document the arrival of the PTSW through use of natural tracers in the stored water. A proposed monitoring program for the cycle testing period is presented in Table 2. However some water quality parameters may be added or removed from the testing program with input from the FDEP. Multiple monitor wells that currently exist at WF2 will be used to comprise the monitoring network. If possible, the PTSW demonstration test will be conducted while the remainder of WF2 is idle to avoid interference or dilution due to recharge from other sources. The focus of the monitoring program will be to evaluate water quality in the monitoring wells and ASR wells to examine the time required for attenuation of coliform (or any other exceeded primary or secondary drinking water standard) in the aquifer, and to evaluate geochemical responses in the aquifer resulting from using PTSW.

Table 2. Proposed Monitoring Plan
Peace River WF2 PTSW ASR Pilot Testing

Parameter	Units	Recording Frequency	Frequency of Analysis			
			<i>Recharge (reservoir)</i>	<i>Recovery (S-4, S-20)</i>	<i>M-14, M-13, M-11, T-11, M-8, M-17</i>	<i>T-8, M-18</i>
Flow Rate, max.	gpm	daily	D/M	D/M		
Flow Rate, min.	gpm	daily	D/M	D/M		
Flow Rate, avg.	gpm	daily	D/M	D/M		
Total Volume Recharged	mg	daily	D/M			
Total Volume Recovered	mg	daily		D/M		
Injection Pressure, max.	psi	continuous	D/M			
Injection Pressure, min.	psi	continuous	D/M			
Injection Pressure, avg.	psi	continuous	D/M			
Water Level, max.	feet (NGVD)	continuous		D/M	D/M	D/M
Water Level, avg.	feet (NGVD)	continuous		D/M	D/M	D/M
Water Level, min.	feet (NGVD)	continuous		D/M	D/M	D/M
pH +	std. Units		W ^a	T ^b	T	M
Specific Conductivity +	µmhos/cm		W ^a	T ^b	T	M
Temperature +	°C		W ^a	T ^b	T	M
Dissolved Oxygen +	mg/L		W ^a	T ^b	T	M
Turbidity +	NTU		W ^a	T ^b	T	M
Oxidation-Reduction Potential +	mV		W ^a	T ^b	T	M
Total Dissolved Solids	mg/L		W ^a	T ^b	T	M
Chloride	mg/L		W ^a	T ^b	T	M
Sulfate	mg/L		W ^a	T ^b	T	M
Arsenic	µg/L		W ^a	T ^b	T	M
Total Suspended Solids	mg/L		W ^a	T ^b	T	M
Nitrate (as N)	mg/L		W ^a	T ^b	T	M
TKN	mg/L		W ^a	T ^b	T	M
Ammonia	mg/L		W ^a	T ^b	T	M
TOC	mg/L		W ^a	T ^b	T	M
Color	Units		W ^a	T ^b	T	M
Total Dissolved Solids	mg/L		W ^a	T ^b	T	M
Aluminum	mg/L		W ^a	T ^b	T	M
Total Coliform	CFU/100 mL		T ^a	T ^b	T	M
Primary and Secondary stds.	mg/L		B			

Notes:

No sampling of ASR wells during storage.

b - during recovery only

W - weekly; D/M - daily and monthly; T - twice weekly; O - other (beginning and end of recovery);

+ - field samples

a - during recharge only

B - Background sample prior to cycle 1 recharge

The project team is optimistic about the outcome of this test regimen because it is markedly similar to the testing for the City of West Palm Beach in cycle testing using PTSW from Clear Lake. In that program, coliform bacteria was not observed in the groundwater monitor wells over the initial several months of recharge activities, even though the PTSW took only a few days to arrive at the nearest monitor well, 172 feet from the ASR well. Data collected to date at West Palm Beach further supports the rapid die-off of microbiota in the subsurface.

Operational data will also be collected during testing to monitor changes in ASR well capacity which may transpire as a result of water quality differences in the PTSW as compared to potable water, such as TSS. Daily flow rates will be recorded from an inline totalizing flow meter during recharge and recovery. It is anticipated that the existing wellhead flow instrumentation can be used to perform this testing if the temporary wellhead is set up accordingly. Existing data loggers/pressure transducers in the ASR wells will monitor water level responses in the ASR wells as currently occurs during normal ASR operation.

Baseline specific injectivity data will be recorded in the wells prior to implementing PTSW cycle testing to establish baseline conditions in the wells. The ASR wells would be recharged at a constant rate with potable water for a period of approximately 4 to 6 hours while the remaining ASR wells remain static. After a short static period, the wells would be pumped for approximately 4 to 6 hours to obtain baseline recovery specific capacity data. Water levels in the monitor wells will be recorded at the same frequency as required by the current ASR operation permit.

4.2.4 Conceptual Test Demonstration Setup

Temporary piping and pumping equipment will be installed at S-4 and S-20 so that the wells can be recharged directly from Reservoir No. 1 during this temporary test program. A single pumping and piping system will be provided to temporarily supply PTSW to S-4 and S-20 during the demonstration period. The pump intake will be located at Reservoir No. 1 near S-4 and S-20 to minimize the distance of temporary piping to the wells. Screening will be provided in the reservoir to avoid intake of aquatic organisms. A sand strainer will be installed downstream of the pump to remove particulates and TSS.

The temporary piping will be tied into existing tees located at the ASR wells which will allow use of the existing flow meters. The wells will be isolated from the rest of the wellfield by removing the hard piped riser elbow at the wellhead and installing a temporary blind flange on upward opening pipe to secure the rest of the wellfield. This will minimize the need to re-configure the ASR well piping associated with any other wells. This physical disconnection will protect the remainder of the wellfield and its associated piping from inadvertent contact with raw surface water should a valve leak or should a valve be accidentally opened through human error. The same piping used to deliver water to the wells will then be used in reverse when the wells are recovered to convey recovered water back to the reservoir through the floating intake structure. The piping will be installed with an adequate vertical rise component to insure fully developed flow in the reach that contains the flowmeter so that it remains fully flooded and functions accurately. Recovery will be conducted using the normal ASR operating protocol. **Figure 3** shows a conceptual diagram of equipment for this temporary demonstration testing.



©2018 Google Imagery, ©2015 Digital Globe, U.S. Geological Survey

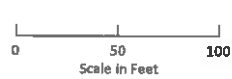


FIGURE 3
S-4 and S-20 Demonstration Testing

4.3 Review of Testing Data and Full Scale Permitting

Following the demonstration testing period the data will be evaluated and a technical memorandum will be drafted for submittal to FDEP for review. If the results of the data are favorable and support full conversion to PTSW ASR, a major modification to the existing operation permit may be submitted to the FDEP requesting full conversion of WF2 to a PTSW ASR system. This step would be anticipated to take 6-months or more, and may require additional meetings with FDEP to agree upon the conditions of the modified permit.

4.4 Full Scale Conversion Concept – Engineering and Construction

The conceptual full PTSW ASR system would recharge water directly from one of the Authority's two reservoirs. As needed, the stored water would be recovered back to the surface water reservoir system using existing infrastructure. To convert the existing WF2 to a full PTSW ASR wellfield, PTSW would need to be nominally sized for 20 million gallons per day (mgd). However, as discussed, the PTSW pumping component may be rolled into a new, larger raw water pump station complex that can serve as a backup to the existing 40 year old building and wet well system. This new pump station would either convey PTSW from Reservoir No. 1 or Reservoir No. 2. Design criteria for screening and straining of the water are still under development but conceptually the screening process would be installed at the intake of the pump station, and the straining process would be installed on the downstream end of the pump station on the leg of pipe which feeds WF2. The strainer system would utilize the pump's pressure to force water through the mechanism. Two alternatives for this pump station are considered:

Alternative 1 - To convey water from Reservoir No. 1, a new pump station would be constructed adjacent to the existing Reservoir Pump Station. Water would be conveyed to WF2 via the existing 36" dedicated pipeline which currently serves the wellfield. As an added benefit, situating the pump station here would allow it to readily serve as a redundant backup to that critical facility and help meet possible future facility capacity expansions.

Alternative 2 –To convey water from Reservoir No. 2 before it enters Reservoir No. 1, the pump station would be constructed near the meter and plug valve facilities between Reservoirs No. 2 and No. 1. Water would be pulled from both the existing 54-inch gravity flow pipe between the two reservoirs and conveyed to ASR WF2 for recharge.

To convey PTSW to WF2, two alternatives were considered that would either convey water from Reservoir No. 1 or Reservoir No. 2. Per the Authority's direction, this pump station will be designed to deliver 20 mgd so as to provide at least 1 mgd to each of WF2's 12 existing wells and provide room for future expansion of the wellfield, provide additional capacity to convey water from Reservoir No. 2 to Reservoir No. 1, or provide additional capacity to convey water to the PRF for treatment.

4.4.1 Alternative 1: New Pump Station to supply water from Reservoir No. 1

This alternative would convey PTSW from Reservoir No. 1 to WF2. A new pump station would be constructed adjacent (within 100 yards) to the existing Reservoir Pump Station. As discussed above, the pump station could serve the dual role of providing backup to the existing raw water pump station serving the treatment facilities as well as delivering water to WF2. So, the final design capacity remains to be determined, but conceptually it would deliver at least 20 mgd to WF2. Water would be conveyed to WF2 via the existing 36-inch dedicated pipeline which currently serves the wellfield.

To prevent migration of aquatic organisms or debris into the pump intake a screening system with air-burst cleaning will be installed. A strainer with bypass option will be installed downstream of the pumps on the piping system to WF2 to remove large solids and TSS to minimize the potential for well plugging, if found to be necessary during the temporary testing program. An aerial schematic/rendering of this pump station is shown in **Figure 4**.

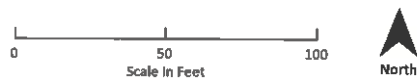
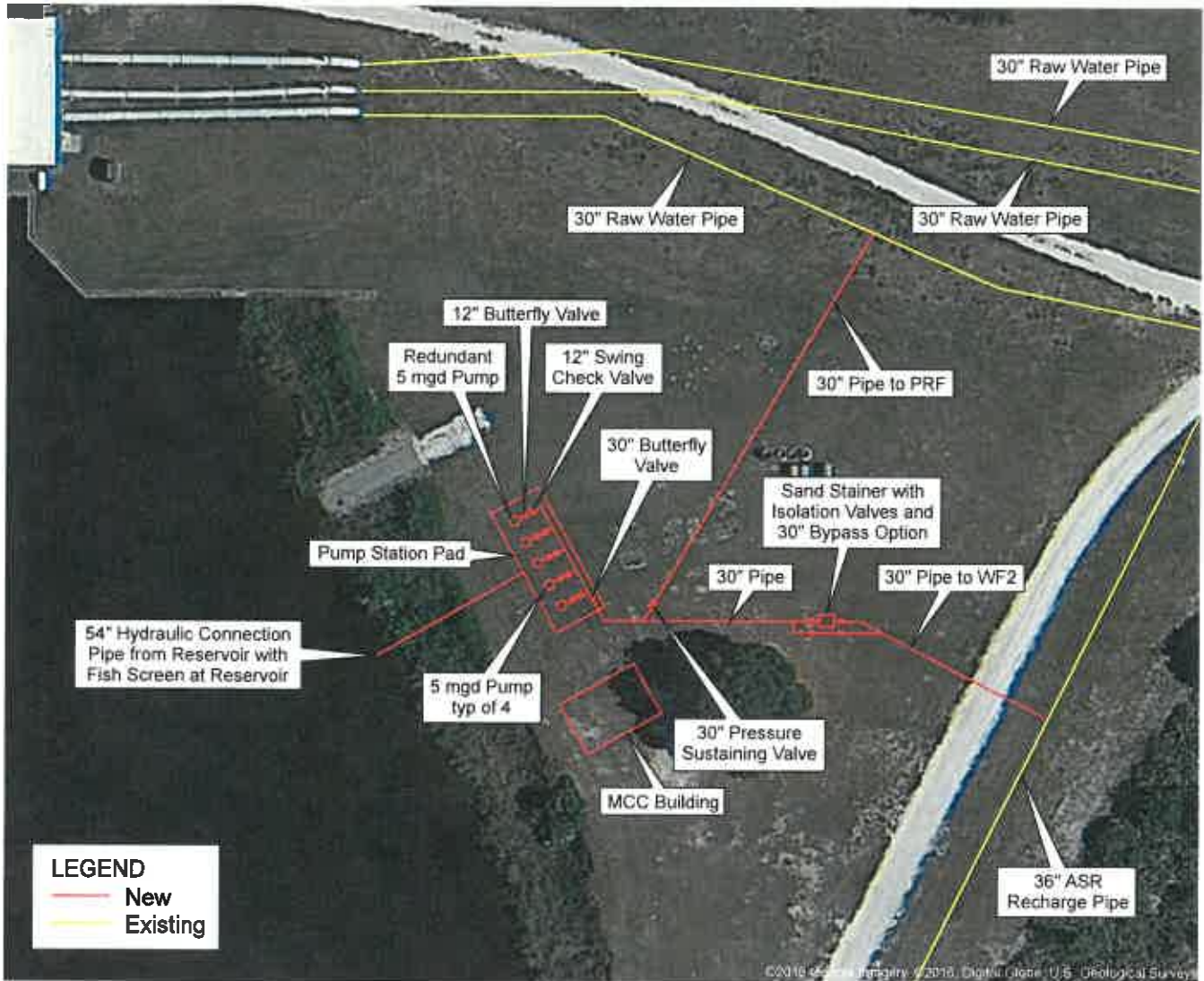


FIGURE 4
 Pump Station Concept to Supply Water from Reservoir No. 1

To supply additional pumping capacity to the PRF from Reservoir No. 1 or to provide redundancy to the existing Reservoir Pump Station, this new pump station could tie into the piping system from the existing Reservoir Pump Station to the PRF. A pressure sustaining valve may need to be installed on this line to prevent excess pressure at the PRF and curve runoff of the new pumps. However, use of VFD driven pumps may allow the pump station to run over a much wider operational band and efficiently serve both needs without wasting energy across a step-down valve.

This pump station would conceptually be remotely operated and controlled by integrating it with the existing supervisory control and data acquisition (SCADA) at the PRF along with the existing Reservoir Pump Station. Wet well level controls would be in place to ensure that the new pumps do not cavitate and that the reservoir is not drawn down below the minimum operating level. Conceptually, four (4) duty pumps would be operated in parallel with VFDs to achieve a wide range of flows between 0 mgd and 20 mgd, and one standby pump for redundancy. The ASR wells can essentially be operated as they are currently operated, recovering water back to the off-stream reservoir system. These concepts would certainly change with commitment for this new pumping station to serve both the treatment facilities and WF2. In that case, the pumps selected would likely be much larger in size and redundancy planning would need to factor in the existing raw water pumps as well.

4.4.2 Alternative 2: New Pump Station to supply water from Reservoir No. 2

Currently, surface water is conveyed from Reservoir No. 2 to Reservoir No. 1 by gravity through a 54" pipe with a 42" bottleneck for a venturi-meter and control valve. Because the crown of the 42" pipe is lower than the invert of the 54" pipe on the upstream and downstream connections, this 42" segment of pipe is always flooded. This 54" pipe was designed for a maximum gravity flow of 60 mgd. Conceptually, in this alternative design, the pump station would tie into the 54" pipe and be located in the available greenspace between Reservoir No. 2 and Reservoir No. 1. An aerial schematic/rendering of this pump station and piping is shown in Figure 5.

This pump station would have the ability to convey up to 20 mgd to WF2, which, as discussed in the prior alternative, serves the existing wells and also leaves room for expansion. A sand strainer will be installed on the piping to WF2. Due to the likelihood of buried utilities in conflict with the current pipeline route from this pump station to WF2, this pipeline route may need to be altered. Because of the proximity of this pipeline route to onsite wetlands, additional permitting strategies may need to be implemented during design including wetland jurisdiction determination, wetland delineation, and environmental resource permitting. During construction, the original wetland grade may need to be restored.

Because the 54" pipe is only designed to gravity flow at a maximum of 60 mgd, there could be a concern with this pipe becoming a hydraulic restriction should the PRF be significantly expanded in the future. This pump station would primarily be used to recharge WF2, but it could also serve the purpose of boosting flows out of Reservoir No. 2 into Reservoir No. 1. This additional inter-reservoir transfer capability may facilitate future the treatment plant expansion.

This pump station could be operated remotely in the same manner as Alternative 1 with SCADA at the PRF similar to the existing Reservoir No. 1 Pump Station. Wet well level controls would be in place to ensure that the new pumps do not cavitate and that the reservoir is not drawn down below the minimum operating level. Conceptually, four (4) duty pumps would be operated in parallel with VFDs to achieve a wide range of flows between 0 mgd and 20 mgd, and one standby pump for redundancy. The ASR wells can essentially be operated as they are currently operated, recovering water back to the off-stream reservoir system. These concepts would certainly change with commitment for this new pumping station to serve both the treatment facilities and WF2. In that case, the pumps selected would likely be much larger in size and redundancy planning would need to factor in the existing raw water pumps as well.

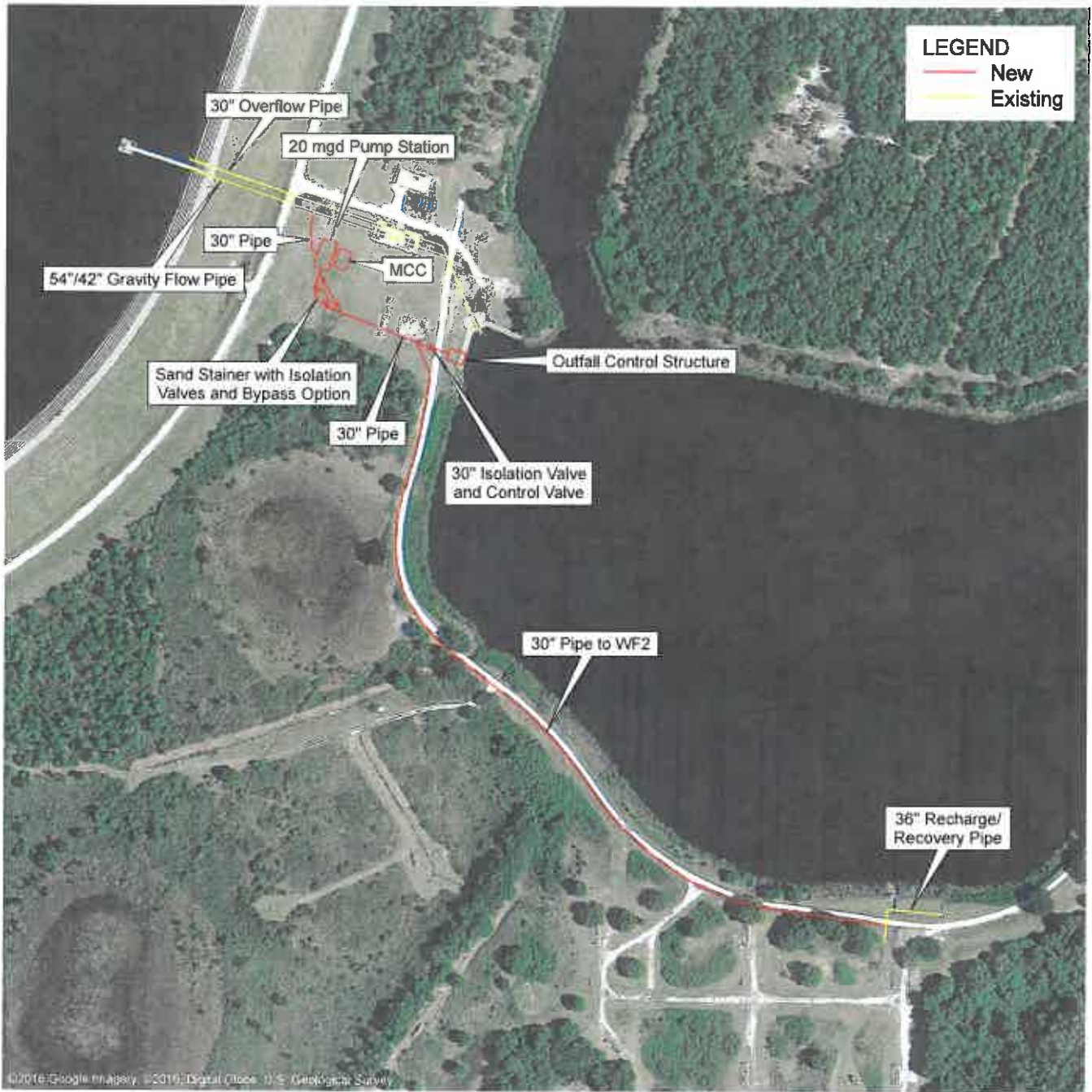


FIGURE 5
Pump Station Concept to Supply Water from Reservoir No. 2



4.5 Compliance Monitoring of PTSW ASR System

A proposed monitoring program of the converted full scale system would be similar to the monitoring program in the current ASR permit with some additional water quality parameters added, such as total coliform. These parameters would require sampling at the individual ASR wellheads and select compliance monitor wells to confirm that any exceedances of drinking water standards remain under property controlled by the Authority. Some water quality parameters may be added or removed, or have modified frequency of collection based on the findings of the PTSW demonstration cycle test results. Ultimately, the adopted monitoring program would require FDEP input and concurrence and would be included in the permit modification request submitted to the FDEP following the demonstration testing program.

5 Partially Treated Surface Water ASR Conversion Cost Discussion

5.1 Demonstration Test

The following equipment has been considered for this demonstration test: a floating intake with screen, suction and discharge piping headers, centrifugal pump, check and isolation valve, duplex in-line sand strainer, and yard piping connection to well S-20 and S-4. **Appendix A** provides additional details for the components of the Demonstration Test which were provided to obtain an equipment rental quote. The rental quote for the proposed equipment pertaining to this conceptual test demonstration was obtained from Xylem. The approximate rental costs are as follows:

Mobilization/Demobilization - \$1,000
 Labor Setup/Teardown Charge - \$9,000
 Equipment Transition from Recharge to Recovery Charge - \$3,000
 Monthly Equipment Rental Charge for Recharge - \$15,000
 Monthly Equipment Rental Charge for Storage/Recovery - \$5,500

Assuming each recharge period lasts two months as indicated in **Table 1** above, the recharge period per cycle would be approximately two months. After recharge, the pump, strainer, and check valves will be removed from the system, and the piping system will be reconnected in the missing equipment's place while the system is in storage mode for approximately two weeks. Thereafter, the existing ASR pumps will be turned on to recover through the temporary piping for approximately one month. The total cost per cycle for the equipment mobilization, recharge period, transition, storage period, recovery period, and equipment demobilization would be approximately \$51,000.

After the cycle is complete, all of the temporary equipment may be removed from the site while the subsequent storage period and recovery event occurs. Then, the rental equipment would be reinstalled for each subsequent needed conceptual testing cycle. For three cycles, the rental equipment cost would be approximately \$153,000. This total cost could be reduced by demobilizing all of the temporary equipment after recharge and utilizing the existing infrastructure for recovery.

Engineering, a conceptual testing completion report, and initial FDEP permitting fees are estimated to cost approximately \$80,000. Additional construction costs such as pouring a concrete pad for the pump and strainer and routing conduit for electrical supply were not estimated. Assuming that three cycles are completed for conceptual testing, and including a 10 percent contingency, the total estimated cost is approximately \$256,000. This estimate is considered a Class V cost estimate per ACEI standards and has an accuracy range of -30% to +50%.

The cost of purchasing the pump and strainer were also requested from Xylem; however, there would not be significant savings in purchasing the equipment even if multiple cycles were completed. The cost of the pump would be approximately \$65,000. The corresponding Variable Frequency Drive for the pump would be approximately \$40,000. The duplex strainer purchase cost would be approximately \$40,000 as well. This option can be further evaluated if there are alternative uses of the equipment that justifies the purchase of the equipment rather than rental.

The chemicals and energy cost to treat water at the PRF amount to \$0.74 per 1,000 gallons. The current potable water ASR system requires the water to be treated once at the PRF before being recharged in WF2, but the water recharged in the demonstration test will not require full treatment prior to recharge. Assuming that three cycles are used for this demonstration to recharge a total of 300 Mgal, the savings realized by not treating this water to drinking water standards could be considered equivalent to \$220,000. This is roughly the cumulative associated demonstration test equipment rental, sampling, analytical and engineering costs for the program. So, this demonstration test program would essentially pay for itself in savings.

5.2 Full Conversion of WF2 to PTSW

5.2.1 Alternative 1

Alternative 1 conveys PTSW from Reservoir No. 1 to WF2 via a new pump station which is proposed to be constructed adjacent to the existing Reservoir Pump Station. The following major items were included in the budgetary cost estimate: pump station, piping to the WF2, and piping to the PRF.

The pump station improvements include an intake fish screen, pump station (vertical turbine pumps will be on a slab over the reservoir, not enclosed), suction and discharge piping, check and isolation valves, structural wet well and electrical building, and SCADA and I&C updates. The piping to the WF2 includes 30-inch DIP piping, fittings, and in-line strainer with bypass. The cost also includes piping for the option to convey reservoir water to the PRF which includes 30-inch DIP piping, fittings, hot tap into existing piping, and pressure sustaining valve. Alternative 1 pump station design alternatives and pump selection will be further developed during the preliminary design phase. **Appendix A** provides specific design details for Alternative No. 1 components proposed in the conceptual cost estimate.

The Class V conceptual cost estimate of Alternative 1 is \$6.4M. Utilizing this cost estimate of the full scale conversion for the Alternative 1 pump station and assuming an additional 17 percent consultant fee for permitting, engineering, bid-phase assistance, services during construction, and part-time resident observation, the total capital cost for the conversion is estimated to be \$7,500,000. Due to the level of detail considered in this concept, this estimate has an accuracy level of -30% to +50%.

Although utilization of self-priming centrifugal pumps instead of vertical turbine pumps may reduce the cost of this alternative's pump station due to the lack of need for a wet well, the application of centrifugal pumps may drastically reduce the operating water level range of the reservoir. The centrifugal pump efficiency is also expected to be lower than the vertical turbine pumps, thereby increasing the horsepower requirement for each pump. This option may be further evaluated during the preliminary design phase.

5.2.2 Alternative 2

Alternative 2 proposes to draw water from Reservoir No. 2 before it enters Reservoir No. 1. The pump station would be constructed near the meter and plug valve facilities between Reservoirs No. 2 and No. 1. Water would be pulled from the existing 54-inch gravity flow pipe between the two reservoirs and conveyed to ASR WF2 for recharge or to Reservoir No. 1 for additional flow capacity.

The following major components were included in the budgetary cost estimate for this pump station. Components include 30-inch pump suction and discharge manifold, vertical turbine pump station, piping to WF2 and Reservoir No. 1, isolation, check, and control valves, in-line strainer with bypass, structural wet well, tap for connection to an existing 36-inch pipe, reservoir No. 1 outfall structure, electrical building, and SCADA and I&C updates. **Appendix A** provides specific design details for Alternative No. 2 components proposed in the conceptual cost estimate.

The Class V conceptual cost estimate of Alternative 2 is \$5.3M. Utilizing the cost estimate of the full scale conversion for the Alternative 2 pump station and assuming an additional 17 percent consultant fee for permitting, engineering, bid-phase assistance, services during construction, and part-time resident observation, the total capital cost for the conversion is estimated to be \$6,600,000. Due to the level of detail considered in this concept, this estimate has an accuracy level of -30% to +50%.

Any additional pretreatment that may be required by FDEP (i.e., if a zone of discharge for total coliform is not granted) was not included in either of the alternatives since the objective of PTSW conversion is to provide the most cost effective and environmentally beneficial system for the Authority. If additional treatment is required by FDEP following an evaluation of the results from the demonstration testing phase, the objectives of the project will be re-evaluated to determine if the project is worth further development.

5.3 Anticipated Operational Cost Savings

Operational costs savings for ASR WF2 operation assume a potable water treatment cost of \$0.74 per 1,000 gallons, 100 mg of recharge per well per year, and a recovery efficiency of 80%. Operational cost savings of a new pump station considered include energy costs, maintenance cost, and wellfield monitoring costs, and debt service of a new capital cost. Because the new pump station will alleviate the existing system pumping demand, the additional energy costs of a new pump station are anticipated to be the same as the existing energy costs. Although the demand on the existing pumping system will be decreased, there will be an increased need for maintenance by the Authority on the new pump station. This increased maintenance cost is assumed to be approximately \$50,000 annually. The costs of monitoring WF2 are anticipated to be the same as the existing monitoring costs. Using these assumptions, the annual cost savings of converting WF2 to PTSW ASR is estimated to be \$838,000. These costs are shown in Table 3 below.

Table 3. ASR Conversion Wellfield Operation Costs
Peace River Facility WF2 PTSW ASR

	Current	PTSW ASR Conversion
Potable Water Treatment Cost	\$ 0.74	\$ 0.74
mg recharge per well per year	100	100
recovery efficiency	0.8	0.8
number wells	12	12
Pump Station Annual Additional Maintenance Cost	\$ -	\$ 50,000
ASR System Operation Cost Per Year	\$ 1,598,000	\$ 760,000

Depending on which alternative is selected, debt service on a loan will impact the annual payment. Assuming a loan period of 20 years, and an annual interest rate of 3%, the following debt services as shown in Table 4 would be anticipated for each pump station alternative.

Table 4. Debt Service and Annual Total Cost Savings
Peace River Facility WF2 PTSW ASR

	Alternative 1	Alternative 2
Engineering and Construction Cost	\$ 7,500,000	\$ 6,600,000
Annual Interest Rate	3%	3%
Loan Period (years)	20	20
Total Interest	\$ 2,582,000	\$ 2,272,000
Total Payment	\$ 10,082,000	\$ 8,872,000
Annual Payment	\$ 504,000	\$ 444,000
Total Cost Savings per Year	\$ 334,000	\$ 394,000

Using the above assumptions, the full conversion of WF2 to PTSW ASR utilizing both pump stations yield a total cost savings to the Authority. The annual cost savings of Alternative 1 and Alternative 2 are approximately \$334,000 and \$394,000, respectively. If the annual cost savings of \$838,000 are applied to the loan payments, the estimated payback period is approximately 11 years and 9 years for Alternative 1 and Alternative 2, respectively. This was based on current energy costs, but if energy prices rise significantly into the future, then the payback period would become shorter.

If the Southwest Florida Water Management District were to contribute cooperative funding at a 50% match basis, it would reduce the payback period to about 5 years. Additionally, the system put into place will continue to serve the Authority long after debt service payments have been satisfied. So once that happens, the net result is a pure savings of \$838,000 per year in operational as compared with the current operational scheme.

6 Summary and Recommendations

The PRF currently operates a potable water ASR system requiring the full treatment of raw water twice before it's delivered to the Authority's customers, making ASR a more expensive option to store water than the off-stream reservoirs. By converting to PTSW ASR, full treatment of water stored in the ASR would be required one time, after recovery from the ASR wells, resulting in significant operational cost savings. Additional benefits of PTSW conversion include:

- Frees up treatment capacity of the PRF during the wet season
- Reduced operational complexity – ASR can be used as an extension of the reservoir system
- Environmentally responsible – effectively manages available surface water resources, and does so using a smaller energy footprint than the current potable water ASR system.
- Can be used to advance the District's Recovery Plan for the SWUCA by recharging excess fresh water to bolster regional aquifer levels
- Recharge water will be 25% lower in TDS concentration and will provide for better public drinking water quality upon final treatment
- Provides the regulatory framework to also cost-effectively recharge PTSW into the permeable unit underlying the ASR storage zone in the future to further improve ASR water quality and reliability by improving upconing water quality that has been observed in WF2
- Improved system sustainability and reliability

A major modification of the current ASR permit will be required to convert to PTSW ASR. The water quality parameters of concern for PTSW is total coliform, aluminum, and color each expected to be above the ground water discharge standard. A ZOD may be applicable at the PRF to allow permitting of the PTSW system due to the institutional control available, requiring that compliance is met at selected monitoring wells rather than at the ASR wellhead.

Two recent PTSW systems have been permitted (West Palm Beach and Mallory Swamp) providing a regulatory precedent for development of additional PTSW aquifer recharge / ASR systems in Florida without the need for disinfection prior to recharge. Several other PTSW aquifer recharge and ASR projects are in various stages of development within the SWFWMD.

A small scale demonstration test will likely be required by FDEP before allowing full scale conversion of WF2 to PTSW ASR. Depending on the results of a demonstration test the Authority may be able to obtain a permit modification to convert the entire wellfield to PTSW ASR.

The budgetary cost estimate to implement conversion to PTSW is as follows:

- Temporary Demonstration Testing – Including Permitting, Engineering, Equipment and Construction - \$251,000.
- Full Scale Conversion - Including Permitting, Engineering, Equipment and Construction
 - Alternative 1 - \$7,500,000
 - Alternative 2 - \$6,600,000

Assuming a 20 year loan and annual interest rate of 20 years, the total cost savings per year for implementation of the PTSW ASR conversion are \$334,000 and \$394,000 for Alternative 1 and Alternative 2, respectively. If the annual cost savings from conversion of WF2 from potable water ASR to PTSW ASR are used to pay off the needed infrastructure, there would be an estimated payback period of 11 years and 9 years for Alternative 1 and Alternative 2, respectively. Once the debt service is satisfied, the cost savings as compared with operation under the currently permitted scheme would balloon to \$838,000 per year. Also, energy pricing is currently very favorable, should energy prices rise, then the payback period would become shorter. Lastly, cooperative funding could lower the payback period to about 5 years.

A comparison of the two alternatives are shown in **Table 5** below.

Table 5. Pump Station Alternative Comparison
Peace River Facility WF2 PTSW ASR

Alternative 1	Alternative 2
Provides additional pumping capacity from Reservoir No. 1 to the PRF	Provides additional flow transfer from Reservoir No. 2 to Reservoir No. 1
Provides redundancy for Reservoir Pump Station	Utilizes higher initial head from Reservoir No. 2 to require slightly less horsepower pumps
Can utilize adjacent power station electrical feed for power supply	Does not require a fish screening system
Requires less suction and discharge piping	Shallower wet well needed
Requires less pipe routing conflict with in-ground utilities	
Pipe route less likely to change	
No wetland mitigation strategies necessary	
Could be less expensive with centrifugal pumps, but Reservoir No. 1 operating ranges will be decreased	

The following recommendations are offered to initiate implementation of PTSW ASR at the Authority's WF2 ASR System:

- 1) The Authority should coordinate and attend a pre-application meeting with FDEP in Tallahassee to discuss converting WF2 to a PTSW ASR facility. Discussions should include incorporating the existing WQCE for arsenic at the site into the ZOD, since this WQCE essentially functions in this capacity as it is currently implemented. Discussions should focus on FDEP's willingness and support for long-term operation of WF2 in this mode.
- 2) The Authority should pursue authorization from FDEP to allow short-term cycle testing with PTSW at ASR WF 2. It is assumed this will require a major permit modification that has to be public noticed, therefore it is anticipated that these permitting activities will take approximately 6 months to complete.
- 3) The Authority should conduct short-term cycle testing with PTSW as outlined in this memorandum and in accordance with the conditions of the FDEP permit modification, once issued.
- 4) Following the demonstration test, if data support PTSW ASR, submit a permit modification to the existing FDEP Class V Operation Permit to allow PTSW ASR at WF2.
- 5) If PTSW ASR is granted by FDEP via modification to the operation permit, implement full scale conversion of ASR WF2 to PTSW ASR.

Appendix A – Conceptual Cost Assumptions

Demonstration Test

The following items considered for this demonstration test:

- Mobilization/demobilization
- Floating fish screen
- 50 feet of 10 " suction piping
- Centrifugal Pump (2,100 gpm @160 ft head) with electrical power hookup
- Check valve and isolation valve for pump
- 500 feet of 8" discharge piping
- Sand strainer
- Connection to S-20 and S-4

Full Scale Conversion

Alternative 1 – Pump Station to Pull Water from Reservoir No. 1

- Pump Station (pumps will be on a slab over the reservoir, not enclosed):
 - Five 150 hp vertical turbine pumps (5 MGD @ 175 ft head each) with Variable Frequency Drives (VFDs)
 - 150 ft of 12" DIP buried shallow
 - Eleven 12" Butterfly valves
 - Ten 12" swing check valves
 - Ten 30"x30"x12" tees
 - 50' x 20' x 30' wet well using a wet installation method into the reservoir
 - One 54" pipe (20 ft long) submerged and protruding the wet well to convey water from the bottom of Reservoir No. 1
 - One fish screen on 54" pipe, and one compressor with tubing for screen blow-off
 - Submerged pad for fish screen to prevent reservoir bottom soil disturbance
 - 20' x 30' x 10' Electrical building with HVAC to house VFDs and MCCs
- Piping to WF2:
 - 100 ft of 30" DIP buried shallow
 - Four 30" 45 degree elbows
 - Tap for 30" pipe onto existing 36" pipe
 - One in-line strainer with bypass option and isolation valves

- **Piping to PRF:**
 - 150 ft of 30" DIP buried shallow
 - Hot tap to existing 36" pipe
 - Pressure sustaining valve

Alternative 2 – Pump Station to Pull Water from Reservoir No. 2

The following major components were included in the budgetary cost estimate for this pump station:

- **Suction Manifold:**
 - 250 ft of 30" DIP buried deep
 - One 30" isolation valve
 - Tap for 30" pipe onto existing 54" pipe
- **Pump Station (pumps will just be on a slab, not enclosed):**
 - Five 150 hp vertical turbine pumps (5 MGD @ 160 ft head each) with VFDs
 - 100 ft of 12" DIP buried deep
 - 150 ft of 12" DIP buried shallow
 - Eleven 12" Butterfly valves
 - Ten 12" swing check valves
 - Ten 30"x30"x12" tees
 - 110 ft of 30" DIP
 - 50' x 20' x 20' wet well
 - One in-line strainer with bypass option and isolation valves
 - 20' x 30' x 10' Electrical building with HVAC to house VFDs and MCCs
- **Piping to WF2:**
 - 1800 ft of 30" DIP buried shallow
 - 30" isolation valve
 - Eight 30" 45 degree elbows
 - Tap for 30" pipe onto existing 36" pipe
- **Piping to Reservoir 1:**
 - 210 ft of 30" DIP
 - One 30" motorized isolation valve
 - One 30" pressure sustaining valve
 - Two 30" 45 degree elbows
 - 30 ft long outfall structure with velocity dispersion baffles and riprap

TAB B
Presentation

Partially Treated Water Aquifer Storage & Recovery Concept

Regular Item 4
April 6, 2016

Use of Seasonally Available Resources

Month	Peace River Mean Flow (CFS)	Peace River Median Flow (CFS)
Jan	500	300
Feb	600	300
Mar	700	300
Apr	400	200
May	300	200
Jun	600	400
Jul	1000	700
Aug	1500	1000
Sep	2000	1200
Oct	1000	600
Nov	500	300
Dec	400	200

In-Stream Reservoir

Off-Stream Reservoir

Aquifer Storage & Recovery (ASR)

Peace River ASR Facilities

The slide features an aerial photograph of the Peace River ASR facilities. In the top right corner, there is a small inset map of the state of Washington with a red circle highlighting the location of the facilities. The main aerial map shows two large reservoirs: Reservoir 2, labeled '6 BG', and Reservoir 1, labeled '500 MG'. Below Reservoir 2 is Wellfield 2, labeled '12 ASR Wells'. Below Reservoir 1 is Wellfield 1, labeled '9 ASR Wells'. A small white box on the aerial map indicates the location of the inset photograph, which shows a wellhead with blue piping and a concrete structure under a blue sky with white clouds.

Wet Season Operation

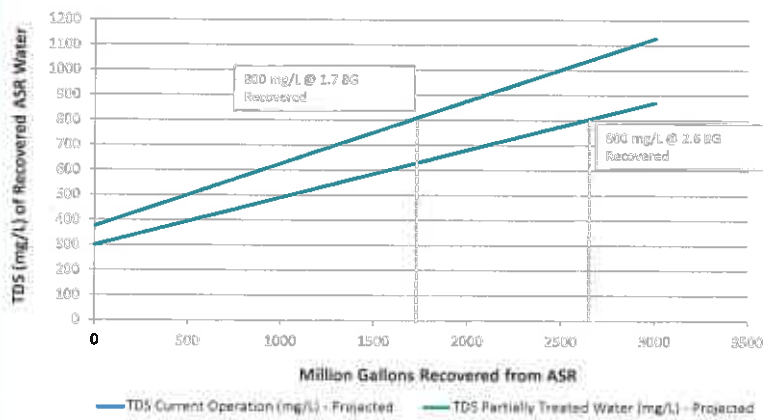
This slide shows the same aerial map of the Peace River ASR facilities as the first slide. Overlaid on the map are blue and green lines representing water flow paths. Blue lines originate from Wellfield 1 and flow towards Reservoir 1. Green lines originate from Wellfield 2 and flow towards Reservoir 2. A small white box on the map indicates the location of the inset photograph from the first slide.



Partially Treated ASR Concept - Recovery from ASR



Potential Benefits – Improved Yield & Quality from ASR



Potential Benefits – Long-Term Effectiveness of ASR

- **Current Recharge Requires Excess Treatment Capacity**
 - As demand increases there is less excess treatment capacity which affects ability to recharge ASR
- **Partially Treated Requires New Pumping Facility**
 - Not affected by demand – but does require a capital investment in new pumping facility
 - Supports storing larger volume in ASR



Potential Benefits of Partially Treated ASR – Cost Savings

Method	Quantity Recharged	Quantity Recovered (1)	Total Annual Cost (2) (3)
Current Fully Treated Water	1.2 BG	960 MG	\$1,598,000
Partially Treated Water	1.2 BG	960 MG	\$1,264,000

(1) Estimate recovery at 80%

(2) Partially Treated Cost includes debt service on \$7.5M pumping facilities & additional O&M

(3) Partially Treated costs don't include co-funding for pumping facilities

Risks of Partially Treated ASR

- Reduction in productivity of ASR wells due to un-filtered sediment or biological growth
 - Manageable but may require operational adjustment
- Affect on Arsenic Mobilization
 - May be Positive or Negative
 - Some studies suggest higher TOC water (partially treated) attenuates arsenic movement
- Pilot Testing is Critical



Near-Term Steps

- May 2016: Discussion with FDEP about ASR Permit Modification for Pilot Testing (Spring)
- October 2016: Complete ASR Permit Modification Authorizing Testing
- December 2016: Begin Pilot Test of Partially Treated ASR

**PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016**

**REGULAR AGENDA
ITEM 5**

Strategic Plan Implementation Process

Presenter -

John Shearer, Shearer Consulting

Recommended Action -

Status Report. This item is presented for the Board's information and no action is required.

John Shearer is facilitating the Strategic Plan Implementation Process with the Administrators and Utility staffs. Mr. Shearer will provide an update to the Board on progress and schedule for Plan implementation.

Budget Action – None

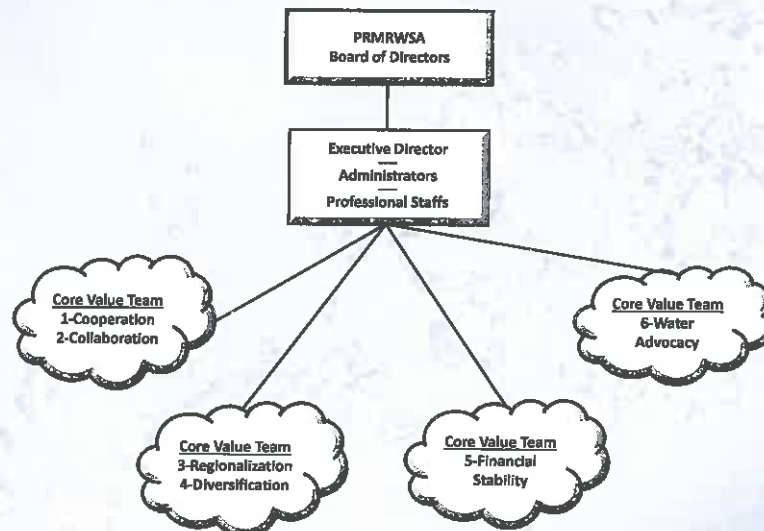
Strategic Plan

- **Vision...** *Through cooperation and collaboration the Authority and its members shall create and maintain a sustainable, interconnected regional water supply system.*
- **Mission...** *to provide the region with a sufficient, high-quality, safe drinking water supply that is reliable, sustainable and protective of our natural resources now and into the future.*

Core Values...

1. Cooperation
2. Collaboration
3. Regionalization
4. Diversification
5. Financial Stability
6. Water Advocacy

Develop Objectives to Support Core Values



Implementing the Strategic Plan

2016 Schedule

	J	F	M	A	M	J	J	A	S	O	N	D
Workshop (11/15)												
Adm Meeting (1/16)												
Board meeting	X											
Form Teams Objectives												
Board meeting				X								
Scope/Prioritization												
Board meeting						X						
Schedule												
Board meeting								X				
Draft Final Plan												
Board meeting										X		
Final Plan												
Board meeting												X

Strategic Plan

Strategic Plan for Peace River Manasota Regional Water Supply Authority

October 15, 2014

Overview

The Peace River Manasota Regional Water Supply Authority is a regional water supply authority that provides wholesale drinking water to its member counties and the City of North Port supporting the region's economy and quality of life.

The Authority is an independent special district created and existing pursuant to Florida Statutes and interlocal agreement between Charlotte, DeSoto, Manatee and Sarasota Counties. The boundaries of the Authority consist of all of DeSoto, Manatee and Sarasota Counties and those parts of Charlotte County which are under the jurisdiction of the Southwest Florida Water Management District. The Board of Directors is vested with all the powers of the Authority.

Statutory Requirements

Pursuant to Section 373.713, Florida Statutes, the Authority shall design, construct, operate, and maintain facilities in locations and at the times necessary to ensure that an adequate water supply will be available to all citizens within the Authority. By statute, the Authority is to maximize the economic development of the water resources while supplying water in such a manner as will give priority to reducing adverse environmental effects.

Vision Statement

Through cooperation and collaboration the Authority and its members shall create and maintain a sustainable, interconnected regional water supply system.

Mission

The mission of the Authority is to provide the region with a sufficient, high-quality, safe drinking water supply that is reliable, sustainable and protective of our natural resources now and into the future.

Core Values

I. Cooperation

Maintaining a strong spirit of cooperation and addressing regional water supply needs through the leadership of the Authority and its member governments.

Unlike other areas of the state where conflict over water supplies has been intense and protracted, the four-county region of DeSoto, Manatee, Sarasota, and Charlotte Counties has avoided "water wars" by maintaining a strong spirit of cooperation and addressing regional water supply needs through the regional partnership of the Peace River Manasota Regional Water Supply Authority and its members.

II. Collaboration

The Authority will seek to develop a significant, constructive role for all local governments in regional water supply planning and management.

The Authority has reached out to non-member local governments through the facilitation of the Water Alliance for communicating and collaborating with all water providers in the region. The

Authority will continue to develop a constructive role for non-member local governments in regional water-supply planning and management.

III. Regionalization

The long-term aim of the Authority is to forge a system that is environmentally sensitive and sustainable, highly interconnected, diversified and affordable.

The Authority will continue to expand the regional water-supply system to meet projected demand by undertaking projects that yield mutual benefits for its member counties and customers and maximization of economic development of the water resources within the region. The long-term aim is to forge a system that is environmentally sensitive and sustainable, highly interconnected, diversified, and affordable. In striving to achieve this vision, the Authority will develop benchmarks for monitoring performance and measuring progress.

IV. Diversification

The Authority will work with its members and water providers in the region to further diversify supplies, integrate additional water supplies into the Authority's regional system, and protect and enhance water-dependent natural resources.

The Authority will work with its member counties, customers, and other water providers in the region to further diversify the region's water supplies, increase water conservation and wastewater reuse, interconnect facilities across the four-county region, and integrate additional water supplies into the Authority's regional system to support protection or enhance water dependent natural resources.

V. Financial Stability

The Authority will maintain financial policies to assure its financial stability while providing affordable water rates that are fair and equitable.

The Authority seeks to maintain policies to retain the highest possible credit ratings that can be achieved without compromising the mission of the Authority or its Customers and meeting all contractual obligations. The Authority will keep its rates as reasonable as possible while balancing costs with environmental and source-water protection and infrastructure needs. The Authority will actively seek funding from outside sources for projects to reduce costs to the residents of the region.

VI. Water Advocacy

The Authority will be a leader for water advocacy through participation in legislative water policy and environmental stewardship for water source, water supply and resource protection.

The Authority will actively engage in legislative and regulatory proceedings to promote environmental stewardship through science based regulation and water resource development and coordinate with respective agencies including the Florida Department of Environmental Protection and Southwest Florida Water Management District and with other water users.

Visit us at: www.regionalwater.org

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

BOARD OF DIRECTORS MEETING

April 6, 2016

REGULAR AGENDA

ITEM 6

Legislative Update

Presenter -

Diane Salz, Governmental Consultant

Recommended Action -

Status Report. This item is presented for the Board's information and no action is required.

Diane Salz, governmental consultant for the Authority will provide an update on results of the recently completed 2016 legislative session relative to the items on the Authority Board priorities list. Board-adopted legislative and regulatory priorities for 2016 and presentation materials are attached.


Budget Action - None

TAB A
Presentation



Legislative Session Wrap-Up

Regular Item 6
April 6, 2016



Legislative / Regulatory Issues & Priorities 2016

STATE ISSUE	TYPE OF CHANGE	ACTIVITY	OUTCOME
Support regional partnerships to enhance funding incentives for the Authority's 'Vision for 2035'	Legislative	Submit Projects for Funding	\$6,000,000 over the past 3-years; \$500,000 for 2016
Support allocation of state funds that promote regional projects through existing statutes and not create additional bureaucracy such as Florida Water Resource Advisory Council: <ul style="list-style-type: none"> • Water Protection & Sustainability Program (403.890 and 403.891, F.S.) • West-Central Florida Water Restoration Action Plan (373.0363(4), F.S.) 	Legislative and Regulatory	Monitor and Participate in Legislative Process	SB 552 emphasizes funding for regionally significant water projects (Section 19); Florida Water Resource Advisory Council failed; effective 07/01/2016

Legislative / Regulatory Issues & Priorities 2016

STATE ISSUE	TYPE OF CHANGE	ACTIVITY	OUTCOME
Support Multi-Source Water Use Permits (Conjunctive Water Use Permits): <ul style="list-style-type: none"> • Applicable to all users; • Prioritizes use of alternative supplies • Allows "conjunctive use" of multiple sources to meet demand 	Legislative (section 373.236, F.S) and Regulatory	No Legislation Passed	Continue to monitor for 2017 Session
Monitor and Participate in Florida DEP Reclaimed Water Study and its implementation <ul style="list-style-type: none"> • Study Implemented through SB 536 • Report to be completed no later than 12/01/2015 	Legislative and Regulatory	Monitor and Participate in FDEP Process	Legislation anticipated in 2017 Session

Legislative / Regulatory Issues & Priorities 2016

STATE ISSUE	TYPE OF CHANGE	ACTIVITY	OUTCOME
Support Senate Confirmation of SWFWMD Executive Director Robert Beltran, and Board Member appointments that may be brought forward, including: <ul style="list-style-type: none"> • Jeff Adams • Ed Armstrong • Mike Moran • Randall Maggard • Paul Senft • John Henslick • Kelly Rice 	Legislative (Section 373.073, F.S)	Support Senate Confirmation	Confirmed

Legislative / Regulatory Issues & Priorities 2016

FEDERAL ISSUE	TYPE OF CHANGE	ACTIVITY	OUTCOME
Support continuation of tax-exempt financing: <ul style="list-style-type: none"> • Preserve ability of water systems to use tax-exempt bonds 	U.S. Congress Legislative	Monitor Legislation	Continue to Monitor
Support continuation of U.S. EPA as lead agency for security at water facilities and the explicit prohibition on disclosure of security program information under federal, state and local laws	U.S. Congress Legislative and U.S. EPA	Monitor Legislation	Continue to Monitor

Legislative / Regulatory Issues & Priorities 2016

FEDERAL ISSUE	TYPE OF CHANGE	ACTIVITY	OUTCOME
Engage in Climate Change Research: <ul style="list-style-type: none"> • Support federal action to research and respond to impacts of climate change on the viability and sustainability of drinking water supplies 	U.S. Congress Legislative and U.S. EPA	Monitor Legislation	Continue to Monitor

TAB B
Legislative Priorities

**Peace River Manasota Regional Water Supply Authority
Legislative/Regulatory Issues and Priorities 2016
[Adopted October 7, 2015]**

Issue	Legislative/Regulatory	Activity
STATE		
Support regional partnerships to enhance to funding incentives for the Authority's 'Vision for 2035'.	Legislative	Submit Projects for funding
Support the allocation of state funds that promotes regional projects through existing statutes and not create additional bureaucracy such as a Florida Water Resource Advisory Council <ul style="list-style-type: none"> • Water Protection and Sustainability Program (403.890 and 403.891, F.S.) • West-Central Florida Water Restoration Action Plan (373.0363(4), F.S.) 	Legislative and Regulatory	Monitor and participate in legislative process
Support multi-source water use permit (conjunctive water use permits): <ul style="list-style-type: none"> • Applicable to all users; • Prioritizes use of alternative supplies; • Allows "conjunctive use" of multiple sources to meet demand. 	Legislative (section 373.236, Florida Statutes) and Regulatory	No legislation proposed
Monitor and Participate in Florida Department of Environmental Protection Reclaim Water Study and its implementation. <ul style="list-style-type: none"> • Study implemented through SB 536 • Report to be completed no later than December 1, 2015. 	SB 536	Monitor and participate in DEP process
Support Senate confirmation of Southwest Florida Water Management District Governing Board Members appointments that may be brought forward, including Jeff Adams, Ed Armstrong, Mike Moran, Randall Maggard and Paul Senft, and newly appointed members John Henslick [Manatee County], and Kelly Rice [Citrus, Lake, Levy and Sumter Counties], and the Senate confirmation of SWFWMD Executive Director Robert Beltran.	Legislative (section 373.073, F.S.)	Support Senate confirmation
FEDERAL		
Support the Continuation of Tax-Exempt Financing: <ul style="list-style-type: none"> • Preserve the ability of water systems to use tax-exempt bonds 	U.S. Congress legislative	Monitor legislation
Support the continuation of U.S. EPA as the lead agency for security at drinking water facilities and the explicit prohibition on the disclosure of security program information under federal, state and local information laws.	U.S. Congress legislative and U.S. EPA	Monitor legislation
Engage in Climate Change research: <ul style="list-style-type: none"> • Support federal action to research and respond to impacts of climate change on the viability and sustainability of drinking water supplies 	U.S. Congress legislative and U.S. EPA	Monitor legislation

STATE ISSUES

Regional Partnerships to Minimize Costs with Enhanced Funding Incentives

Vision Statement: Through Cooperation and collaboration the Authority and its members shall create and maintain a sustainable, interconnected regional water supply system.

- Demands on natural supplies of fresh water to meet the needs of a growing population and the needs of the environment, agriculture and industry will continue to increase. [373.707 FS]
- There is a need for the development of alternative water supplies for Florida to sustain its economic growth, economic vitality, and natural resources. [373.707 FS]
- Alternative water supply development must receive priority funding attention to increase the available supplies of water to meet all existing and future uses and to benefit the natural systems. [373.707 FS]
- Cooperative efforts between municipalities, counties, special districts, water management districts, and the Department of Environmental Protection are mandatory in order to meet the water needs of rapidly urbanizing areas in a manner that will supply adequate and dependable supplies of water where needed without resulting in adverse effects upon the areas from which such water is withdrawn. [373.707 FS]
- Chapter 403.890 and 403.891 FS create the Water Protection and Sustainability Program for the state of Florida and incentivize the development of alternative water supplies by local and regional utilities.
- The Water Protection and Sustainability Program. Chapter 343.0363(4), F.F., provided critical funding in prior years for the development of the Peace River Manasota Regional Water Supply Authority's regional system [Authority members are Charlotte, DeSoto, Manatee and Sarasota counties].
- Establishing a funding source to maintain the development of water supply for all users in the future, including the environment, is critical to the economic recovery and prosperity of the state, region and local communities.
- Continuing to implement the Authority's 'Vision for 2035' will allow greater ability to exchange water regionally to enhance reliability and provide a backup water supply for the four county area.

Comprehensive Water Policy/Funding Initiatives

Support the establishment of reliable funding of alternative sources including beneficial reuse and prudent conservation. Development of a diversified portfolio of safe and cost effective resource options will allow more flexibility in operations and a greater ability to manage future risk due to uncertainties in demand, source availability and climatological conditions.

The 2015 Legislature proposed, but did not reach agreement on comprehensive water policy reform. Significant issues will be debated during the 2016 Legislative Session including the creation of a Florida Water Resources Advisory Council to evaluate water resource projects and recommend projects eligible for state funding. State statute currently provides funding through the Water Protection and Sustainability Program (403.890 and 403.891, F.S.) and West-Central Florida Water Restoration Action Plan (373.0363, F.S.) that provides allocation of state funding through the water management districts without the need to create another layer of government at the state level.

Authority staff will monitor and participate in the legislative process to support comprehensive water policy without creating additional and/or redundant levels of bureaucracy.

Multi-Source Water Use Permit (Conjunctive Water Use Permits)

Through past years the Florida Department of Environmental Protection (DEP) has conducted stakeholder sessions around the state with water users and environmental interests seeking input on ways to improve the consistency and effectiveness of the consumptive use permitting program. Authority staff has participated in the stakeholder sessions.

A common theme throughout the stakeholder sessions is that reliance on a sole water source to meet a region's water needs may not be sustainable. Generally, the best way to meet future demands (other than conservation) is to diversify the sources within that region. This includes "conjunctive use", such as utilizing and combining surface water and groundwater supplies, or other use of multiple sources such as fresh or brackish groundwater, surface water or desalination of seawater. The benefits of such an approach by a regional water supply authority or a utility include a better ability to manage and prevent environmental impacts, improved system reliability, operational flexibility and emergency backup capability.

The consumptive use permitting program should facilitate and encourage the use of multiple sources when appropriate to achieve the environmental and operational benefits that result. Currently, water management districts can and do authorize withdrawal and the use of multiple sources in a single permit, and should continue to do so when requested by an permittee. The water management districts should work with the permittees to establish operational protocols to provide for the use of permitted sources in a way that encourages flexibility of operation.

Florida Department of Environmental Protection Reclaim Water Study

The State Legislature passed SB 536 requiring the Department of Environmental Protection to conduct a study in coordination with the stakeholders on the expansion of the beneficial use of reclaimed water, stormwater and excess surface water. The report is to be submitted to the Governor, the President of the Senate, and the Speaker of the House of Representatives no later than December 1, 2015. Authority staff will continue to monitor and participate through the process and implementation of the study's recommendations.

Senate confirmation of Southwest Florida Water Management District Governing Board Members & Executive Director

Water Management District governing board members are appointed by the Governor, subject to confirmation by the Senate at the next regular session of the Legislature. Governing Board members up for confirmation in 2016 include Jeff Adams, Ed Armstrong, Mike Moran [representing Charlotte and Sarasota Counties], Randall Maggard and Paul Senft, and recently appointed members John Henslick [representing Manatee County], and Kelly Rice [representing Citrus, Lake, Levy and Sumter Counties]. Senate confirmation of SWFWMD Executive Director Robert Beltran will also be in 2016.

FEDERAL ISSUES

Tax-Exempt Financing

The Authority urges Congress to preserve the ability of water systems to use tax-exempt bonds to finance water infrastructure projects. This authority to finance essential governmental services on a tax-exempt basis is vital to the efforts of water utilities to continue to provide high quality, safe and reliable supplies of drinking water at a price that is affordable to ratepayers.

As Congress considers comprehensive tax reform, it must keep in mind that any new tax revenue collected from investors by limiting or eliminating tax-exempt municipal bonds would be offset by increased interest costs that would be borne by local water system ratepayers. Limiting or eliminating the exemption would therefore represent a de-facto tax hike on local communities while encumbering public agencies' effort to raise needed capital to address water supply needs.

Drinking Water Security and Treatment Mandates

The Authority recognizes that water utilities protect their critical facilities from acts of terrorism and other hazards. Drinking water utilities' first responsibility is to protect public health by providing potable.

The Authority supports that EPA should continue to be the lead federal agency for security at drinking water and wastewater facilities. Having more than one federal agency with oversight of water security could not only be inefficient, but could also impair the ability of drinking water systems to properly and efficiently treat their water supplies, making simultaneous compliance with multiple standards or guidelines difficult or even impossible. If contradictory or duplicative security measures were recommended by different federal agencies, water systems would face difficulties in assuring compliance and could incur substantial costs with no real improvement in security.

Some water security programs include the collection of data from water providers. Given the sensitive nature of water security information, the Authority believes that Congress should continue the explicit prohibition on the disclosure of such information under federal, state, and local public information laws. Likewise, federal, state and local agencies must take all internal precautions to prevent the inappropriate disclosure of water system information.

Any new federal security requirements should be accompanied by federal funding assistance. Such assistance could be targeted to help utilities update existing vulnerability assessments or implement other physical security without compromising public health. Otherwise, new security requirements will amount to unfunded federal mandates on local governments at a time when water treatment facilities are facing hundreds of billions of dollars in other priority infrastructure projects.

Climate Change

The Authority supports federal action to research and respond to the impacts of global climate change upon the nation's drinking water supplies. The long-term viability and sustainability of the nation's water supply is integral to a viable regional, state and national economy and therefore a comprehensive, unified, and coordinated federal research program is essential for developing decision support tools, adaptation and mitigation strategies, and for helping local utility managers access better information on the regional impacts of climate change on drinking water quality and quantity. The Environmental Protection Agency (EPA), the National Oceanic and Atmospheric Administration (NOAA), and other federal departments and agencies currently conducting climate change research must increase their efforts to develop reliable modeling systems and regional projections of freshwater quality and quantity changes and offer clear guidance on how water utilities may prepare for changing climate conditions over the next several decades.

Climate change legislation must recognize that water resources and infrastructure in much of the United States are significantly threatened by changing hydrological conditions. Therefore, increased assistance and investment are necessary to help water systems adapt to changing climate conditions and deliver uninterrupted water service to rapidly growing service populations.

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016

GENERAL COUNSEL'S REPORT

Presenter -

Douglas Manson, General Counsel

Recommended Action -

Status Report. This item is presented for the Board's information and no action is required.



Integrity. Intelligence. Diligence.

MEMORANDUM

TO: Board Members and Pat Lehman
FROM: Doug Manson, Laura Donaldson and Paria Shirzadi
RE: Peace River Basin Report for April 6, 2016 Board Meeting
DATE: March 25, 2016

Mosaic Fertilizer, LLC- South Pierce Chemical Complex

On January 22, 2016, the Department of Environmental Protection (“DEP”) published a Notice of Permit Revision #FL0000370 to discontinue use of D-01T and to re-establish D-001 at Mosaic Fertilizer, LLC (“Mosaic”) South Pierce Chemical Complex. The South Pierce Chemical Complex is located in Polk County, Florida. The Notice states that this Permit Revision will not change the quality or quantity of the surface water discharged or the receiving water from the existing Outfall D-01T as currently permitted. The effluent limitations and monitoring of the discharge from D-001 will not be changed from the current permit.

U.S. Agri-Chemicals Corporation- Bartow Closed Stack

On March 9, 2016, DEP received a permit renewal application from U.S. Agri-Chemicals Corporation for its Bartow Closed Stack permit (DEP File No. FL0001961). The submittal stated that U.S. Agri-Chemicals Corporation was still waiting on the analysis from the lab for the “one time groundwater and surface water not typically required by the permit.” The application also

requested reducing groundwater monitoring to semi-annual rather than quarterly for the facility. The facility is a closed fertilizer manufacturing plant that is undergoing closure activities pursuant to Chapter 62-673, Florida Administrative Code, and treats process water with a single stage lime treatment system. The facility is located in Bartow, Polk County.

Mosaic Fertilizer, LLC- Hookers Prairie Mine

On March 11, 2016, DEP approved Modification File No. 0131819-054 to Mosaic's Hookers Mine Prairie Permit No. 0131819-010 and extended the permit expiration date by five years to May 20, 2021. The mine is located in Polk County, Florida, within the drainage basins of Whidden Creek and Little Payne Creek, tributaries of Peace River, and the Alafia River, all Class III waters.

Mosaic Fertilizer, LLC- Wingate East offsite preservation area

On February 3, 2016, DEP received a Letter Modification request from Mosaic Fertilizer, LLC ("Mosaic") for Chapman Citrus Grove Permit No. 40003769.002. On August 28, 2015, Mosaic purchased 85 acres from Farr Groves, LLC, which includes 10.3 acres of upland preservation area as required by a permit condition of Southwest Florida Water Management District ("SWFWMD") permit number 40003769.002. The Letter Modification requests to add Mosaic as a co-permittee and the operation and maintenance entity for the upland preservation area, and relocate the preservation area. The entire parcel is identified as an offsite mitigation project, the Myakka River Headwaters project in the Wingate East Permit No. 0095520-025 issued by DEP on November 16, 2015. The Modification request states that the current placement of the preservation area conflicts with the proposed restoration plan because it is

located within the eroded channel portion of the Myakka River. The requested Modification will not change the size of the preservation area, but will move the preservation area slightly to the south to avoid the Myakka River stream restoration portion of the project.

Probitas Enterprises, LLC- Florida Shell and Fill Mine

On February 17, 2016, DEP issued a Request for Additional Information to Probitas Enterprises, LLC regarding its requested Modification to its Florida Shell and Fill Mine Permit (FDEP#232489-001). The proposed modification is to include the 66.39-acre Superior Groves Mine into the property boundary of Florida Shell and Fill Mine Permit No. 232489-001. The Superior Groves Mine permit expired in 2008 and the lakes in the Superior Groves Mine are currently being used as a water source for the wash plant of the Florida Shell and Fill Mine. The Modification also requests the addition of ancillary areas which serve as access roads/berms around the mine perimeter and areas used for the wash plant/stockpile storage. The total size of the mine would be increased to approximately 208.8 acres. No mining is proposed in the Superior Groves area but bank reclamation and removal of discharge structures will take place when the area is not needed for wash plant. The proposed project is located south of Myrtle Slough (Class III Waters) which is a major drainage basin in Charlotte County and is within the Peace River watershed.

Mosaic Fertilizer, LLC- DeSoto Mine

On January 28, 2016, DEP granted Mosaic Fertilizer, LLC's Second Request for a time extension to respond to DEP's Request for Additional Information regarding Mosaic's DeSoto Mine Environmental Resource Permit Application File No. 331292-001. The revised deadline

for Mosaic to submit the requested additional information is now May 1, 2016.

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016

EXECUTIVE DIRECTOR'S REPORT

Presenter - Patrick Lehman, Executive Director

Recommended Action - **Status Report.** This item is presented for the Board's information and no action is required.

1. Manson Bolves Donaldson P. A. Billing Summary for 1st Quarter

Attached is the billing summary for the 1st Quarter FY 2016 by Manson Bolves Donaldson, P.A. (MBD) showing total billing of \$53,268. The contract for legal services provides an annual contractual amount up to \$180,000 for services within the scope of the contract. Legal services provided outside the scope of the contract are to be approved by the Board.

Legal costs have been incurred by MBD in the settlement negotiations with RTD for the 1991 Rebuild Project and the funding agreements for the Phase 1 Regional Interconnect Pipeline. The work on these issues could be determined to be outside the contract scope of services. This is provided for information, no action is requested at this time.

2. Peace River Facility Silver Anniversary

The year 2016 marks the 25th anniversary of Peace River Manasota Regional Water Supply Authority's acquisition of the Peace River Facility. The facilities have been improved and expanded throughout the last quarter century to become a model for alternative water supply development, environmental sustainability, and operational excellence in the state.

The silver anniversary celebration of the Authority's acquisition of the Peace River Facilities will be part of the Friends of Peace Water annual BBQ on May 6, 2016 at the Peace River Facility. The celebration will highlight the vision and leadership over the years in forming and fostering the growth of the Peace River Manasota Regional Water Supply Authority.

Friends of Peace Water, Inc. Annual BBQ & PRF Silver Anniversary

Friday, May 6 @ 11:30 a.m.

Peace River Facility

8998 SW County Road 769 [Kings Highway]

Arcadia, FL

MEMORANDUM

DATE: April 6, 2016
TO: Board of Directors
FROM: Patrick J. Lehman, Executive Director
RE: Manson Bolves Donaldson, P.A.
Billing Summary for 1st Quarter FY 2016

Attached is the billing summary for the 1st Quarter FY 2016 by Manson Bolves Donaldson, P.A. (MBD). The contract for legal services provides an annual contractual amount up to \$180,000 for services within the scope of the contract. Legal services provided outside the scope of the contract are to be approved by the Board.

Legal costs have been incurred by MBD in the settlement negotiations with RTD for the 1991 Rebuild Project and the funding agreements for the Phase 1 Regional Interconnect Pipeline. The RTD negotiation resulted in the awarding of \$244,000 in liquidated damages to the Authority. The Phase 1 Pipeline funding agreements with the State, SWFWMD and City of Punta Gorda have resulted in \$12M in funding for the pipeline. The work on these issues could be determined to be outside the scope of services provided in the contract with MBD.

	Billing	Out of Scope Work
Total Billed To-Date	\$53,268	\$53,268
RTD Settlement Related Charges		(\$8,690)
Punta Gorda Interconnect Charges		(\$12,363)
Subtotal	\$53,268	\$32,216
Contract Annual Maximum	\$180,000	\$180,000
Remaining	\$126,732	\$147,784

This is provided for information to the Board, no action is requested at this time.

Manson Bolves Donalson, P.A.
FY 2016 Billing Summary [Sept. - Dec. 2015]

Month	Admin/Op	Construction	Legislative	Monthly Billing
Oct-15	\$17,744	\$1,570	\$0	\$19,313
Nov-15	\$11,857	\$6,601	\$0	\$18,458
Dec-15	\$14,259	\$520	\$718	\$15,497
Jan-16				
Feb-16				
Mar-16				
Apr-16				
May-16				
Jun-16				
Jul-16				
Aug-16				
Sep-16				
Year To-Date	\$43,860	\$8,690	\$718	\$53,268
Annual [Cap by Contract for work wihtin Scope]				\$180,000
Remaining				\$126,732

Month	Monthly Billing	Special Projects		Billing Within Scope
		Punta Gorda Interconnect	RTD Settlement	
Oct-15	\$19,313	(\$4,515)	(\$1,570)	\$13,229
Nov-15	\$18,458	(\$1,763)	(\$6,601)	\$10,094
Dec-15	\$15,497	(\$6,085)	(\$520)	\$8,893
Jan-16				
Feb-16				
Mar-16				
Apr-16				
May-16				
Jun-16				
Jul-16				
Aug-16				
Sep-16				
Year To-Date	\$53,268	(\$12,363)	(\$8,690)	\$32,216
Annual [Cap by Contract for work wihtin Scope]				\$180,000
Remaining				\$147,784

***PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016***

**ROUTINE STATUS REPORTS
ITEM 1**

Hydrologic Conditions Report

MEMORANDUM

Project: Hydrologic Conditions Report

Date: April 6, 2016

Developed By: Mike Coates, Deputy Director

This memorandum summarizes rainfall and surface water conditions, and the Authority's current water storage and supply conditions for the month of March 2016, and the preceding 12-month period.

Rainfall Conditions & Projections

Rainfall in the Peace River Basin for the past 12-months is 0.6 inch above-normal (see Table 1). Rainfall for the month of March 2016 (through March 19th) totaled about 0.5 inch while the historical average rainfall for the full month of March is 2.96 inches.

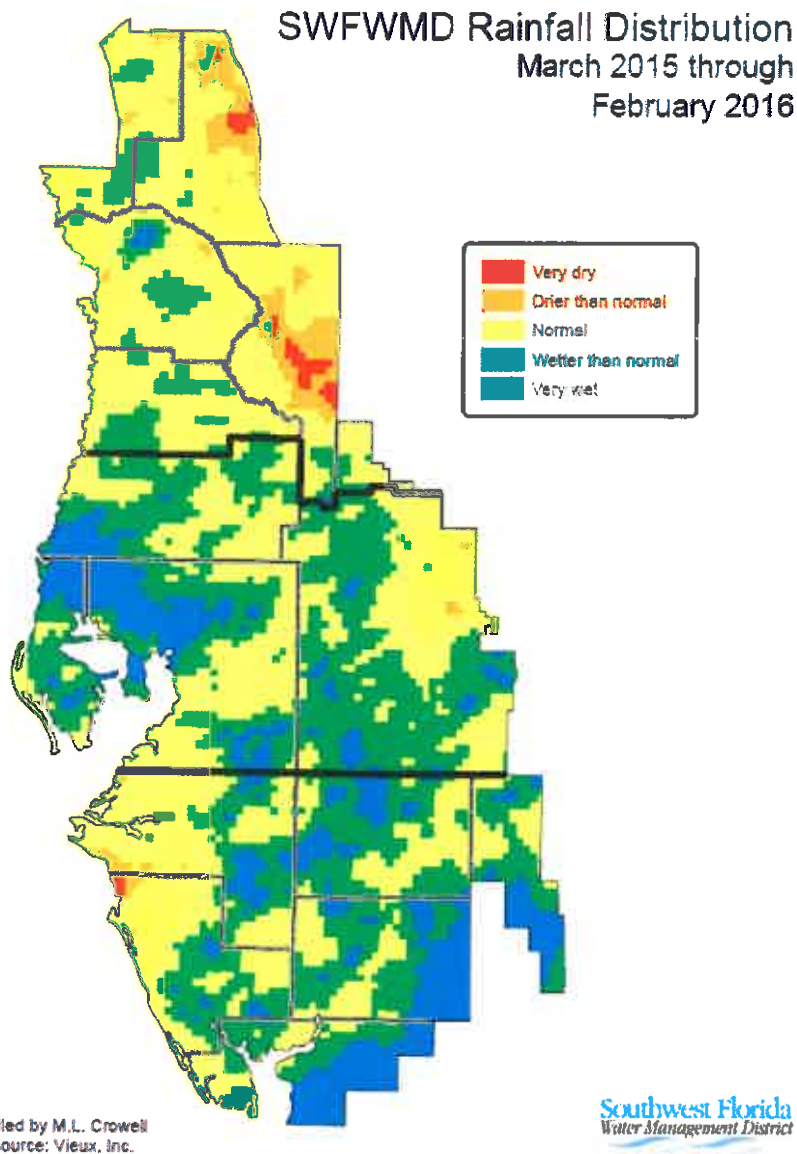
Region-wide rainfall conditions reported by SWFWMD for the 12-month period ending February 2016 are shown in Figure 1 (this is most up-to-date map available). Conditions shown on Figure 1 indicate generally above-normal rainfall in most of the Authority service area.

Projections for the next three months (April through June) from NOAA are for above-normal temperatures and above-normal rainfall for southwest Florida. The NOAA extended forecast predicts weakening of the current El Nino conditions in the equatorial Pacific Ocean and a return to neutral conditions by early summer. Projections also show about a 50% chance of La Nina developing by Fall 2016. In general, La Nina tends to bring warmer drier winter conditions to the Florida peninsula, and suppress hurricane/tropical activity in the summer which can result in development of drought conditions.

Table 1 (Peace River Basin Rainfall - Inches)

Item	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
Long-Term Avg.	2.56	3.89	8.31	8.09	7.6	7.30	3.19	1.73	1.90	2.10	2.56	2.96	52.2
Actual Past 12 Months	3.05	1.09	7.34	7.19	11.7	7.41	2.40	3.26	1.92	4.46	2.42	0.52	52.8
Difference	0.49	-2.80	-0.97	-0.89	4.1	0.11	-0.79	1.53	0.02	2.36	-0.14	-2.44	0.6

Figure 1 (SWFWMD Rainfall Conditions Map)



River Flow Conditions

River flow conditions in the U.S. Geological Survey gage at “Peace River at Arcadia” (about 15 miles upstream of the Authority’s intake) is one of the gages used to calculate how much water the Authority can withdraw from the river each day. March 2016 flow in the “Peace River at Fort Meade” (upper part of the watershed) and “Peace River at Arcadia” (lower part of the watershed) were below seasonal normal levels due to low rainfall in March in the basin. Figure 2 shows the Fort Meade and Arcadia gauge locations in the Peace River basin relative to the Peace River Water Treatment Plant location. Figures 3 and 4 show daily flow measurements at Fort Meade and Arcadia respectively for the past 13 months (blue) relative to the long-term average conditions (orange).

Figure 2 (Peace River Basin showing selected gage locations and Location of PRF)

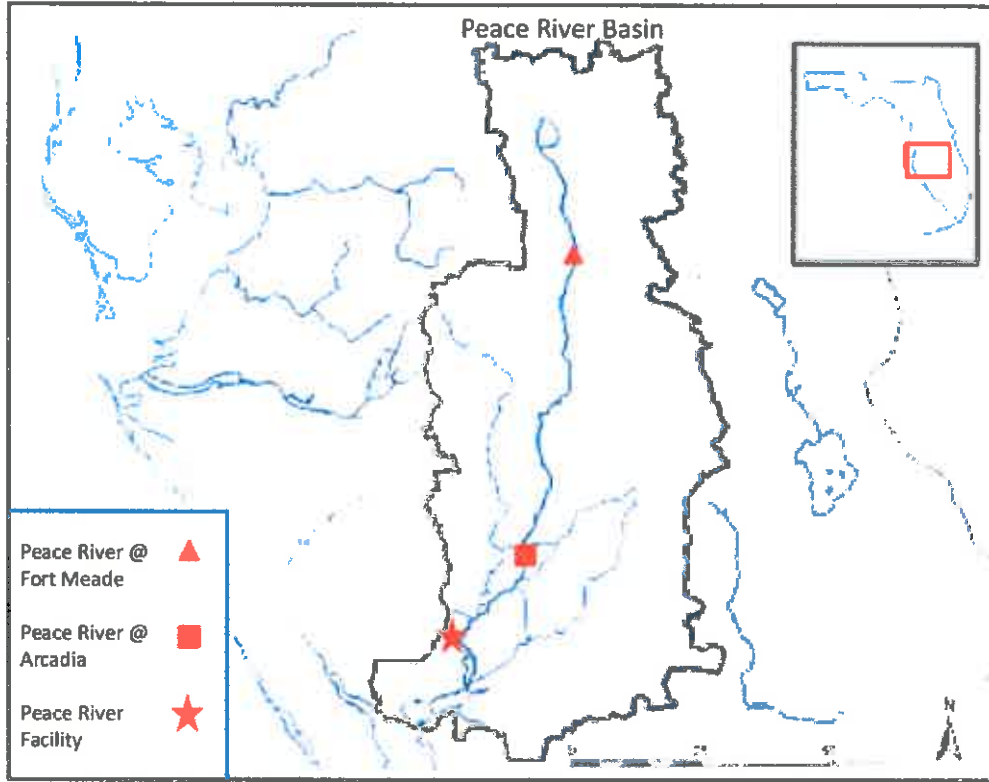


Figure 3 (Peace River Flow @ Fort Meade)

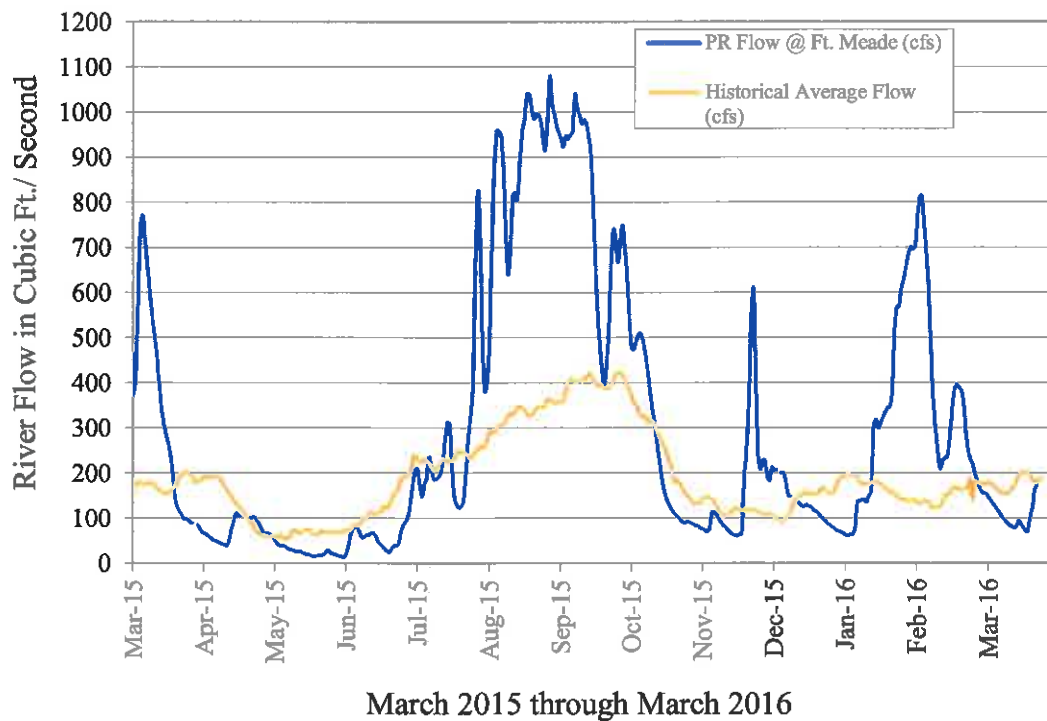
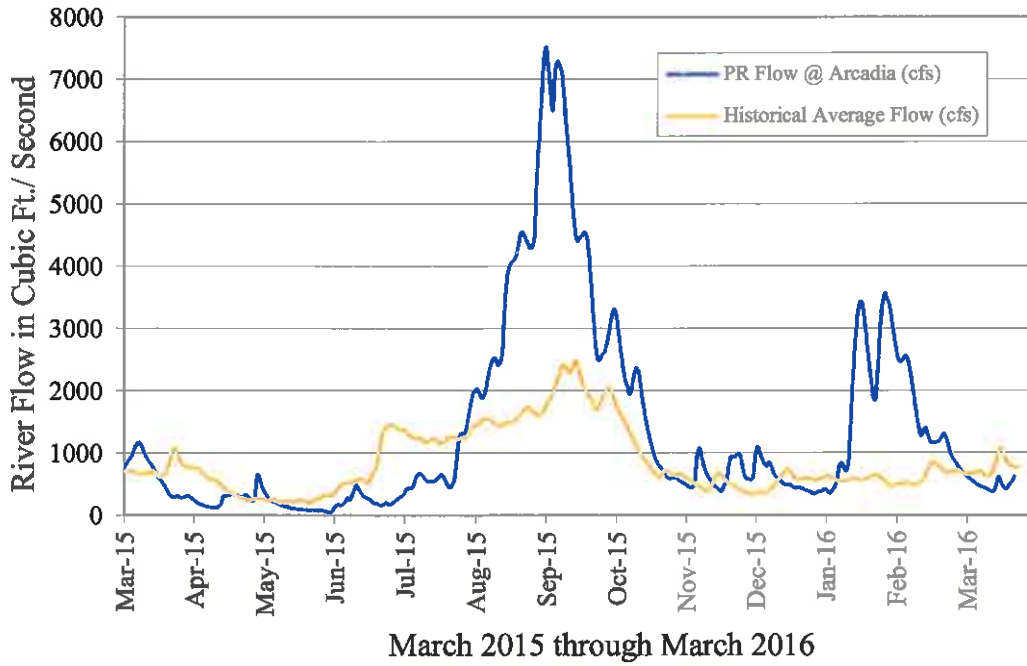


Figure 4 (Peace River Flow @ Arcadia)



River Withdrawals, Finished Water Production & Demand

Withdrawals from the river occurred each month for the past year (an unusual condition), enabling the Authority to keep the reservoir system full or nearly full during that extended timeframe. March 2016 (through March 19th) river withdrawals averaged 20 MGD.

Figure 5 (Withdrawals from Peace River)

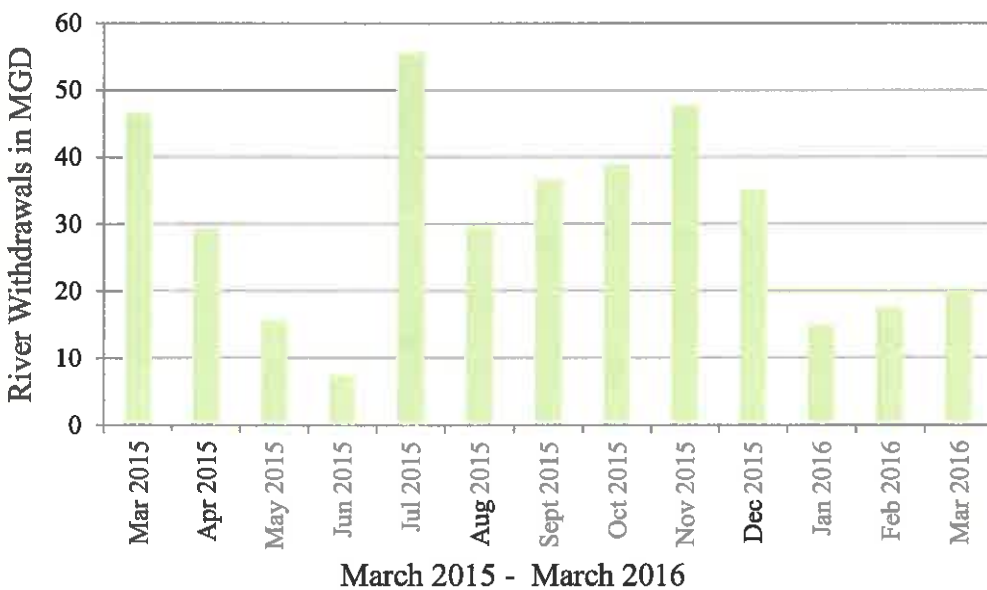
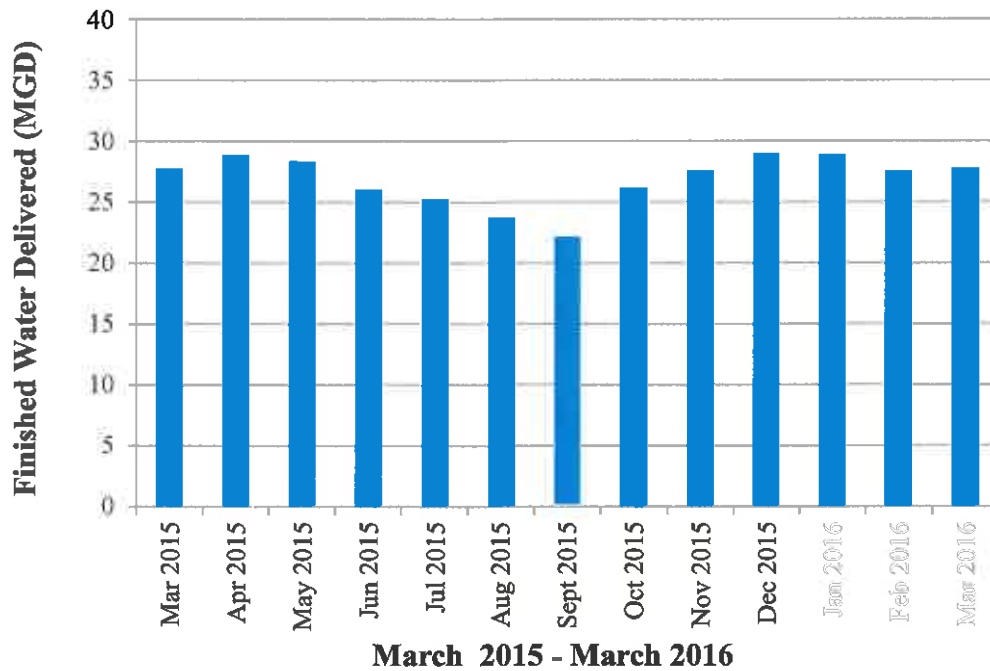


Figure 6 shows monthly finished water deliveries to Customers for the 12-month period ending late March 2016. Finished water deliveries to Customers during March 2016 averaged about 28 MGD. Seasonal water delivery from the regional system to the City of Punta Gorda is ongoing.

Figure 6 (Peace River Facility Deliveries to Customers)



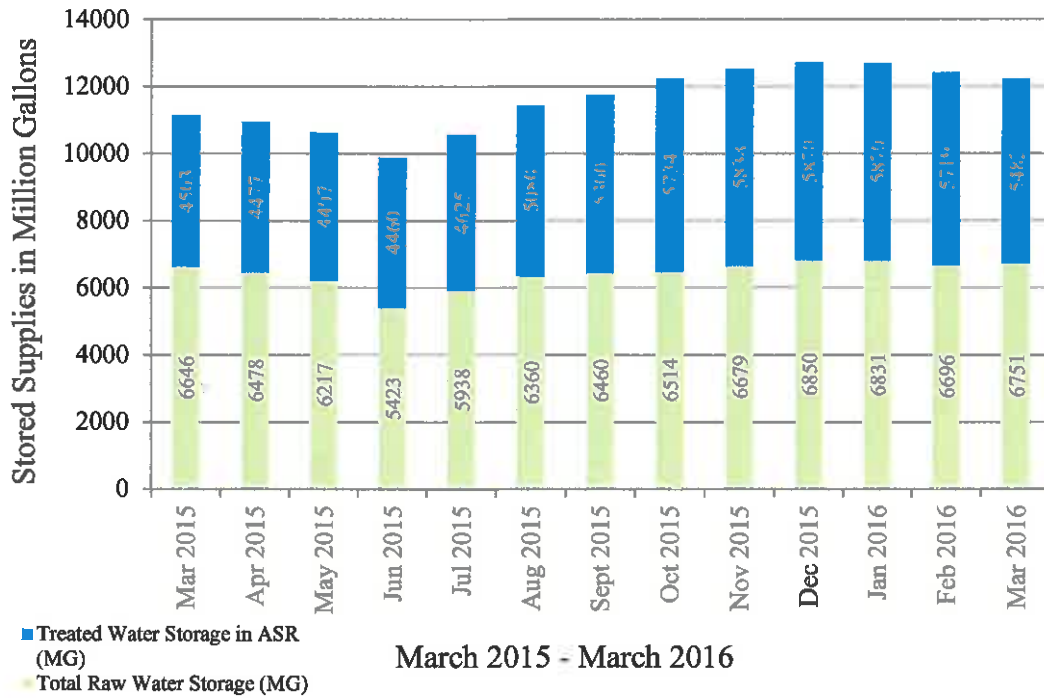
Stored Supplies at the PRF

The Authority maintains two large capacity off-stream storage systems at the PRF. The primary storage is raw river water stored in Reservoir No. 1 and No. 2. When flow in the River is high enough, a small percentage of that flow is harvested at the Authority’s pumping facility on the Peace River and stored in Reservoirs 1 and 2. This storage is designed to be completely refilled each wet season. Total raw-water storage capacity is seasonally adjusted. During the hurricane season the total raw water storage capacity is 6.52 billion gallons (BG). Outside of hurricane season, additional water can be safely stored. Current maximum raw water storage capacity (March) is 6.8 BG. **Raw water stored as of March 19, 2016 totaled about 6.75 BG.**

The secondary storage at the PRF is treated water stored in the Aquifer Storage and Recovery (ASR) system. The design capacity of the ASR system is approximately 6.3 BG. Because this supply must be treated before storage, it can’t be stored as rapidly as water in the raw-water reservoirs. Filling ASR storage is done incrementally each year as excess treatment capacity and hydrologic condition allow. **Treated water stored in ASR as of March 19, 2016 totaled about 5.5 BG.**

Stored raw water supplies (combined storage in Reservoir No. 1 and No. 2) and stored water in the ASR system for the past year are shown in Figure 8. **The total water in storage as of March 19, 2016 was about 12.2 BG.** This is about 1 BG more water in storage than in March 2015.

Figure 8 (Stored Water Supplies)



***PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016***

**ROUTINE STATUS REPORTS
ITEM 2**

Check Registers for January 2016 and February 2016

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

CHECK REGISTER: JANUARY & FEBRUARY 2016

Bank Code:	PUBLIC FUNDS INTEREST CHECKING			Current Balance:	\$4,722,772.11
Document Number	Date	Payee Name / Description	Type	Status	Amount
33873	01/04/2016	SUNCOAST PORTABLE SANITATION IN	CHK	CLR	\$258.00
33874	01/04/2016	CINTAS	CHK	CLR	\$235.68
33875	01/04/2016	CIMTEC AUTOMATION, LLC	CHK	CLR	\$1,184.00
33876	01/04/2016	ALLIED UNIVERSAL CORP.	CHK	CLR	\$29,620.16
33877	01/04/2016	FEDERAL EXPRESS	CHK	CLR	\$19.60
33878	01/04/2016	CITY OF PUNTA GORDA	CHK	CLR	\$3,500.00
33879	01/04/2016	FISHER SCIENTIFIC	CHK	CLR	\$8,546.65
33880	01/04/2016	HACH COMPANY	CHK	CLR	\$965.46
33881	01/04/2016	KINGSWAY ACE HARDWARE	CHK	CLR	\$91.95
33882	01/04/2016	BUSINESS CARD	CHK	CLR	\$351.54
33883	01/04/2016	HOME DEPOT	CHK	CLR	\$135.22
33884	01/04/2016	HDR ENGINEERING INC.	CHK	CLR	\$14,120.91
33885	01/04/2016	BUSINESS CARD	CHK	CLR	\$1,774.77
33886	01/04/2016	U.S. WATER SERVICES CORPORATION	CHK	CLR	\$11,504.88
33887	01/04/2016	AIR CENTERS-FLORIDA	CHK	CLR	\$708.05
33888	01/04/2016	FEI-FT.MYERS WATERWORKS #127	CHK	CLR	\$685.00
33889	01/04/2016	SUNBELT RENTALS	CHK	CLR	\$1,197.02
33890	01/04/2016	BUSINESS CARD	CHK	CLR	\$923.74
33891	01/04/2016	MAILFINANCE	CHK	CLR	\$299.61
33892	01/04/2016	EUROFINS EATON ANALYTICAL, INC.	CHK	CLR	\$395.00
33893	01/04/2016	NATIONWIDE RETIREMENT SOLUTION	CHK	CLR	\$2,734.07
33894	01/04/2016	ULINE	CHK	CLR	\$137.54
33895	01/04/2016	CUMMINS POWER SOUTH	CHK	CLR	\$2,776.83
33896	01/04/2016	CALGON CARBON CORPORATION	CHK	CLR	\$40,220.00
33897	01/04/2016	DESOTO AUTOMALL	CHK	CLR	\$855.87
33898	01/04/2016	GRAINGER	CHK	CLR	\$587.52
33899	01/04/2016	CENTURYLINK	CHK	CLR	\$1,565.08
33900	01/04/2016	ALLIANCE FIRE & SAFETY	CHK	CLR	\$113.75
33901	01/04/2016	AWWA	CHK	CLR	\$90.00
33902	01/04/2016	BENCHMARK ENVIROANALYTICAL INC	CHK	CLR	\$3,794.00
33903	01/04/2016	CH2M HILL ENGINEERS INC.	CHK	CLR	\$5,381.38
33904	01/04/2016	CARTER & VERPLANCK INC	CHK	CLR	\$34,649.00
33905	01/04/2016	FLORIDA POWER & LIGHT COMPANY	CHK	CLR	\$131,729.27
33906	01/04/2016	GARNEY COMPANIES INC.	CHK	CLR	\$28,233.00
33907	01/04/2016	SARASOTA CHAMBER OF COMMERCE	CHK	CLR	\$371.00
33908	01/04/2016	JOHN MEASEL CABINETS	CHK	CLR	\$771.03
33909	01/04/2016	KEETON'S OFFICE & ART SUPPLY	CHK	CLR	\$90.93
33910	01/04/2016	KING ENGINEERING ASSOCIATES INC.	CHK	CLR	\$1,355.95
33911	01/04/2016	MOCK ENGINEERING, INCORPORATED	CHK	CLR	\$2,921.79
33912	01/04/2016	NATIONAL BUSINESS FURNITURE, LLC	CHK	CLR	\$267.20
33913	01/04/2016	C & S CHEMICALS INC.	CHK	VOID	\$0.00
33914	01/04/2016	C & S CHEMICALS INC.	CHK	CLR	\$36,794.60
33915	01/04/2016	RAY PILON	CHK	CLR	\$3,750.00
33916	01/04/2016	DEX IMAGING	CHK	CLR	\$1,180.11
33917	01/04/2016	STATE OF FLORIDA DISBURSEMENT U	CHK	CLR	\$652.44
33918	01/04/2016	THE SHIPPING POST	CHK	CLR	\$25.41
33919	01/04/2016	SUNCOAST COMMERCIAL DOOR & HAR	CHK	CLR	\$711.63
33920	01/04/2016	TRACTOR SUPPLY COMPANY	CHK	CLR	\$554.97
33921	01/04/2016	UPS	CHK	CLR	\$197.77
33922	01/04/2016	U.S. BANK EQUIPMENT FINANCE	CHK	CLR	\$880.60
33923	01/04/2016	UNITED SYSTEMS COMPUTER GROUP	CHK	CLR	\$13,662.26
33924	01/04/2016	VIDEOGUY PRODUCTIONS	CHK	CLR	\$500.00
7538	01/04/2016	Caleb L. Clark	CHK	CLR	\$898.01
PRTX1816	01/08/2016	BANK OF AMERICA-TAX EXPRESS	CHK	CLR	\$26,383.40
33925	01/14/2016	PRO-CHEM INC.	CHK	CLR	\$543.13

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

CHECK REGISTER: JANUARY & FEBRUARY 2016

Bank Code:	PUBLIC FUNDS INTEREST CHECKING			Current Balance:	\$4,722,772.11
Document Number	Date	Payee Name / Description	Type	Status	Amount
33926	01/14/2016	CORPORATE INTERIORS INC	CHK	CLR	\$3,624.74
33927	01/14/2016	MSC INDUSTRIAL SUPPLY CO.	CHK	CLR	\$2,064.15
33928	01/14/2016	MAUDLIN & JENKINS CPA, LLC	CHK	CLR	\$3,815.85
33929	01/14/2016	TRULY NOLEN BRANCH 079	CHK	CLR	\$108.00
33930	01/14/2016	DMS-FINANCIAL MGMT SERVICES	CHK	CLR	\$261.36
33931	01/14/2016	RYAN HERCO PRODUCTS CORP.	CHK	CLR	\$2,546.40
33932	01/14/2016	ALLIED UNIVERSAL CORP.	CHK	VOID	\$0.00
33933	01/14/2016	ALLIED UNIVERSAL CORP.	CHK	CLR	\$67,126.45
33934	01/14/2016	WOMACK SANITATION INC.	CHK	CLR	\$750.00
33935	01/14/2016	ROSEMOUNT INC.	CHK	CLR	\$4,698.02
33936	01/14/2016	FISHER SCIENTIFIC	CHK	CLR	\$1,053.05
33937	01/14/2016	VERIZON	CHK	CLR	\$214.99
33938	01/14/2016	PAGE MECHANICAL GROUP, INC.	CHK	CLR	\$2,418.00
33939	01/14/2016	ANIXTER POWER SOLUTIONS, LLC	CHK	CLR	\$922.53
33940	01/14/2016	HACH COMPANY	CHK	CLR	\$3,210.06
33941	01/14/2016	KINGSWAY ACE HARDWARE	CHK	CLR	\$25.53
33942	01/14/2016	HOME DEPOT	CHK	CLR	\$272.39
33943	01/14/2016	HDR ENGINEERING INC.	CHK	CLR	\$767.90
33944	01/14/2016	MWH AMERICAS INC	CHK	CLR	\$60,451.33
33945	01/14/2016	FEI-FT.MYERS WATERWORKS #127	CHK	CLR	\$448.49
33946	01/14/2016	TRANSCAT, INC.	CHK	CLR	\$263.29
33947	01/14/2016	ENDRESS+HAUSER, INC.	CHK	CLR	\$3,827.47
33948	01/14/2016	NATIONWIDE RETIREMENT SOLUTION	CHK	CLR	\$2,734.07
33949	01/14/2016	CALGON CARBON CORPORATION	CHK	CLR	\$40,320.00
33950	01/14/2016	TOTALFUNDS BY HASLER	CHK	CLR	\$200.00
33951	01/14/2016	GRAINGER	CHK	CLR	\$853.40
33952	01/14/2016	VOYAGER FLEET SYSTEMS, INC.	CHK	CLR	\$1,804.62
33953	01/14/2016	USA BLUEBOOK	CHK	CLR	\$267.39
33954	01/14/2016	COUGAR MOUNTAIN SOFTWARE	CHK	CLR	\$650.00
33955	01/14/2016	ARGILA ENTERPRISES, INC.	CHK	CLR	\$2,700.00
33956	01/14/2016	AWWA	CHK	CLR	\$90.00
33957	01/14/2016	BILL'S BOTTLED WATER SERVICE	CHK	CLR	\$53.25
33958	01/14/2016	BENCHMARK ENVIROANALYTICAL INC	CHK	CLR	\$3,426.80
33959	01/14/2016	CHARLOTTE COUNTY UTILITIES	CHK	CLR	\$164,694.84
33960	01/14/2016	CHARLOTTE COUNTY BCC - EES	CHK	CLR	\$4,854.39
33961	01/14/2016	CHARLOTTE COUNTY BD OF COMMISS	CHK	CLR	\$67,310.21
33962	01/14/2016	DILLER-BROWN & ASSOC. INC.	CHK	CLR	\$4,457.47
33963	01/14/2016	DESOTO COUNTY	CHK	CLR	\$66,333.33
33964	01/14/2016	DIANE R. SALZ	CHK	CLR	\$3,750.00
33965	01/14/2016	EARTH BALANCE	CHK	CLR	\$3,087.25
33966	01/14/2016	FLUID CONTROL SPECIALTIES, INC.	CHK	CLR	\$1,695.56
33967	01/14/2016	FLORIDA ENGINEERING FOUNDATION	CHK	CLR	\$100.00
33968	01/14/2016	AIRGAS SPECIALTY PRODUCTS	CHK	CLR	\$8,564.94
33969	01/14/2016	HVMI, LLC	CHK	CLR	\$6,562.10
33970	01/14/2016	ISA CCST PROGRAM	CHK	CLR	\$200.00
33971	01/14/2016	JAN-PRO OF MANASOTA	CHK	CLR	\$249.00
33972	01/14/2016	JAN-PRO CLEANING SYSTEMS OF SW	CHK	CLR	\$1,237.50
33973	01/14/2016	JOHNSON ENGINEERING, INC.	CHK	CLR	\$1,725.00
33974	01/14/2016	J. H. HAM ENGINEERING INC.	CHK	CLR	\$560.00
33975	01/14/2016	KEETON'S OFFICE & ART SUPPLY	CHK	CLR	\$1,922.34
33976	01/14/2016	LINDA BURKE	CHK	CLR	\$50.60
33977	01/14/2016	MANSON BOLVES DONALDSON, P.A.	CHK	CLR	\$18,457.79
33978	01/14/2016	NATURAL RESOURCES LLC	CHK	CLR	\$58,553.11
33979	01/14/2016	SOLINST CANADA LTD	CHK	CLR	\$1,201.76
33980	01/14/2016	ATKINS NORTH AMERICA, INC.	CHK	CLR	\$7,926.97

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

CHECK REGISTER: JANUARY & FEBRUARY 2016

Bank Code:	PUBLIC FUNDS INTEREST CHECKING			Current Balance:	\$4,722,772.11
Document Number	Date	Payee Name / Description	Type	Status	Amount
33981	01/14/2016	PMC ENGINEERING LLC	CHK	CLR	\$646.74
33982	01/14/2016	SUNSHINE STATE ONE CALL OF FL, IN	CHK	CLR	\$44.34
33983	01/14/2016	RANCH PROPERTY HOLDINGS LLC	CHK	CLR	\$11,972.90
33984	01/14/2016	STATE OF FLORIDA DISBURSEMENT U	CHK	CLR	\$652.44
33985	01/14/2016	SOLARES CONTROLS	CHK	CLR	\$622.14
33986	01/14/2016	THE SHIPPING POST	CHK	CLR	\$109.62
33987	01/14/2016	THE BANK OF NEW YORK MELLON	CHK	CLR	\$750.00
33988	01/14/2016	TRINOVA-FLORIDA	CHK	CLR	\$2,051.40
33989	01/14/2016	UNIVERSITY OF FL. WATER INSTITUTE	CHK	CLR	\$500.00
33990	01/14/2016	UPS	CHK	CLR	\$10.21
33991	01/14/2016	VIDEOGUY PRODUCTIONS	CHK	CLR	\$2,700.00
PRTX12216	01/22/2016	BANK OF AMERICA-TAX EXPRESS	CHK	CLR	\$27,157.66
33992	01/29/2016	PRO-CHEM INC.	CHK	CLR	\$850.31
33993	01/29/2016	BLUSITE SOLUTIONS OF SOUTHWEST	CHK	CLR	\$258.00
33994	01/29/2016	MSC INDUSTRIAL SUPPLY CO.	CHK	CLR	\$170.79
33995	01/29/2016	CINTAS	CHK	CLR	\$237.82
33996	01/29/2016	ALLIED UNIVERSAL CORP.	CHK	CLR	\$10,625.84
33997	01/29/2016	THE SUN	CHK	CLR	\$58.63
33998	01/29/2016	AIRGAS USA, LLC	CHK	CLR	\$18.58
33999	01/29/2016	FISHER SCIENTIFIC	CHK	CLR	\$4,092.79
34000	01/29/2016	HACH COMPANY	CHK	CLR	\$2,053.66
34001	01/29/2016	KINGSWAY ACE HARDWARE	CHK	CLR	\$420.49
34002	01/29/2016	BUSINESS CARD	CHK	CLR	\$131.38
34003	01/29/2016	HDR ENGINEERING INC.	CHK	CLR	\$4,023.77
34004	01/29/2016	SPECIALTY PARTS	CHK	CLR	\$66.23
34005	01/29/2016	U.S. WATER SERVICES CORPORATION	CHK	CLR	\$15,053.63
34006	01/29/2016	FEI-FT.MYERS WATERWORKS #127	CHK	CLR	\$769.37
34007	01/29/2016	SARASOTA HERALD TRIBUNE	CHK	CLR	\$93.50
34008	01/29/2016	BUSINESS CARD	CHK	CLR	\$1,009.17
34009	01/29/2016	BUSINESS CARD	CHK	CLR	\$9.10
34010	01/29/2016	NATIONWIDE RETIREMENT SOLUTION	CHK	CLR	\$2,734.07
34011	01/29/2016	HUDSON PUMP	CHK	CLR	\$5,647.92
34012	01/29/2016	SAM'S CLUB	CHK	CLR	\$445.98
34013	01/29/2016	USA BLUEBOOK	CHK	CLR	\$33.87
34014	01/29/2016	CENTURYLINK	CHK	CLR	\$1,879.01
34015	01/29/2016	HELLING - BATTERIES PLUS	CHK	CLR	\$109.71
34016	01/29/2016	BATES FLAGS AND FLAGPOLES LLC	CHK	CLR	\$599.94
34017	01/29/2016	BENCHMARK ENVIROANALYTICAL INC	CHK	CLR	\$3,249.90
34018	01/29/2016	BV OIL COMPANY, INC.	CHK	CLR	\$521.30
34019	01/29/2016	CHARLOTTE COUNTY BCC - EES	CHK	CLR	\$6,351.72
34020	01/29/2016	CORRPRO COMPANIES	CHK	CLR	\$4,200.00
34021	01/29/2016	CERTAIN WATER SERVICE, INC.	CHK	CLR	\$397.06
34022	01/29/2016	DESOTO COUNTY WATER UTILITY	CHK	CLR	\$1,950.18
34023	01/29/2016	DMK ASSOCIATES	CHK	CLR	\$1,800.00
34024	01/29/2016	DISCOUNT TELECOMMUNICATIONS	CHK	CLR	\$295.00
34025	01/29/2016	EARTH BALANCE	CHK	CLR	\$30,282.56
34026	01/29/2016	FLORIDA LEAGUE OF CITIES, INC.	CHK	CLR	\$90.00
34027	01/29/2016	FLORIDA POWER & LIGHT COMPANY	CHK	CLR	\$136,658.01
34028	01/29/2016	FLORIDA TECHNICAL PRODUCTS, INC.	CHK	CLR	\$1,546.63
34029	01/29/2016	FW&PCOA	CHK	CLR	\$225.00
34030	01/29/2016	THE GLOVER PARK GROUP LLC	CHK	CLR	\$810.25
34031	01/29/2016	JET AUTO SERVICE	CHK	CLR	\$390.07
34032	01/29/2016	JOHNSON ENGINEERING, INC.	CHK	CLR	\$1,682.50
34033	01/29/2016	KEETON'S OFFICE & ART SUPPLY	CHK	CLR	\$1,055.83
34034	01/29/2016	LINDA STEWART	CHK	CLR	\$173.65

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

CHECK REGISTER: JANUARY & FEBRUARY 2016

Bank Code:	PUBLIC FUNDS INTEREST CHECKING			Current Balance:	\$4,722,772.11
Document Number	Date	Payee Name / Description	Type	Status	Amount
34035	01/29/2016	M&M CONTRACTORS INC.	CHK	CLR	\$6,608.01
34036	01/29/2016	C & S CHEMICALS INC.	CHK	VOID	\$0.00
34037	01/29/2016	C & S CHEMICALS INC.	CHK	VOID	\$0.00
34038	01/29/2016	C & S CHEMICALS INC.	CHK	VOID	\$0.00
34039	01/29/2016	C & S CHEMICALS INC.	CHK	CLR	\$71,680.27
34040	01/29/2016	RAY PILON	CHK	CLR	\$3,750.00
34041	01/29/2016	DEX IMAGING	CHK	CLR	\$8.00
34042	01/29/2016	ALL AMERICAN CONTAINERS-MIAMI	CHK	CLR	\$285.12
34043	01/29/2016	PROGRESSIVE WATER RESOURCES, L	CHK	CLR	\$7,536.11
34044	01/29/2016	SECURITY ALARM CORP-USA	CHK	CLR	\$150.00
34045	01/29/2016	SHEARER CONSULTING INC.	CHK	CLR	\$2,500.00
34046	01/29/2016	STATE OF FLORIDA DISBURSEMENT U	CHK	CLR	\$652.44
34047	01/29/2016	THE SHIPPING POST	CHK	CLR	\$9.57
34048	01/29/2016	STRATEGIC PEST CONTROL OF SW FL	CHK	CLR	\$85.00
34049	01/29/2016	Tamiami Art & Frame	CHK	CLR	\$206.43
34050	01/29/2016	TKW CONSULTING ENGINEERS, INC.	CHK	CLR	\$12,644.70
34051	01/29/2016	UPS	CHK	CLR	\$399.02
34052	01/29/2016	U.S. BANK EQUIPMENT FINANCE	CHK	CLR	\$1,481.96
34053	01/29/2016	UNITED SYSTEMS COMPUTER GROUP	CHK	CLR	\$17,385.09
34054	01/29/2016	UNITED STATES GEOLOGICAL SURVEY	CHK	CLR	\$7,025.00
34055	01/29/2016	VOLUNTARY EXTRA DUTY ACCOUNT	CHK	CLR	\$105.00
JAN16FRS	01/29/2016	FLORIDA DIVISION OF RETIREMENT	CHK	CLR	\$20,524.11
PRTX2/5/16	02/05/2016	BANK OF AMERICA-TAX EXPRESS	CHK	CLR	\$24,838.94
34056	02/12/2016	MSC INDUSTRIAL SUPPLY CO.	CHK	CLR	\$1,930.17
34057	02/12/2016	DMS-FINANCIAL MGMT SERVICES	CHK	O/S	\$194.51
34058	02/12/2016	ALLIED UNIVERSAL CORP.	CHK	VOID	\$0.00
34059	02/12/2016	ALLIED UNIVERSAL CORP.	CHK	CLR	\$58,973.66
34060	02/12/2016	FEDERAL EXPRESS	CHK	CLR	\$11.10
34061	02/12/2016	AIRGAS USA, LLC	CHK	CLR	\$18.58
34062	02/12/2016	WOMACK SANITATION INC.	CHK	CLR	\$750.00
34063	02/12/2016	FISHER SCIENTIFIC	CHK	CLR	\$3,344.45
34064	02/12/2016	VERIZON	CHK	CLR	\$214.99
34065	02/12/2016	HACH COMPANY	CHK	CLR	\$23,397.70
34066	02/12/2016	KINGSWAY ACE HARDWARE	CHK	CLR	\$58.60
34067	02/12/2016	MCMASTER-CARR SUPPLY CO	CHK	CLR	\$2,161.35
34068	02/12/2016	HOME DEPOT	CHK	CLR	\$195.60
34069	02/12/2016	HDR ENGINEERING INC.	CHK	CLR	\$1,229.50
34070	02/12/2016	FENDER'S TIRE & BATTERY INC.	CHK	CLR	\$246.00
34071	02/12/2016	STAPLES ADVANTAGE	CHK	CLR	\$447.06
34072	02/12/2016	SARASOTA HERALD TRIBUNE	CHK	CLR	\$137.50
34073	02/12/2016	TRANSCAT, INC.	CHK	CLR	\$1,064.74
34074	02/12/2016	BARNEY'S PUMPS INC.	CHK	CLR	\$2,728.00
34075	02/12/2016	QUALITY STARTER & ALT SER INC.	CHK	CLR	\$202.90
34076	02/12/2016	EUROFINS EATON ANALYTICAL, INC.	CHK	CLR	\$395.00
34077	02/12/2016	NATIONWIDE RETIREMENT SOLUTION	CHK	CLR	\$2,734.07
34078	02/12/2016	CALGON CARBON CORPORATION	CHK	CLR	\$78,600.00
34079	02/12/2016	VOYAGER FLEET SYSTEMS, INC.	CHK	CLR	\$1,525.95
34080	02/12/2016	USA BLUEBOOK	CHK	CLR	\$3,004.56
34081	02/12/2016	CHARLOTTE CO. CHAM OF COMMERC	CHK	CLR	\$197.00
34082	02/12/2016	FLORIDA DEPARTMENT OF STATE	CHK	CLR	\$28.84
34083	02/12/2016	ACE MENTOR SARASOTA	CHK	O/S	\$250.00
34084	02/12/2016	ALLIED ELECTRONICS, INC.	CHK	CLR	\$2,699.27
34085	02/12/2016	ARGILA ENTERPRISES, INC.	CHK	CLR	\$2,250.00
34086	02/12/2016	BILL'S BOTTLED WATER SERVI CE	CHK	CLR	\$29.25
34087	02/12/2016	BENCHMARK ENVIROANALYTICAL INC	CHK	CLR	\$2,427.80

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

CHECK REGISTER: JANUARY & FEBRUARY 2016

Bank Code:		PUBLIC FUNDS INTEREST CHECKING			Current Balance:	\$4,722,772.11
Document Number	Date	Payee Name / Description	Type	Status	Amount	
34088	02/12/2016	CHARLOTTE COUNTY UTILITIES	CHK	CLR	\$426,353.84	
34089	02/12/2016	CHARLOTTE COUNTY BD OF COMMISS	CHK	O/S	\$67,260.21	
34090	02/12/2016	CH2M HILL ENGINEERS INC.	CHK	CLR	\$494.59	
34091	02/12/2016	CITY OF NORTH PORT	CHK	O/S	\$147,946.00	
34092	02/12/2016	DESOTO COUNTY	CHK	CLR	\$102,705.33	
34093	02/12/2016	DIANE R. SALZ	CHK	CLR	\$3,750.00	
34094	02/12/2016	FLORIDA RURAL WATER ASSOCIATIO	CHK	O/S	\$35.00	
34095	02/12/2016	AIRGAS SPECIALTY PRODUCTS	CHK	CLR	\$4,193.42	
34096	02/12/2016	HVMI, LLC	CHK	CLR	\$7,152.62	
34097	02/12/2016	JAN-PRO OF MANASOTA	CHK	CLR	\$249.00	
34098	02/12/2016	JAN-PRO CLEANING SYSTEMS OF SW	CHK	CLR	\$495.00	
34099	02/12/2016	JET AUTO SERVICE	CHK	CLR	\$647.90	
34100	02/12/2016	JOHNSON ENGINEERING, INC.	CHK	CLR	\$1,002.50	
34101	02/12/2016	KEETON'S OFFICE & ART SUPPLY	CHK	CLR	\$1,003.18	
34102	02/12/2016	M&M CONTRACTORS INC.	CHK	O/S	\$3,729.90	
34103	02/12/2016	MANATEE COUNTY SHERIFF	CHK	CLR	\$25.00	
34104	02/12/2016	MAIN GATE ENTERPRISES INC.	CHK	CLR	\$569.66	
34105	02/12/2016	MOTE MARINE LABORATORY	CHK	CLR	\$2,549.36	
34106	02/12/2016	ATKINS NORTH AMERICA, INC.	CHK	CLR	\$4,350.61	
34107	02/12/2016	MAC PAPERS	CHK	CLR	\$336.90	
34108	02/12/2016	C & S CHEMICALS INC.	CHK	VOID	\$0.00	
34109	02/12/2016	C & S CHEMICALS INC.	CHK	VOID	\$0.00	
34110	02/12/2016	C & S CHEMICALS INC.	CHK	CLR	\$66,203.77	
34111	02/12/2016	DEX IMAGING	CHK	CLR	\$8.00	
34112	02/12/2016	PROGRESSIVE WATER RESOURCES, L	CHK	O/S	\$7,500.00	
34113	02/12/2016	RING POWER CORPORATION	CHK	CLR	\$2,250.00	
34114	02/12/2016	RANCH PROPERTY HOLDINGS LLC	CHK	O/S	\$11,972.90	
34115	02/12/2016	SARASOTA COUNTY UTILITIES	CHK	CLR	\$885,340.00	
34116	02/12/2016	SHEARER CONSULTING INC.	CHK	O/S	\$2,500.00	
34117	02/12/2016	SOUTHWEST MOBILE MECHANIC	CHK	CLR	\$2,075.00	
34118	02/12/2016	STATE OF FLORIDA DISBURSEMENT U	CHK	CLR	\$652.44	
34119	02/12/2016	SOLARES CONTROLS	CHK	CLR	\$2,586.17	
34120	02/12/2016	THE SHIPPING POST	CHK	CLR	\$43.25	
34121	02/12/2016	TRINOVA-FLORIDA	CHK	CLR	\$1,175.00	
34122	02/12/2016	TRACTOR SUPPLY COMPANY	CHK	O/S	\$229.99	
34123	02/12/2016	UPS	CHK	CLR	\$322.51	
34124	02/12/2016	U.S. BANK EQUIPMENT FINANCE	CHK	CLR	\$1,119.61	
PRTX21916	02/19/2016	BANK OF AMERICA-TAX EXPRESS	CHK	CLR	\$23,974.92	
34125	02/26/2016	BLUSITE SOLUTIONS OF SOUTHWEST	CHK	O/S	\$258.00	
34126	02/26/2016	MSC INDUSTRIAL SUPPLY CO.	CHK	O/S	\$450.40	
34127	02/26/2016	CINTAS	CHK	O/S	\$227.54	
34128	02/26/2016	DMS-FINANCIAL MGMT SERVICES	CHK	O/S	\$134.46	
34129	02/26/2016	CIMTEC AUTOMATION, LLC	CHK	O/S	\$547.24	
34130	02/26/2016	RYAN HERCO PRODUCTS CORP.	CHK	O/S	\$2,350.80	
34131	02/26/2016	AA ELECTRIC SE INC.	CHK	O/S	\$889.75	
34132	02/26/2016	ALLIED UNIVERSAL CORP.	CHK	O/S	\$40,268.14	
34133	02/26/2016	THE SUN	CHK	O/S	\$214.44	
34134	02/26/2016	FISHER SCIENTIFIC	CHK	O/S	\$2,344.50	
34135	02/26/2016	PAGE MECHANICAL GROUP, INC.	CHK	O/S	\$578.65	
34136	02/26/2016	BOB DEAN SUPPLY INC	CHK	O/S	\$303.10	
34137	02/26/2016	HACH COMPANY	CHK	O/S	\$2,969.12	
34138	02/26/2016	KINGSWAY ACE HARDWARE	CHK	O/S	\$153.89	
34139	02/26/2016	BUSINESS CARD	CHK	O/S	\$730.18	
34140	02/26/2016	U.S. WATER SERVICES CORPORATION	CHK	O/S	\$5,797.12	
34141	02/26/2016	SARASOTA HERALD TRIBUNE	CHK	O/S	\$211.75	

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

CHECK REGISTER: JANUARY & FEBRUARY 2016

Bank Code:		PUBLIC FUNDS INTEREST CHECKING			Current Balance:	
Document Number	Date	Payee Name / Description	Type	Status	Amount	
34142	02/26/2016	TRANSCAT, INC.	CHK	O/S	\$1,578.91	
34143	02/26/2016	FLUID CONTROL SPECIALTIES, INC.	CHK	O/S	\$1,350.85	
34144	02/26/2016	BUSINESS CARD	CHK	O/S	\$401.13	
34145	02/26/2016	BUSINESS CARD	CHK	O/S	\$1,753.97	
34146	02/26/2016	NATIONWIDE RETIREMENT SOLUTION	CHK	O/S	\$2,734.07	
34147	02/26/2016	HUDSON PUMP	CHK	O/S	\$2,693.88	
34148	02/26/2016	SAM'S CLUB	CHK	O/S	\$285.81	
34149	02/26/2016	GRAINGER	CHK	O/S	\$1,814.00	
34150	02/26/2016	USA BLUEBOOK	CHK	O/S	\$444.82	
34151	02/26/2016	CENTURYLINK	CHK	O/S	\$1,898.60	
34152	02/26/2016	ADVANTAGE CARE INC.	CHK	O/S	\$80.00	
34153	02/26/2016	ALLIED ELECTRONICS, INC.	CHK	O/S	\$308.16	
34154	02/26/2016	ALL FLORIDA WATER-TAMPA	CHK	O/S	\$211.58	
34155	02/26/2016	BENCHMARK ENVIROANALYTICAL INC	CHK	O/S	\$5,935.85	
34156	02/26/2016	DMK ASSOCIATES	CHK	O/S	\$1,370.00	
34157	02/26/2016	DOMINION EXTERMINATORS	CHK	O/S	\$130.00	
34158	02/26/2016	EARTH BALANCE	CHK	O/S	\$9,538.75	
34159	02/26/2016	FORT BEND SERVICES, INC.	CHK	O/S	\$11,778.00	
34160	02/26/2016	FORSBERG CONSTRUCTION INC.	CHK	O/S	\$95,035.00	
34161	02/26/2016	FLORIDA POWER & LIGHT COMPANY	CHK	O/S	\$111,578.15	
34162	02/26/2016	FLORIDA RURAL WATER ASSOCIATIO	CHK	O/S	\$280.00	
34163	02/26/2016	HALFACRE CONSTRUCTION COMPANY	CHK	O/S	\$68,482.00	
34164	02/26/2016	HYDRA SERVICES INC.	CHK	O/S	\$3,702.00	
34165	02/26/2016	JAN-PRO CLEANING SYSTEMS OF SW	CHK	O/S	\$995.00	
34166	02/26/2016	KEETON'S OFFICE & ART SUPPLY	CHK	O/S	\$753.48	
34167	02/26/2016	KING ENGINEERING ASSOCIATES INC.	CHK	O/S	\$11,975.35	
34168	02/26/2016	MAIN GATE ENTERPRISES INC.	CHK	O/S	\$399.63	
34169	02/26/2016	MANSON BOLVES DONALDSON, P.A.	CHK	O/S	\$15,497.12	
34170	02/26/2016	KEVIN MORRIS	CHK	O/S	\$899.39	
34171	02/26/2016	NATURAL RESOURCES LLC	CHK	O/S	\$46,805.90	
34172	02/26/2016	SOLINST CANADA LTD	CHK	O/S	\$323.92	
34174	02/26/2016	C & S CHEMICALS INC.	CHK	O/S	\$40,969.36	
34175	02/26/2016	SUNSHINE STATE ONE CALL OF FL, IN	CHK	O/S	\$44.34	
34176	02/26/2016	DEX IMAGING	CHK	O/S	\$1,513.64	
34177	02/26/2016	PUBLIC RISK INSURANCE AGENCY	CHK	O/S	\$234,370.00	
34178	02/26/2016	PROSHRED SECURITY	CHK	O/S	\$749.00	
34179	02/26/2016	STATE OF FLORIDA DISBURSEMENT U	CHK	O/S	\$652.44	
34180	02/26/2016	THE SHIPPING POST	CHK	O/S	\$3.42	
34181	02/26/2016	SARASOTA TROPHY & AWARDS INC.	CHK	O/S	\$31.00	
34182	02/26/2016	TKW CONSULTING ENGINEERS, INC.	CHK	O/S	\$100.50	
34183	02/26/2016	TRINOVA-FLORIDA	CHK	O/S	\$2,523.20	
34184	02/26/2016	TRACTOR SUPPLY COMPANY	CHK	O/S	\$223.90	
34185	02/26/2016	UPS	CHK	O/S	\$62.12	
34186	02/26/2016	U.S. BANK EQUIPMENT FINANCE	CHK	O/S	\$362.35	
34187	02/26/2016	UNITED SYSTEMS COMPUTER GROUP	CHK	O/S	\$785.00	
FRSFEB16	02/29/2016	FLORIDA DIVISION OF RETIREMENT	CHK	O/S	\$22,464.26	
Check Total					\$4,264,293.57	

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

CHECK REGISTER: JANUARY & FEBRUARY 2016

Alphabetically by Vendor

Bank Code:		PUBLIC FUNDS INTEREST CHECKING		Current Balance:		\$4,722,772.11
Document Number	Date	Payee Name / Description	Type	Status	Amount	
34131	02/26/2016	AA ELECTRIC SE INC.	CHK	O/S	\$669.75	
34083	02/12/2016	ACE MENTOR SARASOTA	CHK	O/S	\$250.00	
34152	02/26/2016	ADVANTAGE CARE INC.	CHK	O/S	\$80.00	
33887	01/04/2016	AIR CENTERS-FLORIDA	CHK	CLR	\$708.05	
33968	01/14/2016	AIRGAS SPECIALTY PRODUCTS	CHK	CLR	\$8,564.94	
34095	02/12/2016	AIRGAS SPECIALTY PRODUCTS	CHK	CLR	\$4,193.42	
33998	01/29/2016	AIRGAS USA, LLC	CHK	CLR	\$18.58	
34061	02/12/2016	AIRGAS USA, LLC	CHK	CLR	\$18.58	
34042	01/29/2016	ALL AMERICAN CONTAINERS-MIAMI	CHK	CLR	\$285.12	
34154	02/26/2016	ALL FLORIDA WATER-TAMPA	CHK	O/S	\$211.58	
33900	01/04/2016	ALLIANCE FIRE & SAFETY	CHK	CLR	\$113.75	
34084	02/12/2016	ALLIED ELECTRONICS, INC.	CHK	CLR	\$2,699.27	
34153	02/26/2016	ALLIED ELECTRONICS, INC.	CHK	O/S	\$308.16	
33876	01/04/2016	ALLIED UNIVERSAL CORP.	CHK	CLR	\$29,620.16	
33932	01/14/2016	ALLIED UNIVERSAL CORP.	CHK	VOID	\$0.00	
33933	01/14/2016	ALLIED UNIVERSAL CORP.	CHK	CLR	\$67,128.45	
33996	01/29/2016	ALLIED UNIVERSAL CORP.	CHK	CLR	\$10,625.84	
34058	02/12/2016	ALLIED UNIVERSAL CORP.	CHK	VOID	\$0.00	
34059	02/12/2016	ALLIED UNIVERSAL CORP.	CHK	CLR	\$58,973.66	
34132	02/26/2016	ALLIED UNIVERSAL CORP.	CHK	O/S	\$40,268.14	
33939	01/14/2016	ANIXTER POWER SOLUTIONS, LLC	CHK	CLR	\$922.53	
33955	01/14/2016	ARGILA ENTERPRISES, INC.	CHK	CLR	\$2,700.00	
34085	02/12/2016	ARGILA ENTERPRISES, INC.	CHK	CLR	\$2,250.00	
33980	01/14/2016	ATKINS NORTH AMERICA, INC.	CHK	CLR	\$7,926.97	
34106	02/12/2016	ATKINS NORTH AMERICA, INC.	CHK	CLR	\$4,350.61	
33901	01/04/2016	AWWA	CHK	CLR	\$90.00	
33956	01/14/2016	AWWA	CHK	CLR	\$90.00	
PRTX1816	01/08/2016	BANK OF AMERICA-TAX EXPRESS	CHK	CLR	\$26,383.40	
PRTX12216	01/22/2016	BANK OF AMERICA-TAX EXPRESS	CHK	CLR	\$27,157.66	
PRTX2/5/16	02/05/2016	BANK OF AMERICA-TAX EXPRESS	CHK	CLR	\$24,838.94	
PRTX21916	02/19/2016	BANK OF AMERICA-TAX EXPRESS	CHK	CLR	\$23,974.92	
34074	02/12/2016	BARNEY'S PUMPS INC.	CHK	CLR	\$2,728.00	
34016	01/29/2016	BATES FLAGS AND FLAGPOLES LLC	CHK	CLR	\$599.94	
33902	01/04/2016	BENCHMARK ENVIROANALYTICAL INC	CHK	CLR	\$3,794.00	
33958	01/14/2016	BENCHMARK ENVIROANALYTICAL INC	CHK	CLR	\$3,426.80	
34017	01/29/2016	BENCHMARK ENVIROANALYTICAL INC	CHK	CLR	\$3,249.90	
34087	02/12/2016	BENCHMARK ENVIROANALYTICAL INC	CHK	CLR	\$2,427.80	
34155	02/26/2016	BENCHMARK ENVIROANALYTICAL INC	CHK	O/S	\$5,935.85	
33957	01/14/2016	BILL'S BOTTLED WATER SERVI CE	CHK	CLR	\$53.25	
34086	02/12/2016	BILL'S BOTTLED WATER SERVI CE	CHK	CLR	\$29.25	
33993	01/29/2016	BLUSITE SOLUTIONS OF SOUTHWEST	CHK	CLR	\$258.00	
34125	02/26/2016	BLUSITE SOLUTIONS OF SOUTHWEST	CHK	O/S	\$258.00	
34136	02/26/2016	BOB DEAN SUPPLY INC	CHK	O/S	\$303.10	
33882	01/04/2016	BUSINESS CARD	CHK	CLR	\$351.54	
33885	01/04/2016	BUSINESS CARD	CHK	CLR	\$1,774.77	
33690	01/04/2016	BUSINESS CARD	CHK	CLR	\$923.74	
34002	01/29/2016	BUSINESS CARD	CHK	CLR	\$131.38	
34008	01/29/2016	BUSINESS CARD	CHK	CLR	\$1,009.17	
34009	01/29/2016	BUSINESS CARD	CHK	CLR	\$9.10	
34139	02/28/2016	BUSINESS CARD	CHK	O/S	\$730.18	
34144	02/26/2016	BUSINESS CARD	CHK	O/S	\$401.13	
34145	02/26/2016	BUSINESS CARD	CHK	O/S	\$1,753.97	
34018	01/29/2016	BV OIL COMPANY, INC.	CHK	CLR	\$521.30	
33913	01/04/2016	C & S CHEMICALS INC.	CHK	VOID	\$0.00	
33914	01/04/2016	C & S CHEMICALS INC.	CHK	CLR	\$36,794.60	

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

CHECK REGISTER: JANUARY & FEBRUARY 2016

Alphabetically by Vendor

Bank Code:	PUBLIC FUNDS INTEREST CHECKING			Current Balance:	\$4,722,772.11
Document Number	Date	Payee Name / Description	Type	Status	Amount
34036	01/29/2016	C & S CHEMICALS INC.	CHK	VOID	\$0.00
34037	01/29/2016	C & S CHEMICALS INC.	CHK	VOID	\$0.00
34038	01/29/2016	C & S CHEMICALS INC.	CHK	VOID	\$0.00
34039	01/29/2016	C & S CHEMICALS INC.	CHK	CLR	\$71,680.27
34108	02/12/2016	C & S CHEMICALS INC.	CHK	VOID	\$0.00
34109	02/12/2016	C & S CHEMICALS INC.	CHK	VOID	\$0.00
34110	02/12/2016	C & S CHEMICALS INC.	CHK	CLR	\$66,203.77
34174	02/26/2016	C & S CHEMICALS INC.	CHK	O/S	\$40,969.36
7538	01/04/2016	Caleb L. Clark	CHK	CLR	\$898.01
33896	01/04/2016	CALGON CARBON CORPORATION	CHK	CLR	\$40,220.00
33949	01/14/2016	CALGON CARBON CORPORATION	CHK	CLR	\$40,320.00
34078	02/12/2016	CALGON CARBON CORPORATION	CHK	CLR	\$78,600.00
33904	01/04/2016	CARTER & VERPLANCK INC	CHK	CLR	\$34,649.00
33899	01/04/2016	CENTURYLINK	CHK	CLR	\$1,565.08
34014	01/29/2016	CENTURYLINK	CHK	CLR	\$1,879.01
34151	02/26/2016	CENTURYLINK	CHK	O/S	\$1,898.60
34021	01/29/2016	CERTAIN WATER SERVICE, INC.	CHK	CLR	\$397.06
33903	01/04/2016	CH2M HILL ENGINEERS INC.	CHK	CLR	\$5,381.38
34090	02/12/2016	CH2M HILL ENGINEERS INC.	CHK	CLR	\$494.59
34081	02/12/2016	CHARLOTTE CO. CHAM OF COMMERC	CHK	CLR	\$197.00
33960	01/14/2016	CHARLOTTE COUNTY BCC - EES	CHK	CLR	\$4,854.39
34019	01/29/2016	CHARLOTTE COUNTY BCC - EES	CHK	CLR	\$6,351.72
33961	01/14/2016	CHARLOTTE COUNTY BD OF COMMISS	CHK	CLR	\$67,310.21
34089	02/12/2016	CHARLOTTE COUNTY BD OF COMMISS	CHK	O/S	\$67,260.21
33959	01/14/2016	CHARLOTTE COUNTY UTILITIES	CHK	CLR	\$164,694.84
34088	02/12/2016	CHARLOTTE COUNTY UTILITIES	CHK	CLR	\$426,353.84
33875	01/04/2016	CIMTEC AUTOMATION, LLC	CHK	CLR	\$1,184.00
34129	02/26/2016	CIMTEC AUTOMATION, LLC	CHK	O/S	\$547.24
33874	01/04/2016	CINTAS	CHK	CLR	\$235.68
33995	01/29/2016	CINTAS	CHK	CLR	\$237.82
34127	02/26/2016	CINTAS	CHK	O/S	\$227.54
34091	02/12/2016	CITY OF NORTH PORT	CHK	O/S	\$147,946.00
33878	01/04/2016	CITY OF PUNTA GORDA	CHK	CLR	\$3,500.00
33926	01/14/2016	CORPORATE INTERIORS INC	CHK	CLR	\$3,624.74
34020	01/29/2016	CORRPRO COMPANIES	CHK	CLR	\$4,200.00
33954	01/14/2016	COUGAR MOUNTAIN SOFTWARE	CHK	CLR	\$650.00
33895	01/04/2016	CUMMINS POWER SOUTH	CHK	CLR	\$2,776.83
33897	01/04/2016	DESOTO AUTOMALL	CHK	CLR	\$855.87
33963	01/14/2016	DESOTO COUNTY	CHK	CLR	\$66,333.33
34092	02/12/2016	DESOTO COUNTY	CHK	CLR	\$102,705.33
34022	01/29/2016	DESOTO COUNTY WATER UTILITY	CHK	CLR	\$1,950.18
33916	01/04/2016	DEX IMAGING	CHK	CLR	\$1,180.11
34041	01/29/2016	DEX IMAGING	CHK	CLR	\$8.00
34111	02/12/2016	DEX IMAGING	CHK	CLR	\$8.00
34176	02/26/2016	DEX IMAGING	CHK	O/S	\$1,513.64
33964	01/14/2016	DIANE R. SALZ	CHK	CLR	\$3,750.00
34093	02/12/2016	DIANE R. SALZ	CHK	CLR	\$3,750.00
33962	01/14/2016	DILLER-BROWN & ASSOC. INC.	CHK	CLR	\$4,457.47
34024	01/29/2016	DISCOUNT TELECOMMUNICATIONS	CHK	CLR	\$295.00
34023	01/29/2016	DMK ASSOCIATES	CHK	CLR	\$1,800.00
34156	02/26/2016	DMK ASSOCIATES	CHK	O/S	\$1,370.00
33930	01/14/2016	DMS-FINANCIAL MGMT SERVICES	CHK	CLR	\$261.36
34057	02/12/2016	DMS-FINANCIAL MGMT SERVICES	CHK	O/S	\$194.51
34128	02/26/2016	DMS-FINANCIAL MGMT SERVICES	CHK	O/S	\$134.46
34157	02/26/2016	DOMINION EXTERMINATORS	CHK	O/S	\$130.00

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

CHECK REGISTER: JANUARY & FEBRUARY 2016

Alphabetically by Vendor

Bank Code:	PUBLIC FUNDS INTEREST CHECKING			Current Balance:	\$4,722,772.11
Document Number	Date	Payee Name / Description	Type	Status	Amount
33865	01/14/2016	EARTH BALANCE	CHK	CLR	\$3,067.25
34025	01/29/2016	EARTH BALANCE	CHK	CLR	\$30,282.56
34158	02/26/2016	EARTH BALANCE	CHK	O/S	\$9,538.75
33947	01/14/2016	ENDRESS+HAUSER, INC.	CHK	CLR	\$3,827.47
33892	01/04/2016	EUROFINS EATON ANALYTICAL, INC.	CHK	CLR	\$395.00
34076	02/12/2016	EUROFINS EATON ANALYTICAL, INC.	CHK	CLR	\$395.00
33877	01/04/2016	FEDERAL EXPRESS	CHK	CLR	\$19.60
34060	02/12/2016	FEDERAL EXPRESS	CHK	CLR	\$11.10
33888	01/04/2016	FEI-FT.MYERS WATERWORKS #127	CHK	CLR	\$665.00
33945	01/14/2016	FEI-FT.MYERS WATERWORKS #127	CHK	CLR	\$448.49
34008	01/29/2016	FEI-FT.MYERS WATERWORKS #127	CHK	CLR	\$769.37
34070	02/12/2016	FENDER'S TIRE & BATTERY INC.	CHK	CLR	\$246.00
33879	01/04/2016	FISHER SCIENTIFIC	CHK	CLR	\$8,546.65
33936	01/14/2016	FISHER SCIENTIFIC	CHK	CLR	\$1,053.05
33999	01/29/2016	FISHER SCIENTIFIC	CHK	CLR	\$4,092.79
34063	02/12/2016	FISHER SCIENTIFIC	CHK	CLR	\$3,344.45
34134	02/26/2016	FISHER SCIENTIFIC	CHK	O/S	\$2,344.50
34082	02/12/2016	FLORIDA DEPARTMENT OF STATE	CHK	CLR	\$28.84
JAN16FRS	01/29/2016	FLORIDA DIVISION OF RETIREMENT	CHK	CLR	\$20,524.11
FRSFEB16	02/29/2016	FLORIDA DIVISION OF RETIREMENT	CHK	O/S	\$22,464.26
33967	01/14/2016	FLORIDA ENGINEERING FOUNDATION	CHK	CLR	\$100.00
34026	01/29/2016	FLORIDA LEAGUE OF CITIES, INC.	CHK	CLR	\$90.00
33905	01/04/2016	FLORIDA POWER & LIGHT COMPANY	CHK	CLR	\$131,729.27
34027	01/29/2016	FLORIDA POWER & LIGHT COMPANY	CHK	CLR	\$136,658.01
34161	02/26/2016	FLORIDA POWER & LIGHT COMPANY	CHK	O/S	\$111,578.15
34094	02/12/2016	FLORIDA RURAL WATER ASSOCIATIO	CHK	O/S	\$35.00
34162	02/26/2016	FLORIDA RURAL WATER ASSOCIATIO	CHK	O/S	\$280.00
34028	01/29/2016	FLORIDA TECHNICAL PRODUCTS, INC.	CHK	CLR	\$1,546.63
33966	01/14/2016	FLUID CONTROL SPECIALTIES, INC.	CHK	CLR	\$1,695.56
34143	02/26/2016	FLUID CONTROL SPECIALTIES, INC.	CHK	O/S	\$1,350.85
34160	02/26/2016	FORSBERG CONSTRUCTION INC.	CHK	O/S	\$95,035.00
34159	02/26/2016	FORT BEND SERVICES, INC.	CHK	O/S	\$11,776.00
34029	01/29/2016	FW&PCOA	CHK	CLR	\$225.00
33906	01/04/2016	GARNEY COMPANIES INC.	CHK	CLR	\$28,233.00
33898	01/04/2016	GRAINGER	CHK	CLR	\$587.52
33951	01/14/2016	GRAINGER	CHK	CLR	\$853.40
34149	02/26/2016	GRAINGER	CHK	O/S	\$1,814.00
33880	01/04/2016	HACH COMPANY	CHK	CLR	\$965.46
33940	01/14/2016	HACH COMPANY	CHK	CLR	\$3,210.08
34000	01/29/2016	HACH COMPANY	CHK	CLR	\$2,053.66
34065	02/12/2016	HACH COMPANY	CHK	CLR	\$23,397.70
34137	02/26/2016	HACH COMPANY	CHK	O/S	\$2,969.12
34163	02/26/2016	HALFACRE CONSTRUCTION COMPANY	CHK	O/S	\$68,482.00
33884	01/04/2016	HDR ENGINEERING INC.	CHK	CLR	\$14,120.91
33943	01/14/2016	HDR ENGINEERING INC.	CHK	CLR	\$767.90
34003	01/29/2016	HDR ENGINEERING INC.	CHK	CLR	\$4,023.77
34089	02/12/2016	HDR ENGINEERING INC.	CHK	CLR	\$1,229.50
34015	01/29/2016	HELLING - BATTERIES PLUS	CHK	CLR	\$109.71
33883	01/04/2016	HOME DEPOT	CHK	CLR	\$135.22
33942	01/14/2016	HOME DEPOT	CHK	CLR	\$272.39
34068	02/12/2016	HOME DEPOT	CHK	CLR	\$195.80
34011	01/29/2016	HUDSON PUMP	CHK	CLR	\$5,647.92
34147	02/26/2016	HUDSON PUMP	CHK	O/S	\$2,693.88
33869	01/14/2016	HVMI, LLC	CHK	CLR	\$6,562.10
34096	02/12/2016	HVMI, LLC	CHK	CLR	\$7,152.62

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

CHECK REGISTER: JANUARY & FEBRUARY 2016

Alphabetically by Vendor

Bank Code:	PUBLIC FUNDS INTEREST CHECKING			Current Balance:	\$4,722,772.11
Document Number	Date	Payee Name / Description	Type	Status	Amount
34164	02/26/2016	HYDRA SERVICES INC.	CHK	O/S	\$3,702.00
33970	01/14/2016	ISA CCST PROGRAM	CHK	CLR	\$200.00
33974	01/14/2016	J. H. HAM ENGINEERING INC.	CHK	CLR	\$560.00
33972	01/14/2016	JAN-PRO CLEANING SYSTEMS OF SW	CHK	CLR	\$1,237.50
34098	02/12/2016	JAN-PRO CLEANING SYSTEMS OF SW	CHK	CLR	\$495.00
34165	02/26/2016	JAN-PRO CLEANING SYSTEMS OF SW	CHK	O/S	\$995.00
33971	01/14/2016	JAN-PRO OF MANASOTA	CHK	CLR	\$249.00
34097	02/12/2016	JAN-PRO OF MANASOTA	CHK	CLR	\$249.00
34031	01/29/2016	JET AUTO SERVICE	CHK	CLR	\$390.07
34099	02/12/2016	JET AUTO SERVICE	CHK	CLR	\$647.90
33908	01/04/2016	JOHN MEASEL CABINETS	CHK	CLR	\$771.03
33973	01/14/2016	JOHNSON ENGINEERING, INC.	CHK	CLR	\$1,725.00
34032	01/29/2016	JOHNSON ENGINEERING, INC.	CHK	CLR	\$1,682.50
34100	02/12/2016	JOHNSON ENGINEERING, INC.	CHK	CLR	\$1,002.50
33909	01/04/2016	KEETON'S OFFICE & ART SUPPLY	CHK	CLR	\$90.93
33975	01/14/2016	KEETON'S OFFICE & ART SUPPLY	CHK	CLR	\$1,922.34
34033	01/29/2016	KEETON'S OFFICE & ART SUPPLY	CHK	CLR	\$1,055.83
34101	02/12/2016	KEETON'S OFFICE & ART SUPPLY	CHK	CLR	\$1,003.18
34166	02/26/2016	KEETON'S OFFICE & ART SUPPLY	CHK	O/S	\$753.48
34170	02/26/2016	KEVIN MORRIS	CHK	O/S	\$899.39
33910	01/04/2016	KING ENGINEERING ASSOCIATES INC.	CHK	CLR	\$1,355.95
34167	02/26/2016	KING ENGINEERING ASSOCIATES INC.	CHK	O/S	\$11,975.35
33881	01/04/2016	KINGSWAY ACE HARDWARE	CHK	CLR	\$91.95
33941	01/14/2016	KINGSWAY ACE HARDWARE	CHK	CLR	\$25.53
34001	01/29/2016	KINGSWAY ACE HARDWARE	CHK	CLR	\$420.49
34066	02/12/2016	KINGSWAY ACE HARDWARE	CHK	CLR	\$58.60
34138	02/26/2016	KINGSWAY ACE HARDWARE	CHK	O/S	\$153.89
33976	01/14/2016	LINDA BURKE	CHK	CLR	\$50.60
34034	01/29/2016	LINDA STEWART	CHK	CLR	\$173.65
34035	01/29/2016	M&M CONTRACTORS INC.	CHK	CLR	\$6,608.01
34102	02/12/2016	M&M CONTRACTORS INC.	CHK	O/S	\$3,729.90
34107	02/12/2016	MAC PAPERS	CHK	CLR	\$336.90
33891	01/04/2016	MAILFINANCE	CHK	CLR	\$299.61
34104	02/12/2016	MAIN GATE ENTERPRISES INC.	CHK	CLR	\$569.66
34168	02/26/2016	MAIN GATE ENTERPRISES INC.	CHK	O/S	\$399.63
34103	02/12/2016	MANATEE COUNTY SHERIFF	CHK	CLR	\$25.00
33977	01/14/2016	MANSON BOLVES DONALDSON, P.A.	CHK	CLR	\$18,457.79
34169	02/26/2016	MANSON BOLVES DONALDSON, P.A.	CHK	O/S	\$15,497.12
33928	01/14/2016	MAUDLIN & JENKINS CPA, LLC	CHK	CLR	\$3,815.85
34067	02/12/2016	MCMaster-CARR SUPPLY CO	CHK	CLR	\$2,161.35
33911	01/04/2016	MOCK ENGINEERING, INCORPORATED	CHK	CLR	\$2,921.79
34105	02/12/2016	MOTE MARINE LABORATORY	CHK	CLR	\$2,549.36
33927	01/14/2016	MSC INDUSTRIAL SUPPLY CO.	CHK	CLR	\$2,064.15
33994	01/29/2016	MSC INDUSTRIAL SUPPLY CO.	CHK	CLR	\$170.79
34056	02/12/2016	MSC INDUSTRIAL SUPPLY CO.	CHK	CLR	\$1,930.17
34126	02/26/2016	MSC INDUSTRIAL SUPPLY CO.	CHK	O/S	\$450.40
33944	01/14/2016	MWH AMERICAS INC	CHK	CLR	\$60,451.33
33912	01/04/2016	NATIONAL BUSINESS FURNITURE, LLC	CHK	CLR	\$267.20
33893	01/04/2016	NATIONWIDE RETIREMENT SOLUTION	CHK	CLR	\$2,734.07
33948	01/14/2016	NATIONWIDE RETIREMENT SOLUTION	CHK	CLR	\$2,734.07
34010	01/29/2016	NATIONWIDE RETIREMENT SOLUTION	CHK	CLR	\$2,734.07
34077	02/12/2016	NATIONWIDE RETIREMENT SOLUTION	CHK	CLR	\$2,734.07
34146	02/26/2016	NATIONWIDE RETIREMENT SOLUTION	CHK	O/S	\$2,734.07
33978	01/14/2016	NATURAL RESOURCES LLC	CHK	CLR	\$58,553.11
34171	02/26/2016	NATURAL RESOURCES LLC	CHK	O/S	\$46,805.90

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

CHECK REGISTER: JANUARY & FEBRUARY 2016

Alphabetically by Vendor

Bank Code:	PUBLIC FUNDS INTEREST CHECKING			Current Balance:	\$4,722,772.11
Document Number	Date	Payee Name / Description	Type	Status	Amount
33938	01/14/2016	PAGE MECHANICAL GROUP, INC.	CHK	CLR	\$2,419.00
34135	02/26/2016	PAGE MECHANICAL GROUP, INC.	CHK	O/S	\$578.65
33981	01/14/2016	PMC ENGINEERING LLC	CHK	CLR	\$846.74
33925	01/14/2016	PRO-CHEM INC.	CHK	CLR	\$543.13
33992	01/29/2016	PRO-CHEM INC.	CHK	CLR	\$850.31
34043	01/29/2016	PROGRESSIVE WATER RESOURCES, L	CHK	CLR	\$7,536.11
34112	02/12/2016	PROGRESSIVE WATER RESOURCES, L	CHK	O/S	\$7,500.00
34178	02/26/2016	PROSHRED SECURITY	CHK	O/S	\$749.00
34177	02/26/2016	PUBLIC RISK INSURANCE AGENCY	CHK	O/S	\$234,370.00
34075	02/12/2016	QUALITY STARTER & ALT SER INC.	CHK	CLR	\$202.90
33983	01/14/2016	RANCH PROPERTY HOLDINGS LLC	CHK	CLR	\$11,972.90
34114	02/12/2016	RANCH PROPERTY HOLDINGS LLC	CHK	O/S	\$11,972.90
33915	01/04/2016	RAY PILON	CHK	CLR	\$3,750.00
34040	01/29/2016	RAY PILON	CHK	CLR	\$3,750.00
34113	02/12/2016	RING POWER CORPORATION	CHK	CLR	\$2,250.00
33935	01/14/2016	ROSEMOUNT INC.	CHK	CLR	\$4,698.02
33931	01/14/2016	RYAN HERCO PRODUCTS CORP.	CHK	CLR	\$2,546.40
34130	02/26/2016	RYAN HERCO PRODUCTS CORP.	CHK	O/S	\$2,350.80
34012	01/29/2016	SAM'S CLUB	CHK	CLR	\$445.98
34148	02/26/2016	SAM'S CLUB	CHK	O/S	\$285.81
33907	01/04/2016	SARASOTA CHAMBER OF COMMERCE	CHK	CLR	\$371.00
34115	02/12/2016	SARASOTA COUNTY UTILITIES	CHK	CLR	\$885,340.00
34007	01/29/2016	SARASOTA HERALD TRIBUNE	CHK	CLR	\$93.50
34072	02/12/2016	SARASOTA HERALD TRIBUNE	CHK	CLR	\$137.50
34141	02/26/2016	SARASOTA HERALD TRIBUNE	CHK	O/S	\$211.75
34181	02/26/2016	SARASOTA TROPHY & AWARDS INC.	CHK	O/S	\$31.00
34044	01/29/2016	SECURITY ALARM CORP-USA	CHK	CLR	\$150.00
34045	01/29/2016	SHEARER CONSULTING INC.	CHK	CLR	\$2,500.00
34116	02/12/2016	SHEARER CONSULTING INC.	CHK	O/S	\$2,500.00
33985	01/14/2016	SOLARES CONTROLS	CHK	CLR	\$622.14
34119	02/12/2016	SOLARES CONTROLS	CHK	CLR	\$2,586.17
33979	01/14/2016	SOLINST CANADA LTD	CHK	CLR	\$1,201.76
34172	02/26/2016	SOLINST CANADA LTD	CHK	O/S	\$323.92
34117	02/12/2016	SOUTHWEST MOBILE MECHANIC	CHK	CLR	\$2,075.00
34004	01/29/2016	SPECIALTY PARTS	CHK	CLR	\$66.23
34071	02/12/2016	STAPLES ADVANTAGE	CHK	CLR	\$447.06
33917	01/04/2016	STATE OF FLORIDA DISBURSEMENT U	CHK	CLR	\$652.44
33984	01/14/2016	STATE OF FLORIDA DISBURSEMENT U	CHK	CLR	\$652.44
34046	01/29/2016	STATE OF FLORIDA DISBURSEMENT U	CHK	CLR	\$652.44
34118	02/12/2016	STATE OF FLORIDA DISBURSEMENT U	CHK	CLR	\$652.44
34179	02/26/2016	STATE OF FLORIDA DISBURSEMENT U	CHK	O/S	\$652.44
34048	01/29/2016	STRATEGIC PEST CONTROL OF SW FL	CHK	CLR	\$85.00
33889	01/04/2016	SUNBELT RENTALS	CHK	CLR	\$1,197.02
33919	01/04/2016	SUNCOAST COMMERCIAL DOOR & HAR	CHK	CLR	\$711.63
33873	01/04/2016	SUNCOAST PORTABLE SANITATION IN	CHK	CLR	\$258.00
33982	01/14/2016	SUNSHINE STATE ONE CALL OF FL, IN	CHK	CLR	\$44.34
34175	02/26/2016	SUNSHINE STATE ONE CALL OF FL, IN	CHK	O/S	\$44.34
34049	01/29/2016	Tamiami Art & Frame	CHK	CLR	\$206.43
33987	01/14/2016	THE BANK OF NEW YORK MELLON	CHK	CLR	\$750.00
34030	01/29/2016	THE GLOVER PARK GROUP LLC	CHK	CLR	\$610.25
33918	01/04/2016	THE SHIPPING POST	CHK	CLR	\$25.41
33986	01/14/2016	THE SHIPPING POST	CHK	CLR	\$109.82
34047	01/29/2016	THE SHIPPING POST	CHK	CLR	\$9.57
34120	02/12/2016	THE SHIPPING POST	CHK	CLR	\$43.25
34180	02/26/2016	THE SHIPPING POST	CHK	O/S	\$3.42

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

CHECK REGISTER: JANUARY & FEBRUARY 2016

Alphabetically by Vendor

Bank Code:	PUBLIC FUNDS INTEREST CHECKING			Current Balance:	\$4,722,772.11
Document Number	Date	Payee Name / Description	Type	Status	Amount
33997	01/29/2016	THE SUN	CHK	CLR	\$58.63
34133	02/26/2016	THE SUN	CHK	O/S	\$214.44
34050	01/29/2016	TKW CONSULTING ENGINEERS, INC.	CHK	CLR	\$12,844.70
34182	02/26/2016	TKW CONSULTING ENGINEERS, INC.	CHK	O/S	\$100.50
33950	01/14/2016	TOTALFUNDS BY HASLER	CHK	CLR	\$200.00
33920	01/04/2016	TRACTOR SUPPLY COMPANY	CHK	CLR	\$554.97
34122	02/12/2016	TRACTOR SUPPLY COMPANY	CHK	O/S	\$229.99
34184	02/26/2016	TRACTOR SUPPLY COMPANY	CHK	O/S	\$223.90
33946	01/14/2016	TRANSCAT, INC.	CHK	CLR	\$263.29
34073	02/12/2016	TRANSCAT, INC.	CHK	CLR	\$1,064.74
34142	02/26/2016	TRANSCAT, INC.	CHK	O/S	\$1,576.91
33988	01/14/2016	TRINOVA-FLORIDA	CHK	CLR	\$2,051.40
34121	02/12/2016	TRINOVA-FLORIDA	CHK	CLR	\$1,175.00
34183	02/26/2016	TRINOVA-FLORIDA	CHK	O/S	\$2,523.20
33929	01/14/2016	TRULY NOLEN BRANCH 079	CHK	CLR	\$108.00
33922	01/04/2016	U.S. BANK EQUIPMENT FINANCE	CHK	CLR	\$880.60
34052	01/29/2016	U.S. BANK EQUIPMENT FINANCE	CHK	CLR	\$1,481.96
34124	02/12/2016	U.S. BANK EQUIPMENT FINANCE	CHK	CLR	\$1,119.61
34186	02/26/2016	U.S. BANK EQUIPMENT FINANCE	CHK	O/S	\$362.35
33886	01/04/2016	U.S. WATER SERVICES CORPORATION	CHK	CLR	\$11,504.88
34005	01/29/2016	U.S. WATER SERVICES CORPORATION	CHK	CLR	\$15,053.63
34140	02/26/2016	U.S. WATER SERVICES CORPORATION	CHK	O/S	\$5,797.12
33894	01/04/2016	ULINE	CHK	CLR	\$137.54
34054	01/29/2016	UNITED STATES GEOLOGICAL SURVEY	CHK	CLR	\$7,025.00
33923	01/04/2016	UNITED SYSTEMS COMPUTER GROUP	CHK	CLR	\$13,662.26
34053	01/29/2016	UNITED SYSTEMS COMPUTER GROUP	CHK	CLR	\$17,385.09
34187	02/26/2016	UNITED SYSTEMS COMPUTER GROUP	CHK	O/S	\$785.00
33989	01/14/2016	UNIVERSITY OF FL. WATER INSTITUTE	CHK	CLR	\$500.00
33921	01/04/2016	UPS	CHK	CLR	\$197.77
33990	01/14/2016	UPS	CHK	CLR	\$10.21
34051	01/29/2016	UPS	CHK	CLR	\$399.02
34123	02/12/2016	UPS	CHK	CLR	\$322.51
34185	02/26/2016	UPS	CHK	O/S	\$62.12
33953	01/14/2016	USA BLUEBOOK	CHK	CLR	\$287.39
34013	01/29/2016	USA BLUEBOOK	CHK	CLR	\$33.87
34080	02/12/2016	USA BLUEBOOK	CHK	CLR	\$3,004.56
34150	02/26/2016	USA BLUEBOOK	CHK	O/S	\$444.82
33937	01/14/2016	VERIZON	CHK	CLR	\$214.99
34064	02/12/2016	VERIZON	CHK	CLR	\$214.99
33924	01/04/2016	VIDEOGUY PRODUCTIONS	CHK	CLR	\$500.00
33991	01/14/2016	VIDEOGUY PRODUCTIONS	CHK	CLR	\$2,700.00
34055	01/29/2016	VOLUNTARY EXTRA DUTY ACCOUNT	CHK	CLR	\$105.00
33952	01/14/2016	VOYAGER FLEET SYSTEMS, INC.	CHK	CLR	\$1,804.62
34079	02/12/2016	VOYAGER FLEET SYSTEMS, INC.	CHK	CLR	\$1,525.95
33934	01/14/2016	WOMACK SANITATION INC.	CHK	CLR	\$750.00
34062	02/12/2016	WOMACK SANITATION INC.	CHK	CLR	\$750.00
				Check Total	\$4,264,293.57

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

CHECK REGISTER: JANUARY & FEBRUARY 2016

By Amount Largest to Smallest

Bank Code:	PUBLIC FUNDS INTEREST CHECKING			Current Balance:	\$4,722,772.11
Document Number	Date	Payee Name / Description	Type	Status	Amount
34115	02/12/2016	SARASOTA COUNTY UTILITIES	CHK	CLR	\$885,340.00
34088	02/12/2016	CHARLOTTE COUNTY UTILITIES	CHK	CLR	\$426,353.84
34177	02/26/2016	PUBLIC RISK INSURANCE AGENCY	CHK	O/S	\$234,370.00
33959	01/14/2016	CHARLOTTE COUNTY UTILITIES	CHK	CLR	\$164,694.84
34091	02/12/2016	CITY OF NORTH PORT	CHK	O/S	\$147,946.00
34027	01/29/2016	FLORIDA POWER & LIGHT COMPANY	CHK	CLR	\$136,658.01
33905	01/04/2016	FLORIDA POWER & LIGHT COMPANY	CHK	CLR	\$131,729.27
34161	02/26/2016	FLORIDA POWER & LIGHT COMPANY	CHK	O/S	\$111,578.15
34092	02/12/2016	DESOTO COUNTY	CHK	CLR	\$102,705.33
34160	02/26/2016	FORSBERG CONSTRUCTION INC.	CHK	O/S	\$95,035.00
34078	02/12/2016	CALGON CARBON CORPORATION	CHK	CLR	\$78,600.00
34039	01/29/2016	C & S CHEMICALS INC.	CHK	CLR	\$71,680.27
34163	02/26/2016	HALFACRE CONSTRUCTION COMPANY	CHK	O/S	\$68,482.00
33961	01/14/2016	CHARLOTTE COUNTY BD OF COMMISS	CHK	CLR	\$67,310.21
34089	02/12/2016	CHARLOTTE COUNTY BD OF COMMISS	CHK	O/S	\$67,260.21
33933	01/14/2016	ALLIED UNIVERSAL CORP.	CHK	CLR	\$67,126.45
33963	01/14/2016	DESOTO COUNTY	CHK	CLR	\$66,333.33
34110	02/12/2016	C & S CHEMICALS INC.	CHK	CLR	\$66,203.77
33944	01/14/2016	MWH AMERICAS INC	CHK	CLR	\$60,451.33
34059	02/12/2016	ALLIED UNIVERSAL CORP.	CHK	CLR	\$58,973.66
33978	01/14/2016	NATURAL RESOURCES LLC	CHK	CLR	\$58,553.11
34171	02/26/2016	NATURAL RESOURCES LLC	CHK	O/S	\$46,805.90
34174	02/26/2016	C & S CHEMICALS INC.	CHK	O/S	\$40,969.36
33949	01/14/2016	CALGON CARBON CORPORATION	CHK	CLR	\$40,320.00
34132	02/26/2016	ALLIED UNIVERSAL CORP.	CHK	O/S	\$40,268.14
33896	01/04/2016	CALGON CARBON CORPORATION	CHK	CLR	\$40,220.00
33914	01/04/2016	C & S CHEMICALS INC.	CHK	CLR	\$36,794.60
33904	01/04/2016	CARTER & VERPLANCK INC	CHK	CLR	\$34,649.00
34025	01/29/2016	EARTH BALANCE	CHK	CLR	\$30,282.56
33876	01/04/2016	ALLIED UNIVERSAL CORP.	CHK	CLR	\$29,620.16
33906	01/04/2016	GARNEY COMPANIES INC.	CHK	CLR	\$28,233.00
PRTX12216	01/22/2016	BANK OF AMERICA-TAX EXPRESS	CHK	CLR	\$27,157.66
PRTX1816	01/08/2016	BANK OF AMERICA-TAX EXPRESS	CHK	CLR	\$26,383.40
PRTX2/5/16	02/05/2016	BANK OF AMERICA-TAX EXPRESS	CHK	CLR	\$24,838.94
PRTX21916	02/19/2016	BANK OF AMERICA-TAX EXPRESS	CHK	CLR	\$23,974.92
34065	02/12/2016	HACH COMPANY	CHK	CLR	\$23,397.70
FRSFEB16	02/29/2016	FLORIDA DIVISION OF RETIREMENT	CHK	O/S	\$22,464.26
JAN16FRS	01/29/2016	FLORIDA DIVISION OF RETIREMENT	CHK	CLR	\$20,524.11
33977	01/14/2016	MANSON BOLVES DONALDSON, P.A.	CHK	CLR	\$18,457.79
34053	01/29/2016	UNITED SYSTEMS COMPUTER GROUP	CHK	CLR	\$17,385.09
34169	02/26/2016	MANSON BOLVES DONALDSON, P.A.	CHK	O/S	\$15,497.12
34005	01/29/2016	U.S. WATER SERVICES CORPORATION	CHK	CLR	\$15,053.63
33884	01/04/2016	HDR ENGINEERING INC.	CHK	CLR	\$14,120.91
33923	01/04/2016	UNITED SYSTEMS COMPUTER GROUP	CHK	CLR	\$13,662.26
34050	01/29/2016	TKW CONSULTING ENGINEERS, INC.	CHK	CLR	\$12,644.70
34167	02/26/2016	KING ENGINEERING ASSOCIATES INC.	CHK	O/S	\$11,975.35
33983	01/14/2016	RANCH PROPERTY HOLDINGS LLC	CHK	CLR	\$11,972.90
34114	02/12/2016	RANCH PROPERTY HOLDINGS LLC	CHK	O/S	\$11,972.90
34159	02/26/2016	FORT BEND SERVICES, INC.	CHK	O/S	\$11,776.00
33886	01/04/2016	U.S. WATER SERVICES CORPORATION	CHK	CLR	\$11,504.88
33996	01/29/2016	ALLIED UNIVERSAL CORP.	CHK	CLR	\$10,625.84
34158	02/26/2016	EARTH BALANCE	CHK	O/S	\$9,538.75
33968	01/14/2016	AIRGAS SPECIALTY PRODUCTS	CHK	CLR	\$8,564.94
33879	01/04/2016	FISHER SCIENTIFIC	CHK	CLR	\$8,546.65
33980	01/14/2016	ATKINS NORTH AMERICA, INC.	CHK	CLR	\$7,926.97

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

CHECK REGISTER: JANUARY & FEBRUARY 2016

By Amount Largest to Smallest

Bank Code:		PUBLIC FUNDS INTEREST CHECKING		Current Balance:		\$4,722,772.11
Document Number	Date	Payee Name / Description	Type	Status	Amount	
34043	01/29/2016	PROGRESSIVE WATER RESOURCES, L	CHK	CLR	\$7,536.11	
34112	02/12/2016	PROGRESSIVE WATER RESOURCES, L	CHK	O/S	\$7,500.00	
34096	02/12/2016	HVM, LLC	CHK	CLR	\$7,152.62	
34054	01/29/2016	UNITED STATES GEOLOGICAL SURVEY	CHK	CLR	\$7,025.00	
34035	01/29/2016	M&M CONTRACTORS INC.	CHK	CLR	\$6,608.01	
33969	01/14/2016	HVM, LLC	CHK	CLR	\$6,562.10	
34019	01/29/2016	CHARLOTTE COUNTY BCC - EES	CHK	CLR	\$6,351.72	
34155	02/26/2016	BENCHMARK ENVIROANALYTICAL INC	CHK	O/S	\$5,935.85	
34140	02/26/2016	U.S. WATER SERVICES CORPORATION	CHK	O/S	\$5,797.12	
34011	01/29/2016	HUDSON PUMP	CHK	CLR	\$5,647.92	
33903	01/04/2016	CH2M HILL ENGINEERS INC.	CHK	CLR	\$5,381.38	
33960	01/14/2016	CHARLOTTE COUNTY BCC - EES	CHK	CLR	\$4,854.39	
33935	01/14/2016	ROSEMOUNT INC.	CHK	CLR	\$4,698.02	
33962	01/14/2016	DILLER-BROWN & ASSOC. INC.	CHK	CLR	\$4,457.47	
34106	02/12/2016	ATKINS NORTH AMERICA, INC.	CHK	CLR	\$4,350.61	
34020	01/29/2016	CORRPRO COMPANIES	CHK	CLR	\$4,200.00	
34095	02/12/2016	AIRGAS SPECIALTY PRODUCTS	CHK	CLR	\$4,193.42	
33999	01/29/2016	FISHER SCIENTIFIC	CHK	CLR	\$4,092.79	
34003	01/29/2016	HDR ENGINEERING INC.	CHK	CLR	\$4,023.77	
33947	01/14/2016	ENDRESS+HAUSER, INC.	CHK	CLR	\$3,827.47	
33928	01/14/2016	MAUDLIN & JENKINS CPA, LLC	CHK	CLR	\$3,815.85	
33902	01/04/2016	BENCHMARK ENVIROANALYTICAL INC	CHK	CLR	\$3,794.00	
33964	01/14/2016	DIANE R. SALZ	CHK	CLR	\$3,750.00	
34093	02/12/2016	DIANE R. SALZ	CHK	CLR	\$3,750.00	
33915	01/04/2016	RAY PILON	CHK	CLR	\$3,750.00	
34040	01/29/2016	RAY PILON	CHK	CLR	\$3,750.00	
34102	02/12/2016	M&M CONTRACTORS INC.	CHK	O/S	\$3,729.90	
34164	02/26/2016	HYDRA SERVICES INC.	CHK	O/S	\$3,702.00	
33926	01/14/2016	CORPORATE INTERIORS INC	CHK	CLR	\$3,624.74	
33878	01/04/2016	CITY OF PUNTA GORDA	CHK	CLR	\$3,500.00	
33958	01/14/2016	BENCHMARK ENVIROANALYTICAL INC	CHK	CLR	\$3,426.80	
34063	02/12/2016	FISHER SCIENTIFIC	CHK	CLR	\$3,344.45	
34017	01/29/2016	BENCHMARK ENVIROANALYTICAL INC	CHK	CLR	\$3,249.90	
33940	01/14/2016	HACH COMPANY	CHK	CLR	\$3,210.06	
33965	01/14/2016	EARTH BALANCE	CHK	CLR	\$3,087.25	
34080	02/12/2016	USA BLUEBOOK	CHK	CLR	\$3,004.56	
34137	02/26/2016	HACH COMPANY	CHK	O/S	\$2,969.12	
33911	01/04/2016	MOCK ENGINEERING, INCORPORATED	CHK	CLR	\$2,921.79	
33895	01/04/2016	CUMMINS POWER SOUTH	CHK	CLR	\$2,776.83	
33893	01/04/2016	NATIONWIDE RETIREMENT SOLUTION	CHK	CLR	\$2,734.07	
33948	01/14/2016	NATIONWIDE RETIREMENT SOLUTION	CHK	CLR	\$2,734.07	
34010	01/29/2016	NATIONWIDE RETIREMENT SOLUTION	CHK	CLR	\$2,734.07	
34077	02/12/2016	NATIONWIDE RETIREMENT SOLUTION	CHK	CLR	\$2,734.07	
34146	02/26/2016	NATIONWIDE RETIREMENT SOLUTION	CHK	O/S	\$2,734.07	
34074	02/12/2016	BARNEY'S PUMPS INC.	CHK	CLR	\$2,728.00	
33955	01/14/2016	ARGILA ENTERPRISES, INC.	CHK	CLR	\$2,700.00	
33991	01/14/2016	VIDEOGUY PRODUCTIONS	CHK	CLR	\$2,700.00	
34084	02/12/2016	ALLIED ELECTRONICS, INC.	CHK	CLR	\$2,699.27	
34147	02/26/2016	HUDSON PUMP	CHK	O/S	\$2,693.88	
34119	02/12/2016	SOLARES CONTROLS	CHK	CLR	\$2,586.17	
34105	02/12/2016	MOTE MARINE LABORATORY	CHK	CLR	\$2,549.36	
33931	01/14/2016	RYAN HERCO PRODUCTS CORP.	CHK	CLR	\$2,546.40	
34183	02/26/2016	TRINOVA-FLORIDA	CHK	O/S	\$2,523.20	
34045	01/29/2016	SHEARER CONSULTING INC.	CHK	CLR	\$2,500.00	
34116	02/12/2016	SHEARER CONSULTING INC.	CHK	O/S	\$2,500.00	

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

CHECK REGISTER: JANUARY & FEBRUARY 2016

By Amount Largest to Smallest

Bank Code:	PUBLIC FUNDS INTEREST CHECKING			Current Balance:	\$4,722,772.11
Document Number	Date	Payee Name / Description	Type	Status	Amount
34087	02/12/2016	BENCHMARK ENVIROANALYTICAL INC	CHK	CLR	\$2,427.80
33938	01/14/2016	PAGE MECHANICAL GROUP, INC.	CHK	CLR	\$2,419.00
34130	02/26/2016	RYAN HERCO PRODUCTS CORP.	CHK	O/S	\$2,350.80
34134	02/26/2016	FISHER SCIENTIFIC	CHK	O/S	\$2,344.50
34085	02/12/2016	ARGILA ENTERPRISES, INC.	CHK	CLR	\$2,250.00
34113	02/12/2016	RING POWER CORPORATION	CHK	CLR	\$2,250.00
34067	02/12/2016	MCMASTER-CARR SUPPLY CO	CHK	CLR	\$2,161.35
34117	02/12/2016	SOUTHWEST MOBILE MECHANIC	CHK	CLR	\$2,075.00
33927	01/14/2016	MSC INDUSTRIAL SUPPLY CO.	CHK	CLR	\$2,064.15
34000	01/29/2016	HACH COMPANY	CHK	CLR	\$2,053.66
33988	01/14/2016	TRINOVA-FLORIDA	CHK	CLR	\$2,051.40
34022	01/29/2016	DESOTO COUNTY WATER UTILITY	CHK	CLR	\$1,950.18
34056	02/12/2016	MSC INDUSTRIAL SUPPLY CO.	CHK	CLR	\$1,930.17
33975	01/14/2016	KEETON'S OFFICE & ART SUPPLY	CHK	CLR	\$1,922.34
34151	02/26/2016	CENTURYLINK	CHK	O/S	\$1,898.60
34014	01/29/2016	CENTURYLINK	CHK	CLR	\$1,879.01
34149	02/26/2016	GRAINGER	CHK	O/S	\$1,814.00
33952	01/14/2016	VOYAGER FLEET SYSTEMS, INC.	CHK	CLR	\$1,804.62
34023	01/29/2016	DMK ASSOCIATES	CHK	CLR	\$1,800.00
33885	01/04/2016	BUSINESS CARD	CHK	CLR	\$1,774.77
34145	02/26/2016	BUSINESS CARD	CHK	O/S	\$1,753.97
33973	01/14/2016	JOHNSON ENGINEERING, INC.	CHK	CLR	\$1,725.00
33966	01/14/2016	FLUID CONTROL SPECIALTIES, INC.	CHK	CLR	\$1,695.56
34032	01/29/2016	JOHNSON ENGINEERING, INC.	CHK	CLR	\$1,682.50
34142	02/26/2016	TRANSCAT, INC.	CHK	O/S	\$1,576.91
33899	01/04/2016	CENTURYLINK	CHK	CLR	\$1,565.08
34028	01/29/2016	FLORIDA TECHNICAL PRODUCTS, INC.	CHK	CLR	\$1,546.63
34079	02/12/2016	VOYAGER FLEET SYSTEMS, INC.	CHK	CLR	\$1,525.95
34176	02/26/2016	DEX IMAGING	CHK	O/S	\$1,513.64
34052	01/29/2016	U.S. BANK EQUIPMENT FINANCE	CHK	CLR	\$1,481.96
34156	02/26/2016	DMK ASSOCIATES	CHK	O/S	\$1,370.00
33910	01/04/2016	KING ENGINEERING ASSOCIATES INC.	CHK	CLR	\$1,355.95
34143	02/26/2016	FLUID CONTROL SPECIALTIES, INC.	CHK	O/S	\$1,350.85
33972	01/14/2016	JAN-PRO CLEANING SYSTEMS OF SW	CHK	CLR	\$1,237.50
34069	02/12/2016	HDR ENGINEERING INC.	CHK	CLR	\$1,229.50
33979	01/14/2016	SOLINST CANADA LTD	CHK	CLR	\$1,201.76
33889	01/04/2016	SUNBELT RENTALS	CHK	CLR	\$1,197.02
33875	01/04/2016	CIMTEC AUTOMATION, LLC	CHK	CLR	\$1,184.00
33916	01/04/2016	DEX IMAGING	CHK	CLR	\$1,180.11
34121	02/12/2016	TRINOVA-FLORIDA	CHK	CLR	\$1,175.00
34124	02/12/2016	U.S. BANK EQUIPMENT FINANCE	CHK	CLR	\$1,119.61
34073	02/12/2016	TRANSCAT, INC.	CHK	CLR	\$1,064.74
34033	01/29/2016	KEETON'S OFFICE & ART SUPPLY	CHK	CLR	\$1,055.83
33936	01/14/2016	FISHER SCIENTIFIC	CHK	CLR	\$1,053.05
34008	01/29/2016	BUSINESS CARD	CHK	CLR	\$1,009.17
34101	02/12/2016	KEETON'S OFFICE & ART SUPPLY	CHK	CLR	\$1,003.18
34100	02/12/2016	JOHNSON ENGINEERING, INC.	CHK	CLR	\$1,002.50
34165	02/26/2016	JAN-PRO CLEANING SYSTEMS OF SW	CHK	O/S	\$995.00
33880	01/04/2016	HACH COMPANY	CHK	CLR	\$965.46
33890	01/04/2016	BUSINESS CARD	CHK	CLR	\$923.74
33939	01/14/2016	ANIXTER POWER SOLUTIONS, LLC	CHK	CLR	\$922.53
34170	02/26/2016	KEVIN MORRIS	CHK	O/S	\$899.39
7538	01/04/2016	Caleb L. Clark	CHK	CLR	\$898.01
34131	02/26/2016	AA ELECTRIC SE INC.	CHK	O/S	\$889.75
33922	01/04/2016	U.S. BANK EQUIPMENT FINANCE	CHK	CLR	\$880.80

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

CHECK REGISTER: JANUARY & FEBRUARY 2016

By Amount Largest to Smallest

Bank Code:	PUBLIC FUNDS INTEREST CHECKING			Current Balance:	\$4,722,772.11
Document Number	Date	Payee Name / Description	Type	Status	Amount
33897	01/04/2016	DESOTO AUTOMALL	CHK	CLR	\$855.87
33951	01/14/2016	GRAINGER	CHK	CLR	\$853.40
33992	01/29/2016	PRO-CHEM INC.	CHK	CLR	\$850.31
33981	01/14/2016	PMC ENGINEERING LLC	CHK	CLR	\$846.74
34030	01/29/2016	THE GLOVER PARK GROUP LLC	CHK	CLR	\$810.25
34187	02/26/2016	UNITED SYSTEMS COMPUTER GROUP	CHK	O/S	\$785.00
33908	01/04/2016	JOHN MEASEL CABINETS	CHK	CLR	\$771.03
34006	01/29/2016	FEI-FT.MYERS WATERWORKS #127	CHK	CLR	\$769.37
33943	01/14/2016	HDR ENGINEERING INC.	CHK	CLR	\$767.90
34166	02/26/2016	KEETON'S OFFICE & ART SUPPLY	CHK	O/S	\$753.48
33987	01/14/2016	THE BANK OF NEW YORK MELLON	CHK	CLR	\$750.00
33934	01/14/2016	WOMACK SANITATION INC.	CHK	CLR	\$750.00
34062	02/12/2016	WOMACK SANITATION INC.	CHK	CLR	\$750.00
34178	02/26/2016	PROSHRED SECURITY	CHK	O/S	\$749.00
34139	02/26/2016	BUSINESS CARD	CHK	O/S	\$730.18
33919	01/04/2016	SUNCOAST COMMERCIAL DOOR & HAR	CHK	CLR	\$711.63
33887	01/04/2016	AIR CENTERS-FLORIDA	CHK	CLR	\$708.05
33888	01/04/2016	FEI-FT.MYERS WATERWORKS #127	CHK	CLR	\$665.00
33917	01/04/2016	STATE OF FLORIDA DISBURSEMENT U	CHK	CLR	\$652.44
33984	01/14/2016	STATE OF FLORIDA DISBURSEMENT U	CHK	CLR	\$652.44
34046	01/29/2016	STATE OF FLORIDA DISBURSEMENT U	CHK	CLR	\$652.44
34118	02/12/2016	STATE OF FLORIDA DISBURSEMENT U	CHK	CLR	\$652.44
34179	02/26/2016	STATE OF FLORIDA DISBURSEMENT U	CHK	O/S	\$652.44
33954	01/14/2016	COUGAR MOUNTAIN SOFTWARE	CHK	CLR	\$650.00
34099	02/12/2016	JET AUTO SERVICE	CHK	CLR	\$647.90
33985	01/14/2016	SOLARES CONTROLS	CHK	CLR	\$622.14
34016	01/29/2016	BATES FLAGS AND FLAGPOLES LLC	CHK	CLR	\$599.94
33898	01/04/2016	GRAINGER	CHK	CLR	\$587.52
34135	02/26/2016	PAGE MECHANICAL GROUP, INC.	CHK	O/S	\$578.65
34104	02/12/2016	MAIN GATE ENTERPRISES INC.	CHK	CLR	\$569.66
33974	01/14/2016	J. H. HAM ENGINEERING INC.	CHK	CLR	\$560.00
33920	01/04/2016	TRACTOR SUPPLY COMPANY	CHK	CLR	\$554.97
34129	02/26/2016	CIMTEC AUTOMATION, LLC	CHK	O/S	\$547.24
33925	01/14/2016	PRO-CHEM INC.	CHK	CLR	\$543.13
34018	01/29/2016	BV OIL COMPANY, INC.	CHK	CLR	\$521.30
33989	01/14/2016	UNIVERSITY OF FL. WATER INSTITUTE	CHK	CLR	\$500.00
33924	01/04/2016	VIDEOGUY PRODUCTIONS	CHK	CLR	\$500.00
34098	02/12/2016	JAN-PRO CLEANING SYSTEMS OF SW	CHK	CLR	\$495.00
34090	02/12/2016	CH2M HILL ENGINEERS INC.	CHK	CLR	\$494.59
34126	02/26/2016	MSC INDUSTRIAL SUPPLY CO.	CHK	O/S	\$450.40
33945	01/14/2016	FEI-FT.MYERS WATERWORKS #127	CHK	CLR	\$448.49
34071	02/12/2016	STAPLES ADVANTAGE	CHK	CLR	\$447.06
34012	01/29/2016	SAM'S CLUB	CHK	CLR	\$445.98
34150	02/26/2016	USA BLUEBOOK	CHK	O/S	\$444.82
34001	01/29/2016	KINGSWAY ACE HARDWARE	CHK	CLR	\$420.49
34144	02/26/2016	BUSINESS CARD	CHK	O/S	\$401.13
34168	02/26/2016	MAIN GATE ENTERPRISES INC.	CHK	O/S	\$399.63
34051	01/29/2016	UPS	CHK	CLR	\$399.02
34021	01/29/2016	CERTAIN WATER SERVICE, INC.	CHK	CLR	\$397.06
33892	01/04/2016	EUROFINS EATON ANALYTICAL, INC.	CHK	CLR	\$395.00
34076	02/12/2016	EUROFINS EATON ANALYTICAL, INC.	CHK	CLR	\$395.00
34031	01/29/2016	JET AUTO SERVICE	CHK	CLR	\$390.07
33907	01/04/2016	SARASOTA CHAMBER OF COMMERCE	CHK	CLR	\$371.00
34186	02/26/2016	U.S. BANK EQUIPMENT FINANCE	CHK	O/S	\$362.35
33882	01/04/2016	BUSINESS CARD	CHK	CLR	\$351.54

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

CHECK REGISTER: JANUARY & FEBRUARY 2016

By Amount Largest to Smallest

Bank Code:		PUBLIC FUNDS INTEREST CHECKING		Current Balance:		\$4,722,772.11
Document Number	Date	Payee Name / Description	Type	Status	Amount	
34107	02/12/2016	MAC PAPERS	CHK	CLR	\$338.90	
34172	02/26/2016	SOLINST CANADA LTD	CHK	O/S	\$323.92	
34123	02/12/2016	UPS	CHK	CLR	\$322.51	
34153	02/26/2016	ALLIED ELECTRONICS, INC.	CHK	O/S	\$308.16	
34136	02/26/2016	BOB DEAN SUPPLY INC	CHK	O/S	\$303.10	
33891	01/04/2016	MAILFINANCE	CHK	CLR	\$299.61	
34024	01/29/2016	DISCOUNT TELECOMMUNICATIONS	CHK	CLR	\$295.00	
33953	01/14/2016	USA BLUEBOOK	CHK	CLR	\$287.39	
34148	02/26/2016	SAM'S CLUB	CHK	O/S	\$285.81	
34042	01/29/2016	ALL AMERICAN CONTAINERS-MIAMI	CHK	CLR	\$285.12	
34162	02/26/2016	FLORIDA RURAL WATER ASSOCIATIO	CHK	O/S	\$280.00	
33942	01/14/2016	HOME DEPOT	CHK	CLR	\$272.39	
33912	01/04/2016	NATIONAL BUSINESS FURNITURE, LLC	CHK	CLR	\$267.20	
33946	01/14/2016	TRANSCAT, INC.	CHK	CLR	\$263.29	
33930	01/14/2016	DMS-FINANCIAL MGMT SERVICES	CHK	CLR	\$261.36	
33993	01/29/2016	BLUSITE SOLUTIONS OF SOUTHWEST	CHK	CLR	\$258.00	
34125	02/26/2016	BLUSITE SOLUTIONS OF SOUTHWEST	CHK	O/S	\$258.00	
33873	01/04/2016	SUNCOAST PORTABLE SANITATION IN	CHK	CLR	\$258.00	
34083	02/12/2016	ACE MENTOR SARASOTA	CHK	O/S	\$250.00	
33971	01/14/2016	JAN-PRO OF MANASOTA	CHK	CLR	\$249.00	
34097	02/12/2016	JAN-PRO OF MANASOTA	CHK	CLR	\$249.00	
34070	02/12/2016	FENDER'S TIRE & BATTERY INC.	CHK	CLR	\$246.00	
33995	01/29/2016	CINTAS	CHK	CLR	\$237.82	
33874	01/04/2016	CINTAS	CHK	CLR	\$235.68	
34122	02/12/2016	TRACTOR SUPPLY COMPANY	CHK	O/S	\$229.99	
34127	02/26/2016	CINTAS	CHK	O/S	\$227.54	
34029	01/29/2016	FW&PCOA	CHK	CLR	\$225.00	
34184	02/26/2016	TRACTOR SUPPLY COMPANY	CHK	O/S	\$223.90	
33937	01/14/2016	VERIZON	CHK	CLR	\$214.99	
34064	02/12/2016	VERIZON	CHK	CLR	\$214.99	
34133	02/26/2016	THE SUN	CHK	O/S	\$214.44	
34141	02/26/2016	SARASOTA HERALD TRIBUNE	CHK	O/S	\$211.75	
34154	02/26/2016	ALL FLORIDA WATER-TAMPA	CHK	O/S	\$211.58	
34049	01/29/2016	Tamiami Art & Frame	CHK	CLR	\$206.43	
34075	02/12/2016	QUALITY STARTER & ALT SER INC.	CHK	CLR	\$202.90	
33970	01/14/2016	ISA CCST PROGRAM	CHK	CLR	\$200.00	
33950	01/14/2016	TOTALFUNDS BY HASLER	CHK	CLR	\$200.00	
33921	01/04/2016	UPS	CHK	CLR	\$197.77	
34081	02/12/2016	CHARLOTTE CO. CHAM OF COMMERC	CHK	CLR	\$197.00	
34068	02/12/2016	HOME DEPOT	CHK	CLR	\$195.60	
34057	02/12/2016	DMS-FINANCIAL MGMT SERVICES	CHK	O/S	\$194.51	
34034	01/29/2016	LINDA STEWART	CHK	CLR	\$173.65	
33994	01/29/2016	MSC INDUSTRIAL SUPPLY CO.	CHK	CLR	\$170.79	
34138	02/26/2016	KINGSWAY ACE HARDWARE	CHK	O/S	\$153.89	
34044	01/29/2016	SECURITY ALARM CORP-USA	CHK	CLR	\$150.00	
33894	01/04/2016	ULINE	CHK	CLR	\$137.54	
34072	02/12/2016	SARASOTA HERALD TRIBUNE	CHK	CLR	\$137.50	
33883	01/04/2016	HOME DEPOT	CHK	CLR	\$135.22	
34128	02/26/2016	DMS-FINANCIAL MGMT SERVICES	CHK	O/S	\$134.46	
34002	01/29/2016	BUSINESS CARD	CHK	CLR	\$131.38	
34157	02/26/2016	DOMINION EXTERMINATORS	CHK	O/S	\$130.00	
33900	01/04/2016	ALLIANCE FIRE & SAFETY	CHK	CLR	\$113.75	
34015	01/29/2016	HELLING - BATTERIES PLUS	CHK	CLR	\$109.71	
33986	01/14/2016	THE SHIPPING POST	CHK	CLR	\$109.62	
33929	01/14/2016	TRULY NOLEN BRANCH 079	CHK	CLR	\$108.00	

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

CHECK REGISTER: JANUARY & FEBRUARY 2016

By Amount Largest to Smallest

Bank Code: PUBLIC FUNDS INTEREST CHECKING **Current Balance:** \$4,722,772.11

Document Number	Date	Payee Name / Description	Type	Status	Amount
34055	01/29/2016	VOLUNTARY EXTRA DUTY ACCOUNT	CHK	CLR	\$105.00
34182	02/26/2016	TKW CONSULTING ENGINEERS, INC.	CHK	O/S	\$100.50
33967	01/14/2016	FLORIDA ENGINEERING FOUNDATION	CHK	CLR	\$100.00
34007	01/29/2016	SARASOTA HERALD TRIBUNE	CHK	CLR	\$93.50
33881	01/04/2016	KINGSWAY ACE HARDWARE	CHK	CLR	\$91.95
33909	01/04/2016	KEETON'S OFFICE & ART SUPPLY	CHK	CLR	\$90.93
33901	01/04/2016	AWWA	CHK	CLR	\$90.00
33956	01/14/2016	AWWA	CHK	CLR	\$90.00
34026	01/29/2016	FLORIDA LEAGUE OF CITIES, INC.	CHK	CLR	\$90.00
34048	01/29/2016	STRATEGIC PEST CONTROL OF SW FL	CHK	CLR	\$85.00
34152	02/26/2016	ADVANTAGE CARE INC.	CHK	O/S	\$80.00
34004	01/29/2016	SPECIALTY PARTS	CHK	CLR	\$66.23
34185	02/26/2016	UPS	CHK	O/S	\$62.12
33997	01/29/2016	THE SUN	CHK	CLR	\$58.63
34066	02/12/2016	KINGSWAY ACE HARDWARE	CHK	CLR	\$58.60
33957	01/14/2016	BILL'S BOTTLED WATER SERVI CE	CHK	CLR	\$53.25
33976	01/14/2016	LINDA BURKE	CHK	CLR	\$50.60
33982	01/14/2016	SUNSHINE STATE ONE CALL OF FL, IN	CHK	CLR	\$44.34
34175	02/26/2016	SUNSHINE STATE ONE CALL OF FL, IN	CHK	O/S	\$44.34
34120	02/12/2016	THE SHIPPING POST	CHK	CLR	\$43.25
34094	02/12/2016	FLORIDA RURAL WATER ASSOCIATIO	CHK	O/S	\$35.00
34013	01/29/2016	USA BLUEBOOK	CHK	CLR	\$33.87
34181	02/26/2016	SARASOTA TROPHY & AWARDS INC.	CHK	O/S	\$31.00
34086	02/12/2016	BILL'S BOTTLED WATER SERVI CE	CHK	CLR	\$29.25
34082	02/12/2016	FLORIDA DEPARTMENT OF STATE	CHK	CLR	\$28.84
33941	01/14/2016	KINGSWAY ACE HARDWARE	CHK	CLR	\$25.53
33918	01/04/2016	THE SHIPPING POST	CHK	CLR	\$25.41
34103	02/12/2016	MANATEE COUNTY SHERIFF	CHK	CLR	\$25.00
33877	01/04/2016	FEDERAL EXPRESS	CHK	CLR	\$19.60
33998	01/29/2016	AIRGAS USA, LLC	CHK	CLR	\$18.58
34061	02/12/2016	AIRGAS USA, LLC	CHK	CLR	\$18.58
34060	02/12/2016	FEDERAL EXPRESS	CHK	CLR	\$11.10
33990	01/14/2016	UPS	CHK	CLR	\$10.21
34047	01/29/2016	THE SHIPPING POST	CHK	CLR	\$9.57
34009	01/29/2016	BUSINESS CARD	CHK	CLR	\$9.10
34041	01/29/2016	DEX IMAGING	CHK	CLR	\$8.00
34111	02/12/2016	DEX IMAGING	CHK	CLR	\$8.00
34180	02/26/2016	THE SHIPPING POST	CHK	O/S	\$3.42
33932	01/14/2016	ALLIED UNIVERSAL CORP.	CHK	VOID	\$0.00
34058	02/12/2016	ALLIED UNIVERSAL CORP.	CHK	VOID	\$0.00
33913	01/04/2016	C & S CHEMICALS INC.	CHK	VOID	\$0.00
34036	01/29/2016	C & S CHEMICALS INC.	CHK	VOID	\$0.00
34037	01/29/2016	C & S CHEMICALS INC.	CHK	VOID	\$0.00
34038	01/29/2016	C & S CHEMICALS INC.	CHK	VOID	\$0.00
34108	02/12/2016	C & S CHEMICALS INC.	CHK	VOID	\$0.00
34109	02/12/2016	C & S CHEMICALS INC.	CHK	VOID	\$0.00

Check Total **\$4,264,293.57**

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
CHECK REGISTER: JANUARY & FEBRUARY 2016

Bank	REGIONAL EXP CONST			Current	\$588,048.89
Document	Date	Payee Name / Description	Type	Status	Amount
2289	01/04/2016	BLACK & VEATCH	CHK	CLR	\$4,680.00
2290	01/29/2016	MAGNUM BUILDERS OF SARASOTA INC	CHK	CLR	\$111,903.61
2291	01/29/2016	AECOM TECHNICAL SERVICES, INC.	CHK	CLR	\$7,532.00
2292	01/29/2016	BLACK & VEATCH	CHK	CLR	\$3,320.00
2293	02/26/2016	BLACK & VEATCH	CHK	O/S	\$11,895.09
				Check Total	\$139,330.70

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
CHECK REGISTER: JANUARY & FEBRUARY 2016
Alphabetically by Vendor

Bank	REGIONAL EXP CONST			Current	\$588,048.89
Documen	Date	Payee Name / Description	Type	Status	Amount
2291	01/29/2016	AECOM TECHNICAL SERVICES, INC.	CHK	CLR	\$7,532.00
2289	01/04/2016	BLACK & VEATCH	CHK	CLR	\$4,680.00
2292	01/29/2016	BLACK & VEATCH	CHK	CLR	\$3,320.00
2293	02/26/2016	BLACK & VEATCH	CHK	O/S	\$11,895.09
2290	01/29/2016	MAGNUM BUILDERS OF SARASOTA INC	CHK	CLR	\$111,903.61
				Check Total	\$139,330.70

PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY

CHECK REGISTER: JANUARY & FEBRUARY 2016

By Amount Largest to Smallest

Bank	REGIONAL EXP CONST			Current	\$588,048.89
Document	Date	Payee Name / Description	Type	Status	Amount
2290	01/29/2016	MAGNUM BUILDERS OF SARASOTA INC	CHK	CLR	\$111,903.61
2293	02/26/2016	BLACK & VEATCH	CHK	O/S	\$11,895.09
2291	01/29/2016	AECOM TECHNICAL SERVICES, INC.	CHK	CLR	\$7,532.00
2289	01/04/2016	BLACK & VEATCH	CHK	CLR	\$4,680.00
2292	01/29/2016	BLACK & VEATCH	CHK	CLR	\$3,320.00
				Check Total	\$139,330.70

***PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
April 6, 2016***

**ROUTINE STATUS REPORTS
ITEM 3**

**Regional Integrated Loop System
Phase 1 Interconnect [U.S. 17 to Punta Gorda]**

Project Status Report

Project: Regional Integrated Loop System Phase 1 Interconnect Pipeline Project
[U.S. 17 to Punta Gorda]

Date: April 6, 2016

Prepared by: Ford Ritz, P.E., Project Engineer

The following information summarizes the project description and current status. (see attached conceptual pipe route map).

Project Description

The Phase 1 Interconnect will provide a plant-to-plant connection between the Peace River Facility in DeSoto County with the Punta Gorda Shell Creek Water Treatment Plant in Charlotte County. The project will support the City in meeting drinking water quality requirements through blending with regional supply, provide back-up water supply to the DeSoto County system, and improve regional and local water supply system reliability. The project is envisioned to delivery up to 4-million gallons per day (mgd) of regional finished water from the to the City's Shell Creek WTP and to receive up to 2-mgd from the City Shell Creek WTP.

The estimated project cost is \$12-million. The design and construction schedule is estimated to be 30 to 36 months from start to finish.

The project scope includes:

- Approximately 6.3 miles of a minimum of 24-inch diameter pipeline
- 1,100-ft of HDPE directional drill across Shell Creek (evaluated during design)
- Metering/SCADA and telemetry at connection facilities
- Need for pumping and storage facilities (evaluated during design)
- Conceptual route(s) (evaluated during design).

As currently envisioned, the Phase 1 Interconnect begins at the terminus of the regional system's DeSoto Regional Transmission Main on U.S. 17 at the DeSoto/Charlotte County line, continues south along U.S. 17, east and south along Washington Loop Road, along an abandoned railroad corridor, and across Shell Creek to the City's Shell Creek WTP. Refer to the attached conceptual route map.

Current status

The Phase 1 Interconnect was Board approved for Design by King Engineering Associates, Inc. on February 25, 2016. The Notice-to-Proceed for Work Order 1- Preliminary Design Services/Basis of Design Report was issued to King on March 5, 2016 subsequent to execution of the Cooperative Funding Agreement between the SWFWMD and the Authority. The Project Kick Off Meeting was held on March 15, 2016.

Project History Briefing

Project: Regional Integrated Loop System Phase 1 Interconnect Pipeline Project
[U.S. 17 to Punta Gorda]

Date: April 6, 2016

Prepared by: Ford Ritz, P.E., Project Engineer

The following information summarizes the historical milestones and events of the Regional Integrated Loop System Phase 1 Interconnect.

- July 24, 2015 The Authority Advertised for Consultant Statement of Qualifications (SOQs) for engineering design and construction management services for the Phase 1 Regional Interconnect Pipeline Project.
- August 25, 2015 Deadline for consultant SOQ package. Five SOQ packages were timely received by the following:
 - Atkins North America, Inc.
 - Johnson Engineering, Inc.
 - Kimley Horn and Associates, Inc.
 - King Engineering Associates, Inc.
 - TKW Consulting Engineers, Inc.
- August 28, 2015 Electronic Copies of the SOQ Packages were distributed to member and customer utility directors and the SWFWMD for feedback or comments. Feedback was requested by September 14, 2015.
- September 22, 2015 A short list of three Consultants were listed in alphabetical order and posted on the Authority Web Site.
 - Atkins North America, Inc.
 - King Engineering Associates, Inc.
 - TKW Consulting Engineers, Inc.
- October 7, 2015 Short listed consultants gave their presentations and were interviewed by the Authority Board. King Engineering Associates, Inc. was selected by the Board for the Phase 1 Project.

- December 2, 2015 The Authority Board approved the Interlocal Agreement for the Phase 1 Regional Interconnect Between the PRMRWSA and the City of Punta Gorda.
- December 2, 2015 The Consent Request for approval of the The Authority/Punta Gorda Phase 1 Interconnect Project was submitted to the Charlotte County Board of County Commissioners.
- February 23, 2016 Charlotte County Board of County Commissioners granted Consent for the Phase 1 Interconnect Project.
- February 25, 2016 The Authority Board (Special Board Meeting)Approved thefollowing:
 - The Interlocal Agreement between PRMRWSA and DeSoto County for the Phase 1 Regional Interconnect.
 - The Cooperative Funding Agreement between the SWFWMD and PRMRWSA for the Phase 1 Regional Interconnect for a total of \$12 million. Subdivided into Punta Gorda payment of \$2 million, State Appropriations of \$4 million and SWFWMD Cooperative Funding of of \$6 million.
 - The Contract for Professional Engineering Services for Design and Construction Management/Inspection for the Phase 1 Regional Interconnect with King Engineering Associates, Inc. King).
 - Work Order No. 1 for Preliminary Design Services of Phase 1 with King in the amount of \$278,760. The effort for completion of Work Order 1 is 180-calendar days from the Notice-to-Proceed date.
- March 5, 2016 Pending execution of the Cooperative Funding Agreement between the SWFWMD and PRMRWSA for the Phase 1 Regional Interconnect the Notice-to-Proceed was issued to King for Work Order 1, Preliminary Design Services.
- March 15, 2016 The Phase 1 Interconnect kickoff meeting was held at the Peace River Facility. The meeting was attended by Authority staff, SWFWMD, King and the City of Punta Gorda.

PHASE 1 CONCEPTUAL ROUTE

