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**Board of Directors**  
Dave Eggers  
Ron Oakley  
Harry Cohen  
Rob Marlowe  
Charlie Miranda  
Kathleen Peters  
Darden Rice  
Mariella Smith  
Kathryn Starkey

**Interim General Manager**  
Charles H. Carden

**General Counsel**  
Barrie S. Buenaventura  
*Conn & Buenaventura, P.A.*

## **BOARD AGENDA**

**September 20, 2021 – 9:30 AM**

### **REGULAR MEETING**

### **OPEN TO THE PUBLIC**

#### **PUBLIC COMMENT**

The Tampa Bay Water Board of Directors welcomes comments from the public about any issue of concern. Opinions provide valuable input to the board members. However, we request that public comments be directed to issues and not directed personally against any board member or staff member. This provides a mutual respect between the board members and the public. Any person wishing to speak at this time must have a completed speaker card submitted to the General Manager's Assistant at the dais prior to the beginning of the meeting. Each speaker shall have a maximum of three (3) minutes to address the Board on any matter on the agenda. When addressing the Board, please state your name, address and agenda item on which you wish to comment. Thank you.

The next Tampa Bay Water Regular Board Meeting is scheduled to be held on Monday, October 18, 2021 at 9:30 a.m.

#### **ACCOMMODATIONS**

Anyone requiring reasonable accommodations for this meeting as provided for in the Americans With Disabilities Act should contact the Records Department at 727-796-2355 x2401 or 813-996-7009 at least three working days prior to the public meeting. If a person decides to appeal any decision made by the Board, with respect to any matter considered at this meeting, he/she will need a record of the proceedings, and for such purposes, he/she may need to ensure that a verbatim record of the proceedings is made, such record includes the testimony and evidence upon which the appeal is to be based.





## Regular Meeting Agenda

MONDAY, SEPTEMBER 20, 2021 – 9:30 AM

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**9:30 AM - CALL TO ORDER**

**PLEDGE OF ALLEGIANCE**

**PUBLIC COMMENT - (3 Minutes per speaker)**

### **OTHER ADMINISTRATIVE MATTERS AND OLD BUSINESS**

General Manager Recruitment Board Discussion and Next Steps - *Approve*

### **AGENDA**

#### **A. CONSENT ITEMS**

- A.1 August 16, 2021 - Regular Meeting - Draft Agenda Minutes - *Approve*
- A.2 August 31, 2021 - Special Board Meeting - Draft Agenda Minutes - *Approve*
- A.3 Tampa Bay Water Performance Dashboard Update - *Receive Report*
- A.4 2020 Management and Performance Audit Task Report - *Receive Report*
- A.5 Agency Strategic Planning Update - *Receive Report*
- A.6 Agency 2023 Southwest Florida Water Management District Grant Funding Program - *Receive Report*
- A.7 2021-2022 Regulatory Plan - *Approve*
- A.8 Regional Water Supplies, Member Demands and Environmental Conditions - *Receive Report*
- A.9 South-Central Hillsborough County Memorandum of Understanding - *Receive Report*
- A.10 Water Quality Update - *Receive Report*
- A.11 Energy Management Program - *Receive Report*
- A.12 Capital Improvements Program - Task Order Authorization - *Approve*
- A.13 South Hillsborough Wellfield (via SHARP credits) Feasibility, Project No. 01611: Property Acquisition - *Receive Report*
- A.14 Cypress Creek Purchasing Warehouse Building Replacement, Project No. 06320, Wharton-Smith, Inc., Contract No. 2019-011 - Closeout - *Approve*
- A.15 Eldridge-Wilde Wellfield Powerline Project (50040), Purchase Order No. 20210318 - Construction Services Change Order #1 with Tampa Electric Company - *Approve*
- A.16 Third Amendment to As-Needed Engineering Services Contract No. 2017-020 with Arcadis US, Inc. to increase the contract limit in the amount of \$95,000 for continuation of Utility Conflict Resolution Services - *Approve*
- A.17 Professional Services for the Utility Locate Services, Contract No: 2021-043 - *Approve*
- A.18 Water Treatment Chemical Supply Services, Contract Nos. 2022-013, 2022-014 & 2022-



- 016 to the lowest responsive responsible Bidders - *Approve*
- A.19 As-Needed Source Water Quality Assessment and Protection Services Contracts 2020-013 thru 016 - First Amendments - *Approve*
- A.20 Agency Contract Renewals - *Approve*
- A.21 Special Counsel Current Assignments and Purchase Orders - *Approve*
- A.22 Procurement Exceptions Vendor Limits - *Approve*
- A.23 Fiscal Year 2021 Carry Forward and Transfers of Encumbered and Unencumbered Funds - *Approve*
- A.24 Fiscal Year 2022 Insurance Program for Liability, Auto, Property, Workers' Compensation and Other Coverage - *Approve*

## **REGULAR AGENDA**

### **B. GENERAL MANAGER & GENERAL COUNSEL**

- B.1 General Manager's Report - *Status Report*

### **C. ACTION ITEMS**

- C.1 Professional Services Contracts - As-Needed Hydrogeological Services Contract Nos. 2022-005 through 2022-009 - *Approve*
- C.2 Professional Services Contracts - As-Needed Professional Engineering Contract Nos. 2021-027 through 2021-038 - *Approve*
- C.3 Capital Improvements Program: Integrated Program Manager Consultant Professional Engineering Services Contract No. 2022-001 with Black and Veatch Corporation - *Approve*

### **D. PRESENTATIONS & REPORTS**

- D.1 Tampa Bay Water Wise Program Update Report - *Presentation*
- D.2 Construction Update - *Presentation*
- D.3 Member Government Report - City of St. Petersburg - *Presentation*

### **E. RECEIVE & FILE**

- E.1 Agency Division Activity Reports for August 2021 - *Receive Report*
- E.2 Legal Services Activity Report for August 2021 - *Receive Report*
- E.3 Legal Services Budget Report for August 2021 - *Receive Report*
- E.4 Investment Schedule for July 2021 - *Receive Report*
- E.5 Disposition of Fixed Assets through July 2021 - *Receive Report*
- E.6 Financial Statement - July 2021 - *Receive Report*
- E.7 Potential True Up of Fixed Costs between Member Governments for July 2021 - *Receive Report*
- E.8 Management Statistic Report with Aged Accounts Receivable as of July 2021 - *Receive Report*
- E.9 Vendor's Status Report through July 2021 - *Receive Report*
- E.10 Comprehensive Check List with Delegated Check Approval Items for July 2021 - *Receive Report*

## **ADJOURNMENT**



**DATE:** August 20, 2021

**TO:** Board of Directors

**FROM:** Roberta Kety, Human Resources Director

**SUBJECT:** General Manager Recruitment Board Discussion and Next Steps - *Approve*

**SUMMARY**

At the Tampa Bay Water Board of Directors Special Board meeting on August 31, 2021, the Board interviewed five (5) General Manager candidates. The Board deliberated over the interviews and qualifications of all the candidates. The Board narrowed the field of candidates to two candidates and decided to postpone the the selection of the most qualified candidate for the General Manager position until the September 20, 2021, Board Meeting.

**SUGGESTED ACTION**

Select the most qualified candidate for the General Manager position and delegate authority to the Chairman of the Board and General Counsel to negotiate an employment agreement with the selected candidate. If those negotiations are unsuccessful, the delegation of authority would authorize the Chairman and General Counsel to negotiate an employment agreement with the second-ranked candidate. The negotiated employment agreement will be brought to the Board for approval at the October 18, 2021 Board Meeting.

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**



At the Tampa Bay Water Board of Directors Special Board meeting on August 31, 2021, the Board interviewed five candidates for the general manager position. The Board deliberated over the interviews and qualifications of all the candidates. The Board narrowed the field of candidates to two candidates and voted to postpone the selection of the most qualified candidate for the General Manager position until the September 20, 2021, Board Meeting. The two finalists are: Charles H. Carden and Heath J. Lloyd.

At the September Board Meeting, the Board will select the most qualified candidate for the General Manager position. In addition, the Board is asked to delegate authority to the Chairman of the Board and General Counsel to negotiate an employment agreement with the selected candidate. If those negotiations are unsuccessful, the delegation of authority would authorize the Chairman and General Counsel to negotiate an employment agreement with the second-ranked candidate. The negotiated employment agreement would be brought to the Board for approval at the October 18, 2021 Board Meeting.

### **Employment Agreement:**

At the September Board meeting, staff is requesting that the Board of Directors delegate the authority to negotiate an employment agreement with the selected candidate to Chairman Eggers and Barrie Buenaventura, General Counsel. Further, if those negotiations are unsuccessful with the first ranked candidate, the delegation of authority would authorize negotiating an employment agreement with the second-ranked candidate.

Each employment agreement has a few areas that are likely to become a part of the negotiation process:

- Term of the Employment Agreement
- Termination and severance pay
- Resignation
- Salary- Board approved marketing range was \$200,000-\$260,000
- Performance Evaluation
- Relocation expenses
- Automobile allowance: possible
- Vacation (annual leave) and sick leave
- Employee insurance- medical, dental & vision
- Retirement- possible deferred income contribution percentage provided by the Agency
- Professional development
- Indemnification

The former General Manager's employment agreement provided for a three year term and the agreement automatically renewed for one-year terms.

In the past, vacation and sick leave was provided at the same level of all managerial employees. Medical, dental & vision insurance was provided at the same contribution rate and benefit level as for



all Tampa Bay Water employees.

Life insurance coverage was provided at a rate of 1 x annual salary up to \$250,000.

Long term disability (LTD) insurance was the same level of benefit as all other employees: LTD provides a benefit of 50% of monthly earnings up to a maximum benefit of \$8,000 per month. If the General Manager's salary is over \$192,000, he would be underinsured for Long Term Disability coverage given the maximum benefit of \$8,0000 per month.

Please contact Barrie Buenaventura for any employment agreement related questions.



**DATE:** September 1, 2021

**TO:** Board of Directors

**FROM:** Charles H. Carden, Interim General Manager

**SUBJECT:** August 16, 2021 - Regular Meeting - Draft Agenda Minutes - *Approve*

**SUMMARY**

On August 16, 2021, Tampa Bay Water's Board of Directors held its Regular Board Meeting. A quorum of the Board of Directors of Tampa Bay Water met in person at the Clearwater Administrative Offices.

**SUGGESTED ACTION**

Approve Minutes

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

Draft minutes are attached for the Board's review and approval.

Attachment (1)

[August 16, 2021 Regular Board Meeting Draft Minutes](#)



Tampa Bay Water

Regular Meeting

August 16, 2021 Minutes

**9:30 AM - CALL TO ORDER**

**BOARD MEMBERS PRESENT:**

**Present:** Chairman - Commissioner Dave Eggers, Pinellas County  
Vice-Chairman - Commissioner Ron Oakley, Pasco County  
Commissioner Harry Cohen, Hillsborough County  
Mayor Rob Marlowe, City of New Port Richey  
Councilman Charlie Miranda, City of Tampa  
Commissioner Kathleen Peters, Pinellas County  
Commissioner Mariella Smith, Hillsborough County

**Absent:** Council Member Darden Rice, City of St. Petersburg  
Commissioner Kathryn Starkey, Pasco County

**Staff:** Chuck Carden, Interim General Manager

**Presenters:** Chuck Carden, Interim General Manager  
Justin Fox, Engineering Manager  
Maribel Medina, Planning and Projects Manager  
Jack Thornburgh, Acting Chief Operating Officer  
Roberta Kety, Human Resources Director  
Colin Baenziger, Colin Baenziger & Associates (via Zoom)

**General  
Counsel:** Barrie Buenaventura, General Counsel

A list of others who were present and who signed the attendance roster was filed in the permanent files of Tampa Bay Water. Staff and consultants presenting to the Board are listed above.

Chairman Eggers called the meeting to order at 9:30 a.m.



## **PLEDGE OF ALLEGIANCE**

Vice-Chairman Oakley led the Pledge of Allegiance.

## **PUBLIC COMMENT - (3 Minutes per speaker)**

Chairman Eggers opened the Regular Board meeting to public comment. The following speaker(s) made public comment to the Board of Directors:

Mark Klutho  
David Ballard Geddis

Public comment was duly recorded and is filed in the permanent records of Tampa Bay Water.

## **AGENDA**

### **A) CONSENT ITEMS**

- A.1 July 19, 2021 - Regular Meeting - Draft Agenda Minutes  
Approve July 19, 2021 Minutes
- A.2 Tampa Bay Water Performance Dashboard Update  
Receive Status Report.
- A.3 2020 Management and Performance Audit Task Report  
Receive Report
- A.4 Agency Strategic Planning Update  
Receive Report.
- A.5 Regional Water Supplies, Member Demands and Environmental Conditions  
Receive Status Report.
- A.6 South-Central Hillsborough County Memorandum of Understanding  
Receive Status Report
- A.7 Water Quality Update  
Status Report
- A.8 Capital Improvements Program Executive Quarterly Report



Receive FY 2021 Third Quarter Capital Improvements Program Executive Quarterly Report.

- A.9 Florida Friendly Landscaping Program - One-year Funding Agreements with Hillsborough, Pasco, and Pinellas Counties  
Approve Funding Agreements No. 2022-001, No. 2022-002, and No. 2022-003 with Hillsborough, Pasco, and Pinellas Counties, respectively, at a total cost of \$517,954.
- A.10 Ferric Sulfate Supply Services - Contract No. 2020-021 with Kemira Water Solutions, Inc. - Price Escalation and Option Year Two  
Approve Second Amendment to Contract No. 2020-021 with Kemira Water Solutions, Inc. to include increase to the unit prices shown in the table below and to exercise renewal option year two.
- A.11 Polymer Supply Services - Contract No. 2020-023 with Polydyne, Inc. - Price Escalation and Option Year Two  
Approve Second Amendment to Contract No. 2020-023 with Polydyne, Inc. to include increase to the unit prices shown in the table below and to exercise renewal option year two.
- A.12 Diatomaceous Earth Precoat Filter Media Supply Services - Contract No. 2021-007 with Chemical Systems of Orlando, Inc. - Price Escalation and Option Year One  
Approve First Amendment to Contract No. 2021-007 with Chemical Systems of Orlando, Inc. to include increase to the unit prices shown in the table below and to exercise renewal option year one.
- A.13 Sodium Hydroxide Supply Services - Contract No. 2020-024 with Allied Universal Corporation - Price Escalation and Option Year Two  
Approve Second Amendment to Contract No. 2020-024 with Allied Universal Corporation to include increase to the unit prices shown in the table below and to exercise renewal option year two.
- A.14 Liquid Oxygen Supply Services - Contract No. 2021-008 with Matheson Tri-Gas, Inc. - Price Escalation and Option Year One  
Approve First Amendment to Contract No. 2021-008 with Matheson Tri-Gas, Inc. to include increase to the unit prices shown in the table below and to exercise renewal option year one.
- A.15 Calcium Hydroxide Supply Services - Contract No. 2021-011 with Lhoist North America of Alabama, LLC - Price Escalation and Option Year One



Approve First Amendment to Contract No. 2021-011 with Lhoist North America of Alabama, LLC to include increase to the unit prices shown in the table below and to exercise renewal option year one.

- A.16 Sodium Bisulfite Supply Services - Contract No. 2021-009 with Thatcher Chemical of Florida, Inc. - Price Escalation and Option Year One  
Approve First Amendment to Contract No. 2021-009 with Thatcher Chemical of Florida, Inc. to include increase to the unit prices shown in the table below and to exercise renewal option year one.
- A.17 Ammonium Sulfate & Liquid Sodium Hypochlorite Supply Services, Contract No. 2022-015  
Approve Contract No. 2022-015 to the lowest responsive responsible bidder, Hawkins, Inc.
- A.18 C.W. Bill Young Regional Reservoir - Mowing & Miscellaneous Ground Services, Contract No. 2020-041 with A.J. Landscaping, LLC - Price Amendment and Contract Value Increase  
Approve First Amendment to Contract No. 2020-041 with A.J. Landscaping, LLC to include an increase to the unit price of 3% and increase to the value of the contract from \$175,000.00 to \$180,250.00 per contract year.
- A.19 Fiscal Year 2022 U.S. Geological Survey Joint Funding Agreement for Hydrologic Monitoring Services  
Approve the Fiscal Year 2022 Joint Funding Agreement with the U.S. Geological Survey for Hydrologic Monitoring Services in the amount of \$125,100.
- A.20 Professional Services Contract for Digital Imagery and Remote Sensing Services for all Regional Water Supply Facilities, Contract No. 2022-002  
Approve Professional Services Contract No. 2022-002 with the top-ranked firm, Digital Aerial Solutions, LLC for Digital Imagery and Remote Sensing Services in the amount of \$509,780.52.
- A.21 Professional Services Contract for Environmental Monitoring and Assessment Services at the Cross Bar Ranch Wellfield, Contract No. 2022-003  
Approve Professional Services Contract No. 2022-003 with the top-ranked firm, Pritchett Steinbeck Group, Inc., for environmental monitoring and assessment services in the amount of \$788,415.
- A.22 Professional Services Contract for Environmental Monitoring and Assessment Services at the Cypress Bridge Wellfield, Contract No. 2022-004



Approve Professional Services Contract No. 2022-004 with the top-ranked firm, Wise Consulting Group, LLC, for environmental monitoring and assessment services in the amount of \$450,960.00.

- A.23 Facility Renovations at Clearwater Administration Building - Piggyback Agreement 2021-709 with Caladesi Construction Co.

Approve Agreement in the amount of \$394,474.19 plus \$10,000 Owners Allowance.

- A.24 Agency Contract Renewals

Approve contract renewals as summarized in the attached document.

- A.25 Tampa Bay Water Employee Insurance Program - Delegation of Authority for Selection of Fiscal Year 2022 Employee Insurance Program

Approve

- A.26 General Manager's Quarterly Travel Report

Approve General Manager's Quarterly Travel.

Chairman Eggers announced the Consent Agenda and asked if any agenda items should be pulled for discussion. Chairman Eggers asked for Agenda Item A.23 to be pulled for discussion.

Chairman Eggers asked Michelle Stom, Chief Communications Officer, to provide an update on Agenda Item A.23.

Ms. Stom stated the agency's administrative building is approximately 16-17 years old and in need of many upgrades and replacements. The agency has contracted to repaint the interior of the building, replace carpeting and update the lobby. Chairman Eggers asked if three bids were received. Ms. Stom explained the agency was able to piggyback on Pinellas County's agreement with Caladesi Construction to repaint the interior and replace carpeting. Staff did receive bids for a subcontractor to provide the work in the building lobby.

**Motion:** Vice-Chairman Oakley moved to Approve A) CONSENT ITEMS. Commissioner Cohen seconded the motion.

**Vote:** The motion CARRIED by a vote of 7 - 0.

## **REGULAR AGENDA**

### **B) GENERAL MANAGER & GENERAL COUNSEL**

#### **B.1 General Manager's Report**



### Status Update

Chuck Carden, Interim General Manager, reported on the agency's preparations concerning Tropical Storm Fred. The storm passed by the region on Sunday causing no issues for the agency and region.

Mr. Carden provided an update on the agency COVID-19 precautions. Additional measures were enacted on August 13, 2021, to protect staff. Virtual meetings have been encouraged when possible and an emergency teleworking policy was authorized.

Next, Mr. Carden provided an update on recent activities concerning the City of Tampa's PURE project. Agency staff have met with City staff on two occasions to discuss the sale and purchase of reclaimed water and potential availability of water for Tampa Bay Water through the Harney Canal permit. A third meeting will be scheduled to narrow the list of alternatives to focus on technical discussions.

Mr. Carden also updated the Board on the Groundwater Credits (Reclaimed Water) Pricing. Agency staff and Hillsborough County staff met on July 23 to discuss approaches being developed. Next steps include refining the pricing methodology with the County.

Mr. Carden noted staff have been very active with public outreach for the Brandon Booster Station, South Hillsborough Wellfield Project and Tampa Bay Seawater Desalination Expansion Project. A virtual public meeting is scheduled for August 24 concerning the South Hillsborough Wellfield Project.

Finally, Mr. Carden reported briefly on the agency public opinion survey conducted every three years as well as the upcoming retirements of long-term agency employees who are currently the agency's Chief Science and Technical Officer and the agency's Engineering Senior Manager, and related recruitment efforts.

A copy of the full report can be found in the agency's Records Department.

## C) ACTION ITEMS

- C.1 Southern Hillsborough County Supply Expansion: Pipeline Segments A & B, Projects No. 01610 and 01616, Professional Engineering Services Contract No. 2021-024 with Wade Trim, Inc. and Contract No. 2021-025 with Stantec Consulting Services, Inc.



Approve Task No. 1 with top-ranked firms Wade Trim, Inc. and Stantec Consulting Services, Inc. for the Southern Hillsborough County Supply Expansion: Pipeline Segments A & B, Projects No. 01610 and 01616, Contracts 2021-026 and 2021-025, respectively.

Justin Fox, Engineering Manager, provided a presentation on the Southern Hillsborough County Supply Expansion: Pipeline Segments A & B, Professional Engineering Services Contracts. Mr. Fox reviewed a schematic of the pipeline segments providing additional information on Pipelines A & B noting Pipeline B is funded by a joint project agreement to the new point of connection in Southern Hillsborough County. The joint project agreement was approved by the Board in July. Pipeline B represents a long-term solution for supply in the Southern Hillsborough area. Co-funding applications have been approved by SWFWMD for Pipeline A & B and cover through the basis of design report. Final design permitting and bidding tasks will be brought back to the Board for consideration once the final routes for the segments have been approved. Staff continues to meet with Hillsborough County bi-weekly to brainstorm options for supply in South County.

Chairman Eggers asked if the design contract will be co-funded 50% by SWFWMD. Mr. Fox responded SWFMWD has approved co-funding through the basis of design report. Chairman Eggers stated half the funds for each. Mr. Fox responded yes.

A copy of the full report can be found in the agency's Records Department.

**Motion:** Commissioner Smith moved to Approve Task No. 1 with top-ranked firms Wade Trim, Inc. and Stantec Consulting Services, Inc. for the Southern Hillsborough County Supply Expansion: Pipeline Segments A & B, Projects No. 01610 and 01616, Contracts 2021-026 and 2021-025, respectively. Mayor Marlowe seconded the motion.

**Vote:** The motion CARRIED by a vote of 7 - 0.

C.2 Southern Hillsborough County Supply Expansion: Booster Pump Station, Project 01609; Contract No. 2021-012 Guaranteed Maximum Price (GMP) Proposal No.1 for the Lithia Regional Point of Connection Flow Control Valve and GMP Proposal No.2, for Early Equipment Procurement.

Approve Guaranteed Maximum Price (GMP) Proposal No.1 for the Lithia Regional Point of Connection Flow Control Valve for a Lump Sum Amount of \$263,049.60 inclusive of \$18,000 for Owner's Allowance and GMP Proposal No.2 for Early Equipment Procurement for a Lump Sum Amount of \$3,865,758.57 inclusive of \$100,000 for Owner's Allowance provided by the Construction Manager at Risk (CMAR), PCL Construction, Inc. under Contract No. 2021-012. Authorize the Chair and Interim General Manager to execute the Amendment(s).



Justin Fox, Engineering Manager, provided a presentation on the Southern Hillsborough County Supply Expansion: Booster Pump Station, Project 01609; Contract No. 2021-012 Guaranteed Maximum Price (GMP) Proposal No.1 for the Lithia Regional Point of Connection Flow Control Valve and GMP Proposal No.2, for Early Equipment Procurement. Mr. Fox explained the booster station project is comprised of a new booster station and two off-site improvements, a flow control valve at the Lithia Point of Connection and a pump, motor and variable frequency drive replacement at the BUD 7 well site. The project is being implemented using a Construction Manager at Risk approach. The Construction Manager at Risk will provide pre-construction services to the project which will increase flow by 5-7 million gallons per day (mgd) through the existing Brandon transmission main and deliver more supply to Southern Hillsborough County through the County's Lithia facility. Cooperative funding was provided by SWFWMD in the amount of \$3.8 million. Future guaranteed maximum price proposals are anticipated due to an increase in capacity of the transmission main and will be brought to the Board for consideration. Mr. Fox stated Staff are presenting the first two guaranteed maximum price proposals for consideration and provided a brief description of each proposal.

Chairman Eggers asked if the project is on schedule. Mr. Fox responded yes.

A copy of the full report can be found in the agency's Records Department.

**Motion:** Commissioner Cohen moved to Approve Guaranteed Maximum Price (GMP) Proposal No.1 for the Lithia Regional Point of Connection Flow Control Valve for a Lump Sum Amount of \$263,049.60 inclusive of \$18,000 for Owner's Allowance and GMP Proposal No.2 for Early Equipment Procurement for a Lump Sum Amount of \$3,865,758.57 inclusive of \$100,000 for Owner's Allowance provided by the Construction Manager at Risk (CMAR), PCL Construction, Inc. under Contract No. 2021-012. Authorize the Chair and Interim General Manager to execute the Amendment(s). Commissioner Smith seconded the motion.

**Vote:** The motion CARRIED by a vote of 7 - 0.

C.3     On Call General Civil & Large Pipeline Contractor Services, Award Contract Nos. 2021-044, 2021-045, 2021-046 & 2021-047 to the lowest, responsive, responsible Bidders  
Approve Award of Contract No's. 2021-044, 2021-045, 2021-046 & 2021-047 to the lowest responsive responsible bidders, Granger Maintenance & Construction, Inc. (2021-044), Rowland, Inc. (2021-045, 2021-047) and Amici Engineering Contractors, LLC (2021-046).

Chuck Carden, Interim General Manager, provided a brief presentation on On-Call General Civil & Large Pipeline Contractor Services. Mr. Carden stated the agency requires general contractor services to respond quickly to short-term construction tasks or emergency repairs



for our civil and large pipeline facilities. Based on the past and projected uses, staff recommends the award of four contracts to be as-needed standby to allow simultaneous use of multiple contractors on the different task and flexibility. The contracts are worth up to \$2 million each over a 4-year period and they are budgeted and are included in our uniform rate.

A copy of the full report can be found in the agency's Records Department.

**Motion:** Councilman Miranda moved to Approve Award of Contract No's. 2021-044, 2021-045, 2021-046 & 2021-047 to the lowest responsive responsible bidders, Granger Maintenance & Construction, Inc. (2021-044), Rowland, Inc. (2021-045, 2021-047) and Amici Engineering Contractors, LLC (2021-046). Commissioner Oakley seconded the motion.

**Vote:** The motion CARRIED by a vote of 7 - 0.

## **D) PRESENTATIONS & REPORTS**

### **D.1 Long-term Master Water Plan Feasibility Studies Receive Status Report.**

Maribel Medina, Planning and Projects Manager, provided an update presentation on the Long-term Master Water Plan Feasibility Studies. Ms. Medina stated in December 2008, the board approved the Long-term Master Water Plan update which included the recommendation to study the feasibility of three potential water supply capital projects. The feasibility studies for three options will be completed by early 2022. The Board and member governments will be provided with an evaluation of each water supply option based on the Board approved selection criteria. Ms. Medina explained the Integrated Program Management Consultant will evaluate all options and develop configurations of the projects. Ms. Medina reviewed the timeline noting the first feasibility study will evaluate the potential expansion by 10 to 15 million gallons per day (mgd) of the desalination water treatment plant as well as consider sea water source water quality, alternative intake and concentrate disposal to address potential impacts from TECO power plant modernization project and the future operations, environmental modeling of concentrate discharge to the bay, pilot testing of pre-treatment alternatives, condition assessment of critical infrastructure or equipment at the facility and public engagement efforts. The study is co-funded by SWFWMD up to \$1.5 million.

Ms. Medina reviewed current activities and upcoming tasks. Ms. Medina then presented the second feasibility study the Surface Water Treatment Capacity Expansion by 10 to 15 mgd which is also co-funded by SWFWMD up to \$275 thousand. Ms. Medina noted that this project includes the evaluation of two options. The first option includes the potential expansion of the Regional Surface Water Treatment Plant and the second option is building a



new surface water treatment plant near the C.W. Bill Young Regional Reservoir. Ms. Medina indicated that this project is about 99 % complete and that the draft feasibility report is currently under review by Staff. The next steps include receiving a final draft which will be distributed to the member government utilities directors and finalizing the report.

Then Ms. Medina presented the final feasibility study the South Hillsborough Wellfield. Ms. Medina indicated this project is the most complex of the three studies and that over the last six months staff has reported to the Board three of the six areas of the project including: groundwater (i.e., reclaimed) credit negotiation; property acquisition; and new Point of Connection with Hillsborough County. Ms. Medina then proceeded to present the status of the overall feasibility study. Ms. Medina indicated that the project is about 60 % complete and that construction of the test production well and associated monitoring wells is complete, and that aquifer performance testing is also complete. Currently staff is analyzing water samples, proceeding with modeling to determine the potential yield of the wellfield and started the conceptual design of the wellfield and associated water treatment plant. Ms. Medina also reminded the board of the upcoming public meeting scheduled on August 24, 2021.

A copy of the full report can be found in the agency's Records Department.

No Board action was required on this item.

## D.2 Regional Demands and System Operations Update Presentation

Jack Thornburgh, Acting Chief Operating Officer, provided an update presentation on Regional Demands and System Operations. Mr. Thornburgh stated demands have been steadily increasing in the region. The system configurations were changed to a wet season mode when the rains began in June. Mr. Thornburgh reviewed and compared the average daily delivery for fiscal year 2021 to the budgeted or predicted amount noting supply has been banked for the future. The Consolidated Wellfield in the northern system is at 81 million gallons per day (mgd) which is under the permitted limit of 90 mgd. South Central Wellfield is running approximately 1 mgd below the agency's permit. The Brandon Booster Station and the work at the Lithia Facility will assist in taking the pressure off the wellfields. The Tampa Bay Regional Surface Water Treatment Plant is running at approximately 85 mgd. The agency utilizes two sources to supply the SWTP during the wet season: the Tampa By-Pass Canal and the Alafia River. The desalination facility is an alternative water source and runs from fall to spring and is currently offline for planned maintenance and repairs. The C. W. Bill Young Reservoir is currently at 135 feet (14.8 billion gallons).



Commissioner Smith asked if the South-Central Hillsborough Wellfield running at 1 mgd below the average is for the year. Mr. Thornburgh responded that is correct. The month of May was very dry. During May, the wellfield was at 37 mgd. However, 23.1 mgd is the running annual average for 12 months. Commissioner Smith asked what would take the pressure off of that wellfield. Mr. Thornburgh explained several of the projects mentioned previously by Mr. Fox will assist to increase flows to the Lithia Plant through the regional line. Staff are looking at several other projects through conservation and additional water supplies to the existing point of connection.

A copy of the full report can be found in the agency's Records Department.

No Board action was required on this item.

## **E) OTHER ADMINISTRATIVE MATTERS AND OLD BUSINESS**

### **E.1 General Manager Recruitment Update**

[Approve short list of General Manager candidates to be interviewed on August 31, 2021](#)

Roberta Kety, Human Resources Director, provided an update presentation on the General Manager recruitment. Ms. Kety stated on August 11, recruitment materials were forwarded to each Board Member electronically and by hand delivery. The materials included a cover memorandum and information about five of the most qualified candidates for the general manager position. Mr. Kety explained if the Board approves the short list of candidates, those candidates would be asked to attend the Special Meeting scheduled for August 31, 2021 at 10:00 a.m. An agenda schedule and details of the agenda will be provided to each Board Member by August 20, 2021. Individual Zoom interview sessions with the candidates can be arranged for each Board Member, if requested. Ms. Kety provided the names of each candidate and noted Colin Baenziger is attending via Zoom to answer any questions.

Chairman Eggers asked Mr. Baenziger to provide a general assessment of each candidate. Mr. Baenziger provided an update on the process and some details about each candidate's qualifications. Chairman Eggers asked how Mr. Baenziger anticipated the August 31 proceeding. Mr. Baenziger explained his thoughts on the process prior to the meeting and on August 31. There was discussion of the structure of interviews and the schedule for the meeting. Commissioner Cohen asked if a generalized approach will be taken concerning questions for the candidates. Mr. Baenziger agreed a generalized approach would be best. Chairman Eggers stated he and Mr. Baenziger will develop a list of questions. Ms. Kety added that an outline of recommended possible questions will be provided well in advance of August



31. There was a brief discussion on the salary range. Ms. Kety requested Board approval of the provided short list of candidates.

A copy of the full report can be found in the agency's Records Department.

**Motion:** Vice-Chairman Oakley moved to Approve short list of General Manager candidates to be interviewed on August 31, 2021. Commissioner Cohen seconded the motion.

**Vote:** The motion CARRIED by a vote of 6 - 0. Councilman Miranda was not present during the vote.

**F) RECEIVE & FILE**

F.1 Agency Division Activity Reports for July 2021  
Receive and File

F.2 Legal Services Activity Report for July 2021  
Receive and File

F.3 Legal Services Budget Report for July 2021  
Receive and File

F.4 Disposition of Fixed Assets through June 2021  
Receive and File

F.5 Vendor's Status Report through June 2021  
Receive and File

F.6 Investment Schedule for June 2021  
Receive and File

F.7 Comprehensive Check List with Delegated Check Approval Items for June 2021  
Receive and File

F.8 Management Statistic Report with Aged Accounts Receivable as of June 2021  
Receive and File

F.9 Potential True Up of Fixed Costs between Member Governments for June 2021  
Receive and File



F.10 Third Quarter Fiscal Year 2021 Budget Amendments and Transfers.  
Receive and File.

F.11 Financial Statement - June 2021  
Receive and File

**Motion:** Vice-Chairman Oakley moved to Approve F) RECEIVE & FILE. Commissioner Smith seconded the motion.

**Vote:** The motion CARRIED by a vote of 6 - 0. Councilman Miranda was not present during the vote.

**ADJOURNMENT – 10:33 a.m.**

Attest: \_\_\_\_\_  
Charles H. Carden, Interim General Manager/Secretary

Date: \_\_\_\_\_



**DATE:** September 1, 2021

**TO:** Board of Directors

**FROM:** Charles H. Carden, Interim General Manager

**SUBJECT:** August 31, 2021 - Special Board Meeting - Draft Agenda Minutes - *Approve*

**SUMMARY**

On August 31, 2021, Tampa Bay Water's Board of Directors held a Special Board Meeting. A quorum of the Board of Directors of Tampa Bay Water met in person at the Clearwater Administrative Offices.

**SUGGESTED ACTION**

Approve Minutes

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

Draft minutes are attached for the Board's review and approval.

Attachment (1)

[August 31, 2021 Special Board Meeting Draft Minutes](#)



Tampa Bay Water

Special Board Meeting

August 31, 2021 Minutes

**10:00 AM - CALL TO ORDER**

**BOARD MEMBERS PRESENT:**

**Present:** Chairman - Commissioner Dave Eggers, Pinellas County  
Vice-Chairman - Commissioner Ron Oakley, Pasco County  
Commissioner Harry Cohen, Hillsborough County  
Mayor Rob Marlowe, City of New Port Richey  
Councilman Charlie Miranda, City of Tampa  
Council Member Darden Rice, City of St. Petersburg  
Commissioner Mariella Smith, Hillsborough County  
Commissioner Kathryn Starkey, Pasco County  
**Absent:** Commissioner Kathleen Peters, Pinellas County

**Staff:** Roberta Kety, Human Resources Director

**Presenters:** Colin Baenziger, Colin Baenziger & Associates (via Zoom)

**General  
Counsel:** Barrie Buenaventura, General Counsel

A list of others who were present and who signed the attendance roster was filed in the permanent files of Tampa Bay Water.

Chairman Eggers called to order the Special Meeting of the Tampa Bay Water Board of Directors at 10:06 a.m., for the purpose of interviewing candidates for the position of General Manager. Chairman Eggers noted a quorum of Board Members were present.

**PLEDGE OF ALLEGIANCE**

Vice-Chairman Oakley led the Pledge of Allegiance.



## **PUBLIC COMMENT - (3 Minutes per speaker)**

Chairman Eggers opened the Special Board meeting to public comment. The following speaker(s) made public comment to the Board of Directors:

No members of the public came forth to provide comment.

## **AGENDA**

### **A) CANDIDATE INTERVIEWS**

#### **A.1 General Manager Recruitment**

Approve the selection of the most qualified candidate and direct the Chairman and General Counsel to negotiate employment contract.

Chairman Eggers explained a list of five questions had been provided at the dais for each Board Member. Each candidate is allotted 45 minutes to interview and a short break will be provided after each interview.

The candidates were interviewed in the following order:

Charles H. Carden  
Dean E. Dickey  
Biju George  
Peter J. Kusky  
Heath J. Lloyd

Concluding the interviews, the Board took a brief recess at 3:14 p.m. Chairman Eggers reconvened the meeting at 3:26 p.m. and opened the floor for discussion of the candidates by the Board.

### **B) BOARD DISCUSSION AND POTENTIAL SELECTION**

#### **B.1 Board Discussion and Next Steps**

Select most qualified general manager candidate and direct Chairman and General Counsel to negotiate employment contract.

Commissioner Smith suggested each Board Member select their top candidates for discussion.

Discussion ensued regarding reactions to the candidates with each Board Member identifying their top two or three candidates. Chairman Eggers announced the Board selected Charles H. Carden and Heath J. Lloyd as their top two candidates. The Board discussed delaying ranking of the two candidates until the September 20, 2021 Regular Board meeting.

**Motion:** Councilman Miranda moved to Approve ranking the two candidates (Charles H. Carden and Heath J. Lloyd) at the beginning of the Regular Board meeting on September 20, 2021. Commissioner Cohen seconded the motion.



**Vote:** The motion CARRIED by a vote of 7 - 1. Commissioner Oakley voted nay.

Chairman Eggers thanked the Board for the time in interviewing the candidates and also thanked Colin Baenziger and Roberta Kety for their hard work.

## **ADJOURNMENT**

The Special Meeting adjourned at 4:26 p.m.

Attest: \_\_\_\_\_  
Krista Simon, Agency Clerk

Date: \_\_\_\_\_



**DATE:** September 7, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Michelle Stom, Chief Communications Officer

**SUBJECT:** Tampa Bay Water Performance Dashboard Update - *Receive Report*

**SUMMARY**

Tampa Bay Water staff updated the Agency's performance dashboard that measures key performance indicators identified in the Strategic Plan against water utility industry benchmarks from the American Water Works Association. The performance dashboard provides regular reports on performance to the Board of Directors.

**SUGGESTED ACTION**

Receive Status Report.

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

Tampa Bay Water staff updated the agency performance dashboard to measure key performance indicators identified in the Strategic Plan. Regular reports on performance are provided to the Board of Directors with the agenda package.



## **BACKGROUND**

Tampa Bay Water strives to continually improve and become more efficient in operating and maintaining the water supply system and planning for the region's future drinking water needs. In 2011, the agency's board of directors approved the Strategic Plan and approved updates of the plan in 2014 and 2019. The agency assigned key performance indicators to the Strategic Plan goals for measuring against the American Water Works Association's water utility industry benchmarks using a performance dashboard.

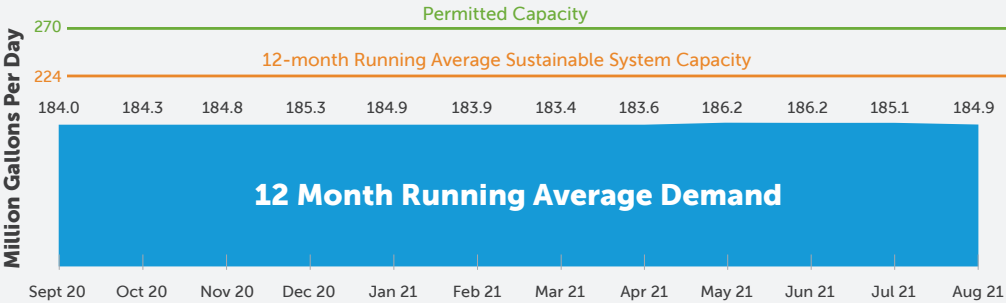
Attachment (1)

[Overall Performance Dashboard - September 2021](#)



## AVAILABLE CAPACITY

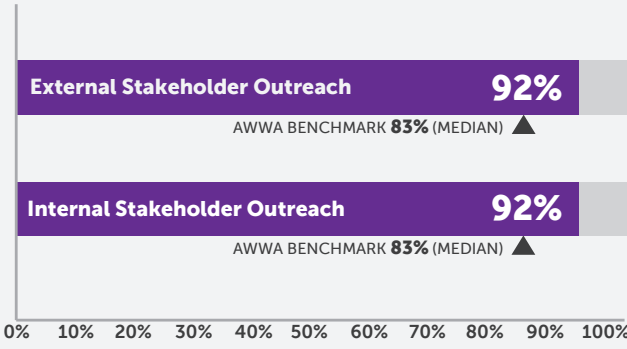
This indicator shows the gap between how much water the utility is permitted to use, the 12-month running average sustainable system capacity and the 12-month running average demand. Average demand should not exceed permitted capacity.



## STAKEHOLDER OUTREACH FISCAL YEAR 2020

This indicator provides a measure of the utility's stakeholder outreach activities using the American Water Works Association's Stakeholder Outreach Index. A value is assigned by senior management to various categories of stakeholder outreach based on evidence that existed during the reporting period. Total scores can range from 0 to 12 and are presented as a percentage of the maximum possible score. Utilities should strive to be above the benchmark.

Tampa Bay Water Score



## BOND RATING

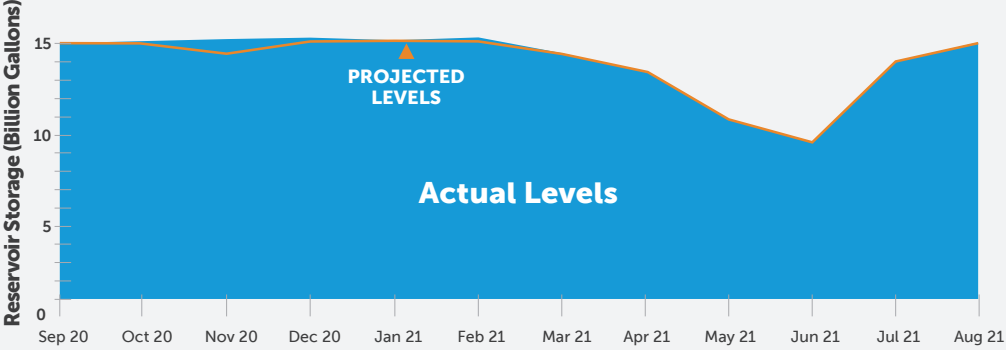
The bond rating assigned by the three major rating services based on evaluations of the issuer's financial strength and ability to pay a bond's principal and interest in a timely fashion.

Tampa Bay Water Rate

Bond Rating			Rating Category	AWWA Benchmark % of Utilities in Rating Category
Moody's	S&P	Fitch		
Aaa	AAA	AAA	Prime	21%
Aa1	AA+	AA+	High grade	63%
Aa2	AA	AA		
Aa3	AA-	AA-		
A1	A+	A+	Upper medium grade	8%
A2	A	A		
A3	B	A-		
Baa 1 2 3	BBB+/-	B+/-	Lower medium grade	0%

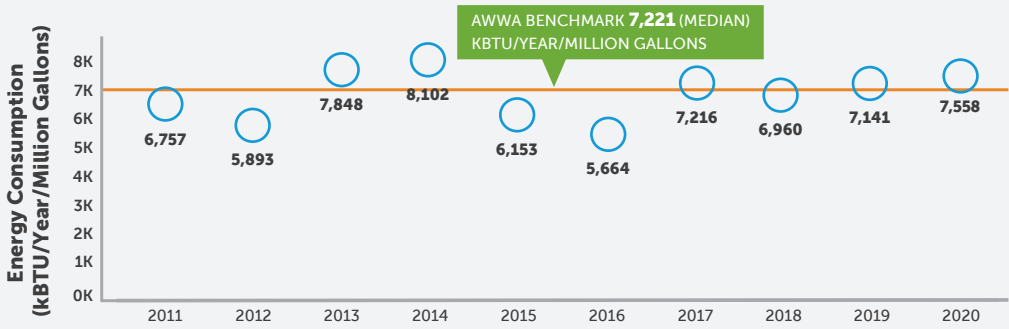
## MEETING PROJECTED RESERVOIR LEVELS

This indicator provides a measure of the reliability of the utility's forecasted reservoir use.



## ENERGY CONSUMPTION

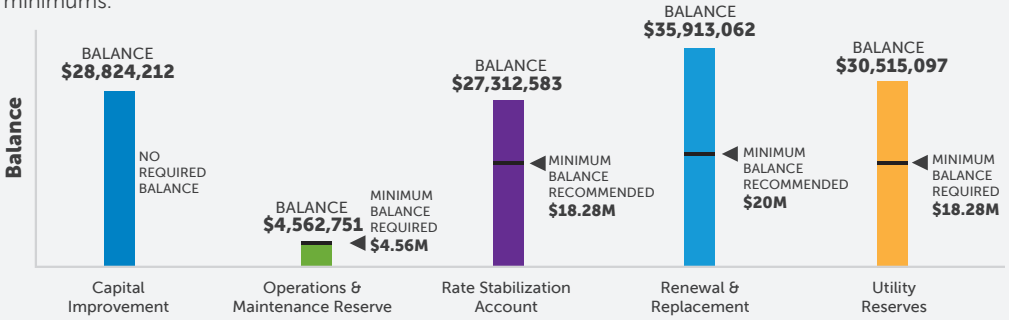
This indicator quantifies the energy consumed to supply potable water on an annual basis normalized by water demand in million gallons per day. Utilities should strive to be below the benchmark.



## RESERVE FUNDS BALANCE

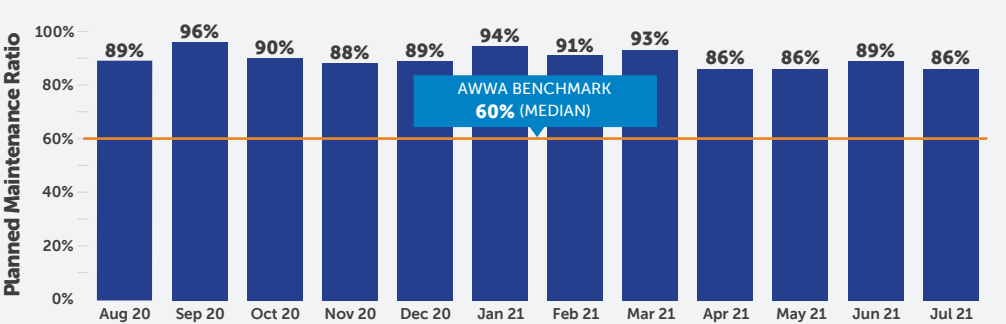
CURRENT AS OF JULY 2021

This indicator tracks the utility's reserve fund balances against their contractual- or policy-based minimums.



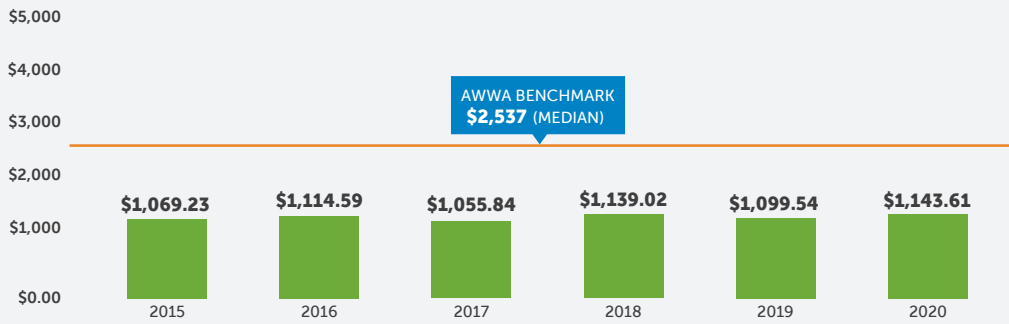
## PLANNED MAINTENANCE TIME

This indicator provides a measure of the time spent on planned maintenance shown as a percent of total maintenance time. Utilities should strive to be above the benchmark.



## OPERATING COST OF WATER

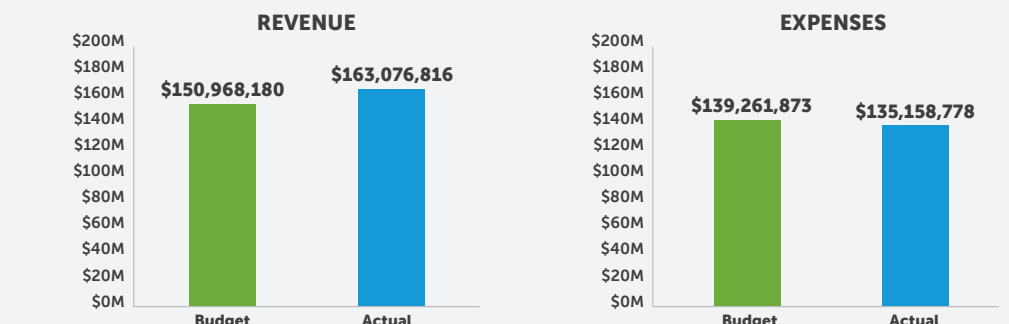
This indicator provides a measure of total operating costs of water services per million gallons of water. Utilities should strive to be below the benchmark.



## OPERATING WITHIN BUDGETS AS FORECASTED

CURRENT AS OF JULY 2021

This indicator provides a measure of the utility's ability to operate within budget forecasts.



## COMPLIANCE

### CONSOLIDATED WATER USE PERMIT

This indicator provides the 12-month running average for groundwater used from our 11 consolidated wellfield. Average should not exceed 90 million gallons per day.

PERMIT LIMIT:  
90 MILLION GALLONS  
PER DAY  
ANNUAL AVERAGE

81.17  
MILLION  
GALLONS  
PER DAY

### SAFE DRINKING WATER ACT COMPLIANCE

This indicator quantifies the percentage of time each year that the utility meets all Safe Drinking Water Act standards. Utilities should strive to be at the benchmark.

AWWA BENCHMARK  
100% (MEDIAN)

100%

## OPTIMIZED STAFF LEVELS

### CURRENT FILLED POSITIONS

The indicator provides a measure of filled, full-time positions shown as a percentage of total positions.



### EMPLOYEE TURNOVER FISCAL YEAR 2021 YEAR-TO-DATE

This indicator quantifies the rate of employee departures. Utilities should strive to be below the benchmark at the end of the reporting period.

AWWA BENCHMARK  
8.6% (MEDIAN)

10.3%

### RETIREMENT ELIGIBILITY

This indicator is an estimated percentage of full-time equivalent employees who are eligible for retirement in the next 5 years (2026).

26.45%

AWWA BENCHMARK  
22.9% (MEDIAN)

## SAFETY AND SECURITY 2021

### RECORDABLE INCIDENTS

This indicator is the total recordable incident rate normalized for any size organization using the total hours worked by employees. Utilities should strive to be below the benchmark.

AWWA BENCHMARK  
3.9 (MEDIAN)

0.7

### NEAR MISSES

This indicator measures the number of unsafe situations or conditions where no personal injury was sustained and no property was damaged, but where, given a shift in time or position, injury or damaged property could have occurred. Utilities should strive to be below the benchmark.

AWWA BENCHMARK  
1 (MEDIAN)

0



**DATE:** September 6, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Christina Sackett, Chief Financial Officer

**SUBJECT:** 2020 Management and Performance Audit Task Report - *Receive Report*

**SUMMARY**

The attached report details the status of the task-related recommendations from the 2020 Management and Performance Audit.

**SUGGESTED ACTION**

Receive Report

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

A tracking process for the task-related recommendations of the 2020 Management and Performance Audit that facilitates verification and promotes accountability is a priority for the Agency.

The attached task report includes the task description, status, timing and status notes or final outcome for completed tasks.



## **BACKGROUND**

At the August 2020 Board meeting, the Board was presented the results of the 2020 Management and Performance Audit, performed by CliftonLarsonAllen, LLP and management's initial response to the 38 main and sub-part audit recommendations. The Board instructed staff to come back with a plan for tracking and reporting on the agency's progress towards reviewing and implementing the audit recommendations. In February 2021, the Board received a presentation on follow-up activities from the Board's three workshops and a plan for tracking and reporting on the 2020 Management and Performance Audit recommendations. In March 2021, the Board was presented a breakdown of which recommendations were identified as strategy related and would be evaluated in the strategic plan update and which ones were identified as task-related and that the progress on the task-related recommendations would be tracked and reported to the Board monthly.

Attachments (1)

[2020 Management and Performance Audit Task Report - September 2021](#)



2020 Management & Performance Audit Tasks - Recommendation #	Status	Timing	Task Leader(s)	Status Notes/Final Outcome
Implement mechanisms to ensure compensation increases, performance ratings do not lead to gender or racial inequities - 11	Completed	9/25/20	Robbie Kety Christina Sackett	Analytics of ratings by gender and race performed with FY20 Performance Evaluations & Merit Program
Institutionalize the periodic execution of Board retreats and workshops - 1	Completed	12/14/20	Michelle Stom	Held three Board workshops, conducted SWOT analysis and identified key areas for consideration in strategic planning, presented report to Board December 2020 (G2); annual board workshops will be scheduled to review agency strategic and tactical plans once the current strategic plan update is completed.
Create a formal and documented succession plan - 10	Completed	12/14/20	Robbie Kety	2020 Agency Succession Plan presented to Board December 2020 (G3)
Take specific actions and implement tracking process for 2020 Management and Performance audit task-related recommendations - 38	Completed	3/15/21	Christina Sackett	The first status report on task-related recommendations provided to the Board in March 2021. This report will continue monthly until all task-related recommendations have either been determined to not implement or have been completed.
Take actions to ensure fulfillment of the Planner/Scheduler responsibilities - 20	Completed	6/7/21	Jack Thornburgh Robbie Kety	Maintenance Planner/Scheduler hired, started work 6/7/21.
Develop a Job Description for General Manager position - 15	Completed	6/21/21	Robbie Kety Board	GM Job Description and salary range Board approved June 2021 (E1). The executive recruiting firm, Colin Baenziger & Associates, posted the position on their website to run through July 16, 2021.
Consider the creation of a "Government Affairs" position - 2	In-Progress	Oct-21	Michelle Stom	Position approved in June as part of the Fiscal Year 2022 budget; position currently advertised to be filled in October 2021.
Improve communications with Utility Directors - 5	In-Progress	Oct-21	Chuck Carden Ken Herd	Quarterly Utility Director meetings that include both draft agendas and draft meeting summaries for review and input from the Member Governments before finalizing. At the August 4, 2020 Utility Director meeting, staff sought feedback on specific opportunities to improve communications with the group. The Utility Directors requested Board agenda items be provided and discussed with each member government in advance of board member briefings and for a central portal to access agendas, minutes and other materials from other Agency meetings where Member Government staff attend. Agency Board Agenda Page Turn meetings are now held with Utility Directors ten days prior to the Board meetings, to brief and discuss each agenda item. A Sharefile folder, for a central portal, has been created and is in the implementation process.
Explore automating employee data transfer functions/evaluate potential solutions to track performance, compensation and training information - 12	In-Progress	Oct-21	Robbie Kety	In 2018, the Agency commenced using NEOGOV as a recruitment platform. In 2020, the Agency contracted with NEOGOV for Perform and Onboard. The Agency is using NEOGOV for FY21 performance evaluations, to be finished by the end of September 2021. Evaluating NEOGOV versus other systems for training, tracking CPE and licensing.
Complete Employee Handbook - 14	In-Progress	Oct-21	Robbie Kety	Employment Counsel has gone over the Employee Handbook and provided edits and comments for review. Revised Employee Handbook distributed to the Executive Team on 9/8/21 for final review and then it will be provided to the leadership team.
Evaluate governance of information systems and technology; hire executive leader - 28	In-Progress	Oct-21	Chuck Carden Robbie Kety	The Agency has contracted with the Executive Recruitment firm GOVHR USA for this recruitment effort. The position has been advertized since August 20th and closes on September 17th.
Use more appropriate methodology to analyze and interpret employee surveys - such as 7-point Likert scale - 16	In-Progress	Dec-21	Michelle Stom Robbie Kety	Employee survey developed using 7-point Likert scale. Employee survey will be conducted in 2021.
Evaluate inventory of custom applications versus off the shelf applications - 29	In-Progress	Dec-21	Christina Sackett Nathan Sprunger	Custom applications have been reduced by 61% over the past five years. A SOP will be developed to evaluate custom applications, which should include conducting a cost-benefit analysis to determine the future of the application (taken offline, changed to an off-the-shelf program or continue in-house). IT Director will review and finalize.
Continue developing rigorous Standard Operating Procedures (SOPs) around IT infrastructure and assets. Consider hiring 3rd party to help with documentation - 30	In-Progress	Dec-21	Christina Sackett Nathan Sprunger	IT contracted technical writer is drafting SOPs with guidance from Interim IT Senior Manager. IT Director will review and finalize.
Evaluate and document agency's Disaster Recovery Plan - 31	In-Progress	Dec-21	Christina Sackett Nathan Sprunger	Document complete, except for diagram of Enterprise Network, and will be distributed to Executive Team in September for review. IT Director will review and finalize.
Measure total costs of operations, scalability, reliability, redundancy and security of locating primary and secondary servers into 3rd party Tier 4 hosted data centers - 32	In-Progress	Dec-21	Christina Sackett Bruce Pacheco	Master agreements for lease space and communications have been fully executed. Migration preparation and migration projects are underway. Currently on hold until Multi-Factor authorization complete and fully staffed.
Evaluate agency's telecom services - 36	In-Progress	Dec-21	Christina Sackett Bruce Pacheco	IT has reviewed multiple options and will put together a comparison of the options for the Executive Team to review.



2020 Management & Performance Audit Tasks - Recommendation #	Status	Timing	Task Leader(s)	Status Notes/Final Outcome
Establish a clear purpose for the manager meetings - 2	In-Progress	Jan-22	Executive Team	<b>Strategic Leadership Team:</b> Through the agency strategic planning process, a Core Planning Team and Executive Management Team have been established. Six workshops have been held to date and a seventh workshop is scheduled for September 23rd. Eventually, the Core Planning team will transition to the Strategic Leadership Team and will meet quarterly with a defined agenda to track the progress of the Strategic Plan. <b>Management Team:</b> Management training on Recruiting, Retaining and Managing a Multi-Generational Workforce was held on June 24, 2021 and another training has been tentatively scheduled for September. Managers have had virtual trainings on the performance evaluation system. Plus, two trainings have been scheduled for managers through Skillsoft - Become a Great Listener and The Art and Science of Communication.
Periodically revisit the purpose, relevance, participants, frequency, and alignment with the strategic plan of the Agency's cross-functional teams - 3	In-Progress	Jan-22	Executive Team	Mid-level managers and all staff are being included in the strategic planning process and are being asked to provide feedback and endorsement at every step. Evaluating cross-functional teams is part of this process.
Create a mechanism to capture action items to incorporate into the strategic plan - 3	In-Progress	Jan-22	Executive Team	This recommendation is being addressed as the Core Planning Team works on updating the strategic plan, developing a one-year tactical plan and creating a performance measurement system.
Develop standard operating procedures to document federal, state and local grant cycles from pre-award to post-award - 37	In-Progress	Jan-22	Michelle Stom Christina Sackett Ken Herd	The Planning & Projects department is currently documenting the process and creating standard operating procedures to follow for District, state and federal grants and co-funding.
Take specific actions and implement tracking process for 2020 Management and Performance audit strategy related recommendations - 38	In-Progress	Jan-22	Michelle Stom	Strategy related recommendations will be evaluated through the strategic plan and, where applicable, will be incorporated into the plan and tracked and reported through the agency performance measurement system that will be subsequently created. Six workshops have been held to date, the seventh workshop is scheduled for September 23rd.
Conduct mid-level manager survey regarding advancing Agency mission and potential areas of concern - 2	In-Progress	Feb-22	Executive Team	Mid-level managers and all staff are being included in the strategic planning process and are being asked to provide feedback and endorsement at every step. Once strategic plan completed a survey will be done.
Public Affairs Division should prioritize the initiatives in the Employee Communication Plan - 4	In-Progress	Feb-22	Michelle Stom Brandon Moore	Current Employee Communications Plan prioritization completed; Revised Employee Communications Plan will be completed following the public opinion survey, communications recommendations and update to Agency Umbrellas Communications Plan at the end of 2021/early 2022.
Limit the number of P-Cards to essential staff - 23	In-Progress	Feb-22	Christina Sackett Teresa Collins	Agency is participating in The National Association of Purchasing Card Professionals (NAPCP) p-card versus purchase order cost analysis study to be completed by December 2021. This study along with NAPCP p-card best practices will help in evaluating the number of p-cards and determine the need for any additional standard operating procedures.
Use data analytics software to ensure that all employee purchases on a P-Card are for a valid business purpose - 23	In-Progress	Feb-22	Christina Sackett Teresa Collins	Currently all p-card transactions are reviewed for business purpose and budget by staff. Staff is working with the agency's p-card vendor, JPMorgan, to evaluate additional analytic capabilities that are included with their program. Staff has had preliminary discussions with other entities using p-cards regarding any data analytic software they use and the capabilities and costs. Discovering that this type of software is often used when an entity has several thousand transactions a week, largely due to the costs and the agency currently has around 500 transactions a month.
Implement scheduled Munis Bid Management and Vendor Self Service modules within the Agency's financial system - 24	In-Progress	Mar-22	Christina Sackett Teresa Collins	Implementation cannot proceed at this time, staff has two work/issue tickets in with Tyler Technology (Munis) regarding functionality and are still awaiting response, despite escalation. Tyler's annual conference announced that Vendor Self Service is being replaced in Munis version 2021. The Vendor Self Service module drives the Bid Module so both modules cannot proceed, plus the Bid Module functionality will not support the Request for Proposal process as originally thought. At Tyler's annual conference it was announced that Vendor Self Services is being replaced in the next Munis version, v.2021. Staff are preparing to meet with Tyler to discuss issues with various Munis modules, the impact of the Vendor Self Service module replacement and the best way to proceed.
Establish a formal approach to track and monitor CPE and licensing within MUNIS or NEOGOV - 13	In-Progress	Sep-22	Robbie Kety Christina Sackett	Training Coordination Team and IT held a session to review NEO Train capabilities and very happy with program. Reviewing other agency software for capabilities and comparison. Safety Services Manager is reviewing the current contract with SkillSoft for the terms.
Add early payment discounts as part of the standard payment terms in procuring vendor contracts - 25	In-Progress	Sep-22	Christina Sackett Sandro Svrclin	Staff successfully tested the process in Munis without any issues. A policy and procedure will be developed and payment terms will be updated to reflect any early payment discount terms in new contracts.



2020 Management & Performance Audit Tasks - Recommendation #	Status	Timing	Task Leader(s)	Status Notes/Final Outcome
Obtain Service Organization Controls (SOC) report for IT service providers and review reports for internal controls - 34	Not Yet Started	Jun-22	Christina Sackett Nathan Sprunger	A Service Organization Controls (SOC) report is a way to verify that an organization is following some specific best practices related to finances, security, processing integrity, privacy and availability. The reports are created and validated by third-party auditors and are built to provide independent assurance and to help customers understand any potential risks involved in working with the organization evaluated. A standard operating process for obtaining SOC reports will be developed and different products will be evaluated to assist the agency achieve a comprehensive secure supply chain program.
Develop a Formal Mechanism to Track Contractor’s Performance - 26	Not Yet Started	Sep-22	Christina Sackett Teresa Collins	On hold, pending implementation of Munis Bid Management and Vendor Self-Service modules issues.
Consider engaging an independent consultant that specializes in electric utility bill reviews - 22	Not Implementing	N/A	Jack Thornburgh Ken Herd	The agency runs monthly audits on each bill to identify any issues upon receipt of the invoice. If issues are identified, staff follows up with energy provider to resolve issues. Annually, staff coordinates with three energy providers to determine if better tariffs can be applied to existing accounts/facilities. If energy provider proposes an alternative rate, staff analyzes the facility's planned operations for the next twelve months to evaluate if rate change will be beneficial.



**DATE:** September 1, 2021  
**TO:** Board of Directors  
**THRU:** Charles H. Carden, Interim General Manager  
**FROM:** Michelle Stom, Chief Communications Officer  
**SUBJECT:** Agency Strategic Planning Update - *Receive Report*

**SUMMARY**

Agency staff, under the facilitation of WSP USA, Inc., continues to update the agency's strategic plan and create a performance measurement system for tracking and reporting progress. This item provides an update on the current activities for that effort.

**SUGGESTED ACTION**

Receive Report.

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

In response to the 2020 Management and Performance Audit recommendations 6 and 7 to create a new agency strategic plan and to create an agency performance measurement system, the agency engaged WSP USA, Inc., to facilitate and lead staff through a strategic planning and performance measurement process that kicked off in March 2021. Six workshops have been held and a seventh is scheduled for September 23, 2021.

At its July 2021 board meeting, the Tampa Bay Water Board of Directors affirmed the agency's revised



vision statement, key organizational issues and six strategic goals, as attached. Strategic planning workshops and meetings are scheduled every 3-4 weeks throughout the planning and development process and include 21 managers, senior managers and executive staff from across the agency. All agency staff are asked for feedback and endorsement of the output created from these meetings. The next several workshops will focus on refining strategies and tactics to meet the agency's overarching goals. The plan is slated to be completed for Board approval at the December 2021 or January 2022 Board meeting.



**DATE:** August 26, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Jonathan M. Kennedy, Engineering Senior Manager

**SUBJECT:** Agency 2023 Southwest Florida Water Management District Grant Funding Program -  
*Receive Report*

**SUMMARY**

Tampa Bay Water (Agency) has successfully received co-funding from the Southwest Florida Water Management District (District) since the first configuration of Master Water Plan projects. The Agency continues its efforts to secure District, state and federal grant funding for agency projects and programs. This item provides an update on the projects that will be submitted for the Fiscal Year 2023 District co-funding program.

**SUGGESTED ACTION**

Receive Status Report

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

Since 1998, the Agency has received more than \$316 million in co-funding from the District for Master Water Plan and Capital Improvements Program Projects. The District application deadline for the Fiscal Year 2023 co-funding program is October 1, 2021. Tampa Bay Water is reapplying for three projects described below which have been previously funded by District. Reapplication is required by the



District to continue to receive funding on a Fiscal Year basis.

**Southern Hillsborough County Expansion - Booster Pump Station (Project No. 01609):** This project is needed to address the short-term water supply needs of Southern Hillsborough County and includes acquiring fee property and the design, permitting, and construction of a new in-line booster station in the vicinity of production well #7 of the Brandon Urban Dispersed Wells. The new booster station will be named the Brandon Booster Station and will take advantage of residual line pressure in the Brandon Transmission Main coming from the High Service Pump Station at Tampa Bay Water's Regional Surface Water Treatment Plant and boost pressures to sustain a higher flow rate to the existing Regional Delivery Point of Connection at the Lithia Water Treatment Facility. The Booster Pump Station will be designed to have a booster capacity of 20 million gallons per day (mgd) with a net gain in transmission line flow of approximately 5 to 7 mgd. The total cost for this project is \$15,176,254. This project has been approved for total co-funding by the District's governing Board in the amount of \$3.8 million after undergoing a third party review. The total requested funds in previous fiscal years is \$1 million. For Fiscal Year 2023 Tampa Bay Water will be requesting \$2.7 Million. An additional \$100 thousand will be requested in Fiscal Year 2024.

**Southern Hillsborough County Supply Expansion - Regional Pipeline Segments A and B (Project Nos. 01610 and 01616):** These projects are needed to address the long-term water supply needs of Southern Hillsborough County and includes approximately 26 miles of a 60 or 66-inch diameter pipeline to convey treated water from the High Service Pump Station to two Hillsborough County Points of Connection. The first delivery location will be at the existing Hillsborough County Lithia Water Treatment Plant and the second delivery will be at a new Point of Connection located south of the Lithia Water Treatment Plant, which has been identified by Hillsborough County as the AgMart property being acquired by the Water Resources Department. The project when completed, will increase capacity to Southern Hillsborough County by 65 mgd. The pipeline will be designed and built in two segments under two separate projects with concurrent schedules. The total cost for both segments is \$305,038,000. The total requested funds in previous fiscal years is \$4,459,207. Tampa Bay Water will be requesting \$2.9 million in co-funding for Fiscal Year 2023. In future years an additional total amount of \$137,694,793 will be requested.

**Tampa Bay Water Wise:** Tampa Bay Water Wise is the regional water conservation rebate program, which aims to save 11 million gallons per day by 2030. The program has 11 rebate types which save water in the residential and commercial sectors, across all members' service areas. The program's development is guided by the members through a Working Group, and the program is administered by a 3<sup>rd</sup> party contractor, EGIA. The Agency secured cooperative funding for fiscal years 2020 through 2022 and is applying for another year of funding for Fiscal Year 2023. Fiscal Year 2023 costs are projected to be \$1,608,919. Tampa Bay Water will be requesting half of eligible costs which is projected to be \$726,892 in co-funding for Fiscal Year 2023. Ineligible costs include costs associated with the shallow well rebate program. In addition, the customizable rebate program is funded separately by the District through their WISE program.

No new projects have been identified for District co-funding for Fiscal Year 2023. Once the next year



supply project or projects from the three Master Water Plan project(s) undergoing feasibility is/are selected for implementation by the Board, staff will develop future funding requests for the project or projects selected.

## **BACKGROUND**

The Agency secured \$183 million through the Partnership Agreement with the District to assist in the development of eligible projects for System Configuration I. The District, State and Federal sources have provided funding for planning and design of alternative water supply projects. The District funded \$11.25 million for design and construction of the West Pasco Infrastructure Project. The District and the Northern Tampa Bay Basin Boards co-funded \$122,029,149 of System Configuration II. The Agency plans to seek co-funding for future water supply facilities.



**DATE:** September 1, 2021

**TO:** Board of Directors

**FROM:** Barrie Buenaventura, General Counsel

**SUBJECT:** 2021-2022 Regulatory Plan - *Approve*

**SUMMARY**

Tampa Bay Water must prepare and submit its annual regulatory plan by October 1, 2021. As reflected in the proposed 2021-2022 Regulatory Plan, the agency does not intend to engage in rulemaking activities in the coming year.

**SUGGESTED ACTION**

Approve 2021-2022 Regulatory Plan for submittal in compliance with Section 120.74, F.S.

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

Chapter 120, F.S., requires Tampa Bay Water to prepare and submit a regulatory plan annually by October 1. The regulatory plan must identify laws enacted or amended during the previous 12 months that affect the duties or authority of the agency, and for each such law, the agency must state whether it must adopt rules to implement the law and provide details about the proposed schedule for rulemaking. If rulemaking is not necessary to implement the identified laws, the agency must provide a concise written explanation of why that is so. Regulatory plans must also include a listing of other laws the agency expects to implement by rulemaking in the coming year and it may include an update or supplement to prior regulatory plans. Finally, the regulatory plan must include certifications by the



presiding officer and principal legal advisor to the agency.

As shown in the attached proposed 2021-2022 Regulatory Plan, Tampa Bay Water does not intend to adopt or amend any rules in the coming fiscal year. Upon approval by the Board, Tampa Bay Water will timely submit the agency's 2021-2022 Regulatory Plan and publish it on the agency's website.

It is recommended that the Board approve the agency's proposed 2021-2022 Regulatory Plan.

Attachment (1)

[2021-2022 Regulatory Plan](#)



**2021-2022 REGULATORY PLAN OF**  
**TAMPA BAY WATER, A REGIONAL WATER SUPPLY AUTHORITY**

A. **RULEMAKING TO IMPLEMENT NEW LAWS**

List laws enacted or amended during the previous 12 months which create or modify the duties or authority of Tampa Bay Water:

Chapter 2021-017, Laws of Florida	Legal Notices
Chapter 2021-072, Laws of Florida	Public Records and Public Meetings
Chapter 2021-124, Laws of Florida	Payment for Construction Services
Chapter 2021-127, Laws of Florida	Public Records/Agency Trace Secrets
Chapter 2021-165, Laws of Florida	Drones
Chapter 2021-173, Laws of Florida	Public Records
Chapter 2021-194, Laws of Florida	Public Works Projects
Chapter 2021-226, Laws of Florida	Special District Accountability

The laws enacted or amended during the previous 12 months do not require Tampa Bay Water to adopt new rules or amend existing rules in order to implement them.

B. **OTHER RULEMAKING**

List each law not otherwise listed under A., which Tampa Bay Water expects to implement by rulemaking before July 1, 2022, except emergency rulemaking: None.

C. **UPDATE OF PRIOR YEAR'S REGULATORY PLAN OR SUPPLEMENT**

No update or supplement of any prior year's regulatory plan is needed.

D. **CERTIFICATIONS**

**Certification of Chairman of Tampa Bay Water Board of Directors:**

As Chairman of the Board of Directors, I certify that I have reviewed Tampa Bay Water's 2021-2022 Regulatory Plan and that Tampa Bay Water regularly reviews all of its rules. As of September 20, 2021, Tampa Bay Water reviewed all of its rules and determined that they remain consistent with the agency's rulemaking authority and the law implemented.

\_\_\_\_\_  
Dave Eggers

Chair

Date: \_\_\_\_\_



**Certification of Tampa Bay Water General Counsel:**

As General Counsel to Tampa Bay Water, I certify that I have reviewed Tampa Bay Water's 2021-2022 Regulatory Plan and that Tampa Bay Water regularly reviews all of its rules. As of September 20, 2021, Tampa Bay Water reviewed all of its rules and determined that they remain consistent with the agency's rulemaking authority and the law implemented.

\_\_\_\_\_  
Barrie S. Buenaventura  
General Counsel

Date: \_\_\_\_\_



**DATE:** September 1, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Kenneth R. Herd, Chief Science & Technical Officer

**SUBJECT:** Regional Water Supplies, Member Demands and Environmental Conditions - *Receive Report*

**SUMMARY**

This item provides the status of Tampa Bay Water's water demand and water supply conditions including hydrologic conditions, surface water and reservoir management, and source rotation. Water Shortage Mitigation Plan status and an outlook for the upcoming fall season are also included. The Agency continues to closely monitor production from the South-Central Hillsborough Regional Wellfield and work with Hillsborough County on ways to limit demand and shift production to manage water delivery to the Lithia Point of Connection.

**SUGGESTED ACTION**

Receive Status Report.

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

Summary Highlights

Since the beginning of this fiscal year, the Agency has delivered an average of 185.92 million gallons of



water per day (mgd) to meet the member governments' demands. This is about 1 mgd (0.5%) more water delivered than for the same period last year. The region received an average of 9.4 inches of rainfall in August 2021 (nearly 1.5 inches above average). River flows were at the 75th and 56th percentiles for the Hillsborough and Alafia Rivers, respectively for the month of August 2021. A normal condition is defined when river flow is between the 34<sup>th</sup> and 67<sup>th</sup> percentiles of flow for the same calendar month; therefore, an above-normal flow condition was observed in the Hillsborough River and a normal flow condition was observed in the Alafia River during August 2021. River flows were harvested to fill the C.W. Bill Young Regional Reservoir during August 2021. The Regional Reservoir storage volume was operationally full at 14.90 billion gallons at the end of August 2021. The remaining storage is intentionally unfilled at this time to allow for potential heavy rainfall that might occur in the coming months. A summary of other conditions is highlighted below:

- The 12-month running average Consolidated Permit Wellfield pumping rate was 81.17 mgd at the end of August 2021.
- There was a shift to more groundwater production than surface water production because of current challenges in liquid oxygen availability, a key ingredient for water treatment. Surface production was lowered from 85 mgd to 30 mgd in mid-August.
- The 12-month running average pumping rate for the South Central Hillsborough Regional Wellfield was 23.34 mgd at the end of August 2021, below the permitted annual average quantity of 24.1 mgd.
- The City of Tampa's Hillsborough River Reservoir was at an elevation of 22.74 ft. (full) at the end of August 2021.
- No water diversion through Harney augmentation occurred during August 2021.
- No water delivery to the City of Tampa at the Morris Bridge Point of Connection occurred during August 2021.
- No water was produced from the Tampa Bay Water Desalination Facility as planned in August 2021.
- Groundwater levels generally **increased about 1.4 feet** from July 2021 to August 2021.
- Average water levels in the 10 indicator lakes and wetlands located on and near Consolidated Permit Wellfields **increased 6.4 inches** during August 2021 (based on data collected throughout the month, not necessarily end-of-month).

### Climate Outlook

A La Niña event occurred in the winter of 2020, which typically brings warm temperature and reduces rainfall in our region. The effect of La Niña often peaks in the months of December, January, and February. The impact of a La Niña event has been observed in the past winter and spring months, although the impact is not the same across the country. In the month of August, neutral conditions were observed but a La Niña Watch was issued by the National Oceanic and Atmospheric Administration (NOAA) in its updated forecast issued at the end of August. Neutral conditions are favorable through the Northern Hemisphere summer and into the fall, with a La Niña event potentially emerging during the September-November season and lasting through the 2021-2022 winter (70% chance of occurrence during November-January).



The 90-day climate outlook issued by NOAA on August 19, 2021 predicts normal precipitation and above-normal temperature for the period of September - November 2021. This is projected for much of the Southeastern United States including Florida.

### Hydrologic Conditions

The region received 9.4 inches of rainfall in August 2021 based on averaged rainfall from all gauges throughout the service area (Figure 1). Rainfall measurements from a single gauge at individual wellfields (Figures 7-16) are provided showing current environmental conditions at those locations.

Average monthly flows in the Hillsborough and Alafia Rivers were 348 mgd and 327 mgd (75th and 57th percentiles), respectively in August 2021. Note that a normal river flow condition is defined when the flow falls within the range of the 34th and 67th percentiles compared to the historical baseline; therefore, an above-normal flow condition was observed in the Hillsborough River and a normal flow condition was observed in the Alafia River during August 2021.

Permitted available withdrawals from the Alafia River averaged 37.15 mgd while the average withdrawal of water from the Tampa Bypass Canal was 73.55 mgd in August 2021.

### Water Demand and Supply Summary

Tampa Bay Water's budgeted delivery for Water Year 2021 is 184.7 mgd. This includes a projected average annual delivery to the City of Tampa of 6.0 mgd. Total average delivery to the member governments in August 2021 was 178.22 mgd, which is 3.32 mgd lower than the total average delivery in August 2020. Although rainfall received in August 2021 was less than what was received in August 2020, the total amount of rainfall received during June through August 2021 is 7 inches more than what was received in same three months of 2020. The abundant rainfall has suppressed regional water demand, especially outdoor irrigation. Tampa Bay Water's average total delivery for October 2020 through August 2021 was 185.92 mgd, which is about 1 mgd (0.5%) more water delivered than for the same period last year (Figure 2).

Aggregate groundwater production from the 13 Tampa Bay Water wellfields totaled 118.0 mgd in August 2021. Production from the Consolidated Permit Wellfields totaled 88.46 mgd in August 2021 and the 12-month running average withdrawal rate was 81.17 mgd through August 31, 2021 (Figure 3). Groundwater production from each of the Consolidated Permit Wellfields is presented in Figures 7-16.

Tampa Bay Water continues to closely monitor water production in the South Hillsborough County service area. The 12-month running average water production from the South Central Hillsborough Regional Wellfield was within 0.75 mgd of the annual average permit limit (24.1 mgd) (Figure 4) at the end of August 2021. Staff is working with Hillsborough County to coordinate supply and demand management opportunities in this service area. The County instituted a one-day-a-week watering restriction for its South County residential and commercial customers. The watering restriction took effect on January 4, 2021 and ends December 31, 2022. Staff is also working with the County to reduce water demand at the Lithia Point of Connection and shift more production to the Central Point of



Connection. Staff has also been communicating monthly with Southwest Florida Water Management District staff to coordinate issues related to pumping rates at the South Central Hillsborough Regional Wellfield. Additional alternative water supply delivery capacity to the Lithia Point of Connection will occur when the Brandon Booster Station is completed by 2024.

Treated surface water totaled 61.96 mgd in August 2021. The Desalination Facility was offline in August 2021 as planned. Given abundant flow in both the Hillsborough and Alafia Rivers, river flows were harvested for storage in the Regional Reservoir in August. The monthly average influent to the Regional Reservoir was 37.76 mgd in August 2021. The Reservoir storage volume was operationally full at 14.90 billion gallons at the end of August 2021. The remaining storage is intentionally unfilled at this time to allow for heavy rainfall that might occur in the coming months.

Comparison of year-to-date production from the three water supply sources between WY 2021 and WY 2020 is shown in Figure 5.

### Environmental Conditions

Tampa Bay Water closely monitors the environmental conditions around Agency wellfields and these data are used to guide production and wellfield management decisions. Figure 6 depicts the locations of selected Upper Floridan Aquifer monitor sites and lake or wetland sites. A summary of observed conditions in and around the 10 Consolidated Permit Wellfields is provided in Figures 7 through 16. These figures show pumping rate and rainfall at these wellfields for the past 23 years as well as water-level data from the Upper Floridan Aquifer and a lake or wetland located on or near each wellfield.

A reference line on the lake and wetland hydrographs shows the lake minimum level or the normal pool elevation in the wetland. The normal pool elevation of a wetland is the water-surface elevation that is normally reached at the end of the rainy season during an average rainfall year. This is typically the highest water level reached in a wetland during an average rainfall year; water levels are expected to fluctuate below this elevation during the year.

Water levels in lakes and wetlands respond more directly to changes in rainfall than does the Floridan Aquifer. Even with substantially reduced groundwater production, because of the strong relation to rainfall conditions, water levels in some lakes and wetlands on and near wellfields will exhibit normal water level fluctuations only as rainfall occurs in normal or above-normal amounts. With a sustained reduction in groundwater pumping rate and normal rainfall, water levels in area lakes and wetlands should continue to approximate normal water-level fluctuations.

General water-level changes are summarized as follows:

- Groundwater levels generally **increased about 1.4 feet** during August 2021.
- Groundwater levels in August 2021 were generally **1.8 feet higher** than in August 2020.
- Average water levels in the 10 indicator lakes and wetlands located on and near Consolidated Permit Wellfields **increased 6.4 inches** during August 2021(based on data collected throughout the month, not necessarily end-of-month).
- Average water levels in the 10 indicator lakes and wetlands in August 2021 were about **13.9 inches higher** than water levels in August 2020.



## Water Shortage Mitigation Plan

The Board approved the updated Water Shortage Mitigation Plan (WSMP) in April 2017. The Water Shortage Mitigation Plan uses rainfall, stream flows, and reservoir storage as indicators of the health of the region's water supplies.

The cumulative rainfall in the region is at a 6.45-inch surplus at the end of August 2021 (compared to a 7.71-inch surplus at the end of July 2021). Stream flow is at a 73.61 mgd surplus at the end of August 2021 (compared to a 63.42 mgd surplus at the end of July 2021). The storage in the C.W. Bill Young Regional Reservoir was operationally full at 14.90 billion gallons (approximately 96% of full storage) at the end of August 2021. Tampa Bay Water is currently under a normal WSMP Stage.

Staff continues to work with the members in collecting watering restriction and conservation information, discussing and exploring various short-term and long-term demand management alternatives, implementing a consistent public awareness campaign throughout the region, and identifying additional opportunities to optimize existing water resources.

## **BACKGROUND**

Data collection, analysis, and interpretation as well as decision-making are ongoing for a multitude of factors that influence and constrain Agency operations. These include hydrologic and environmental conditions, supply and demand conditions, treatment plant parameters, water quality constituents, along with equipment/machinery and infrastructure variables.

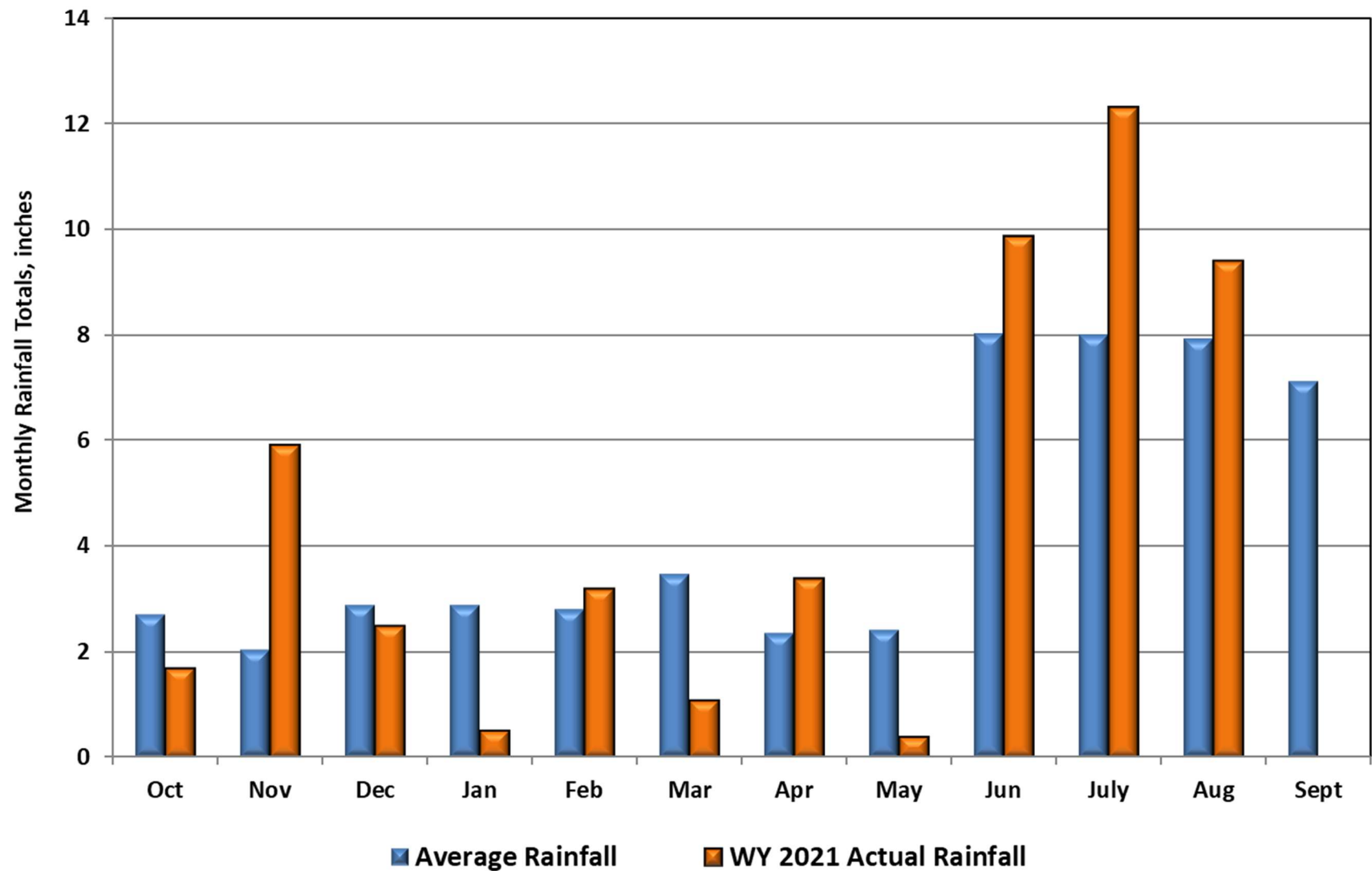
A summary of monthly information is compiled and provided to the Board in each Agenda Packet and is supplemented as necessary. A summary of highlights is presented annually.

Attachment (1)

[Figures](#)

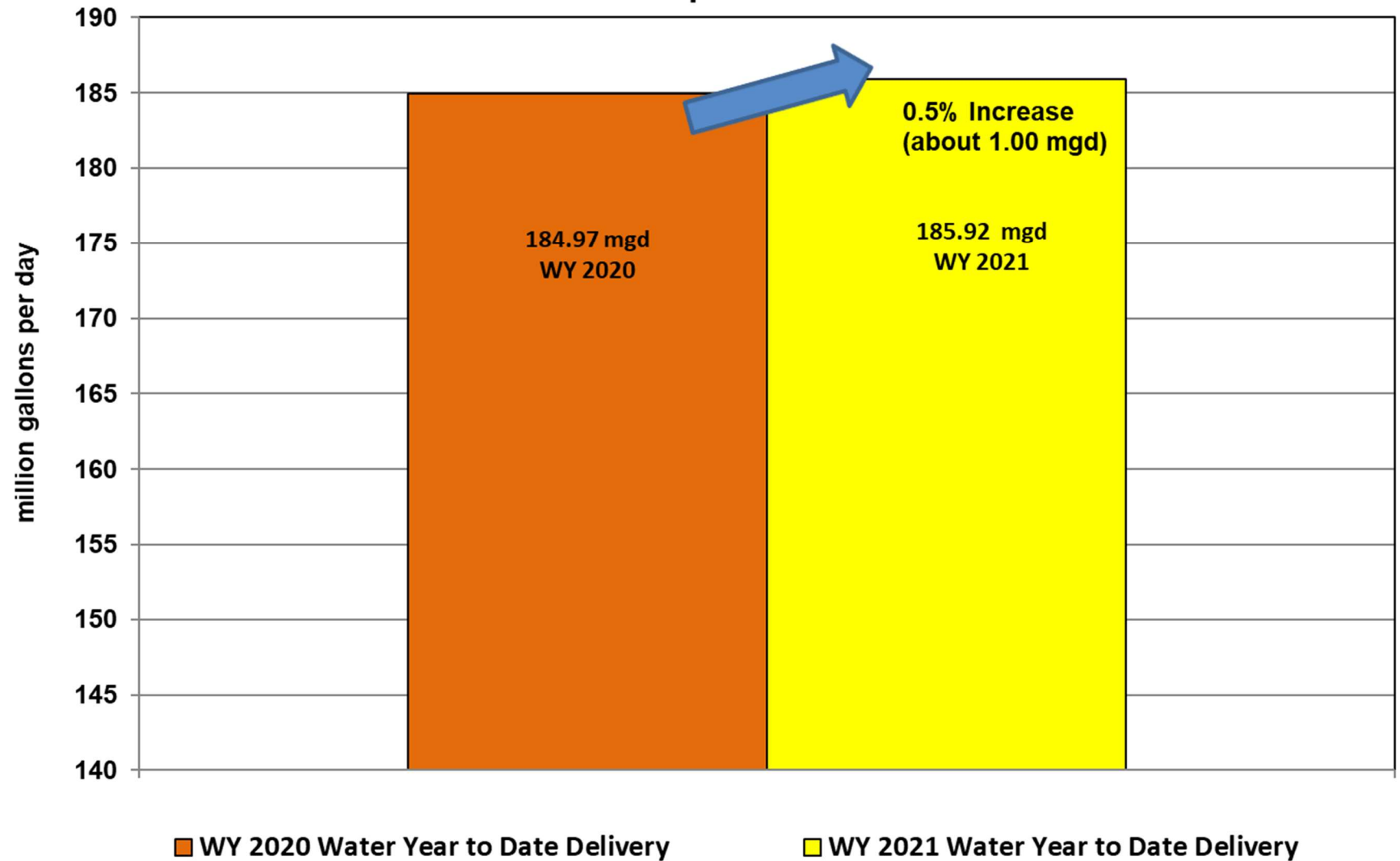


**Figure 1. Water Year 2021**  
**Monthly Rainfall vs. Average Monthly Rainfall**



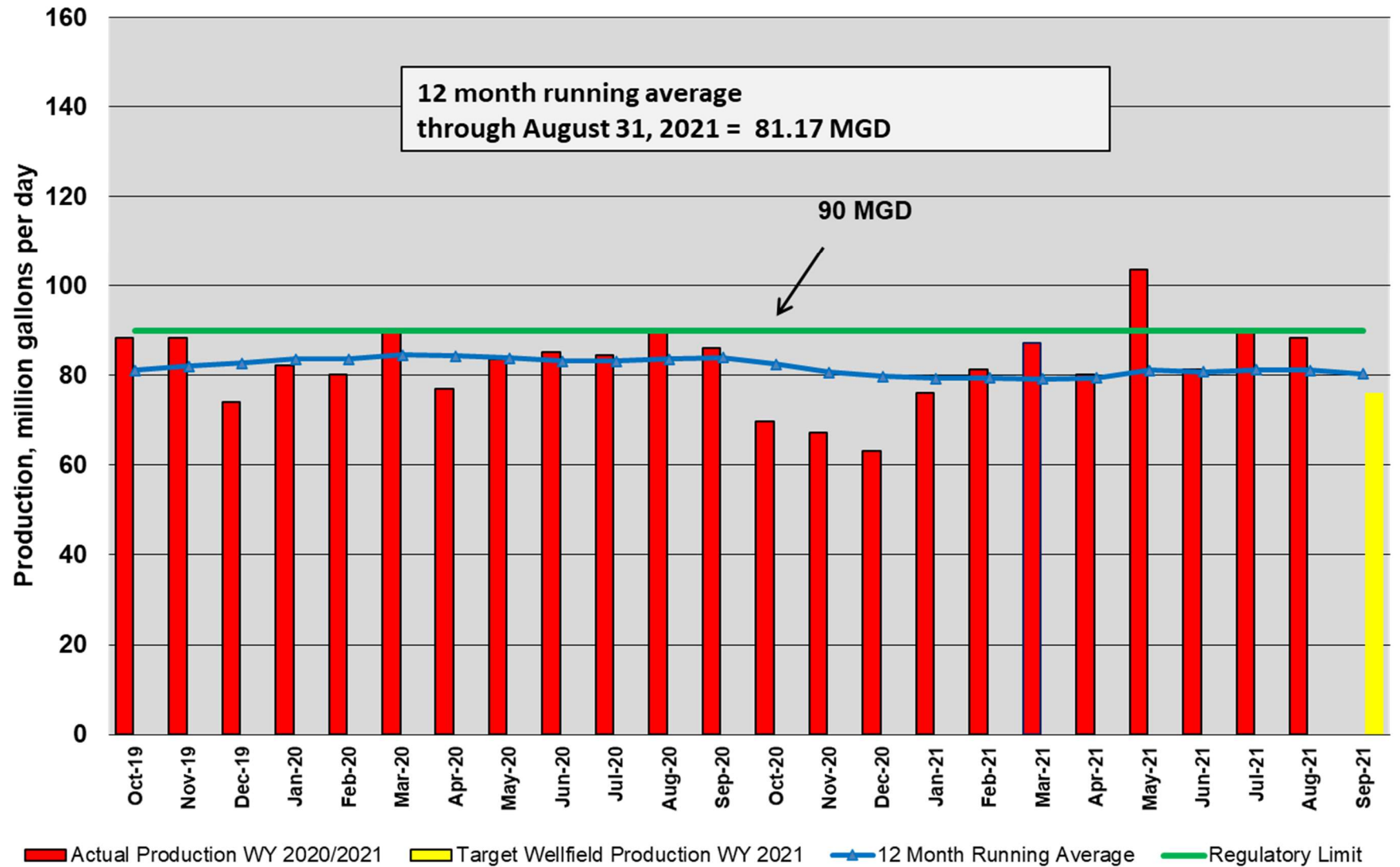


**Figure 2. Tampa Bay Water Delivery Through August  
Water Year 2021 Compared To Water Year 2020**



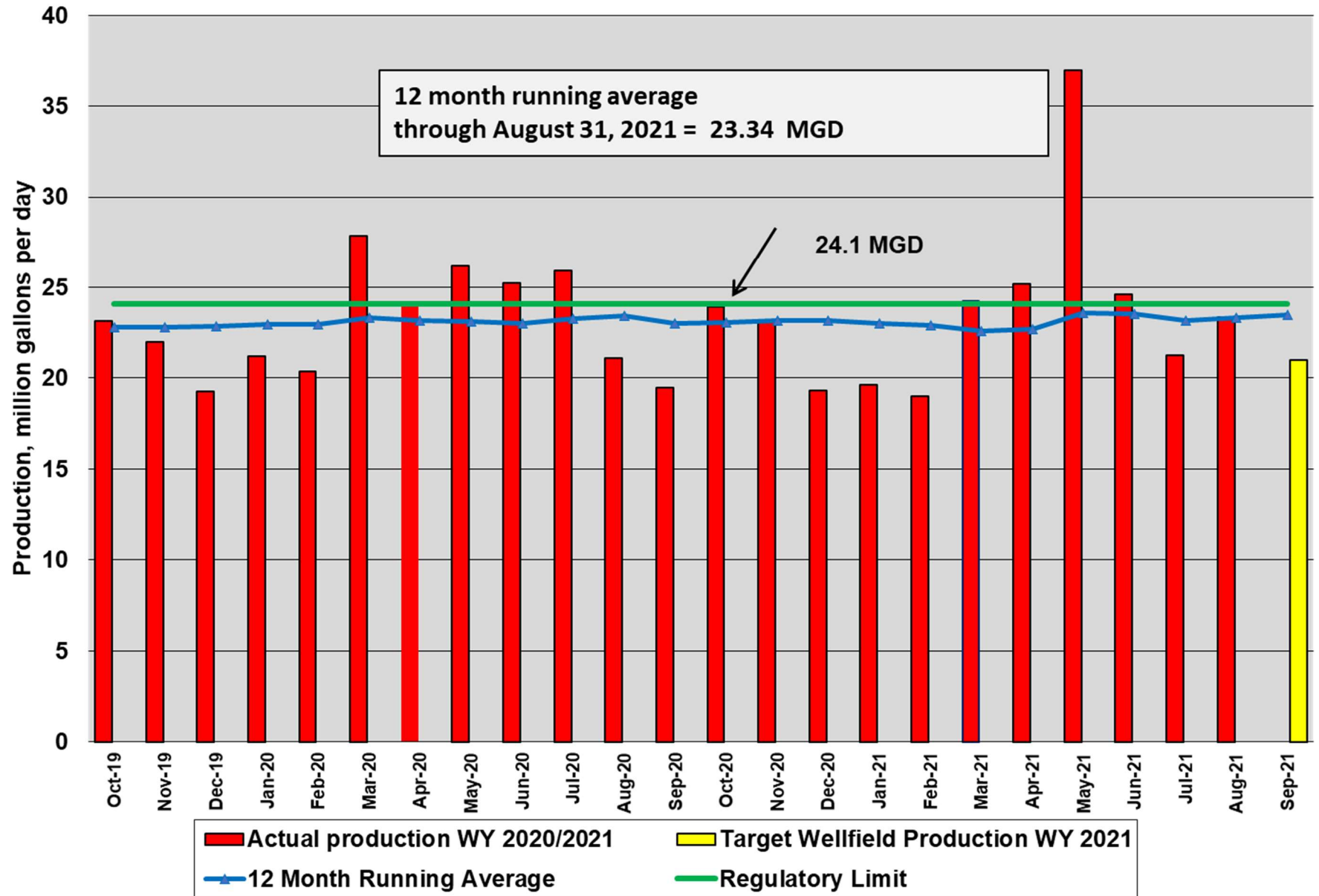


### Figure 3. Consolidated Wellfield Production



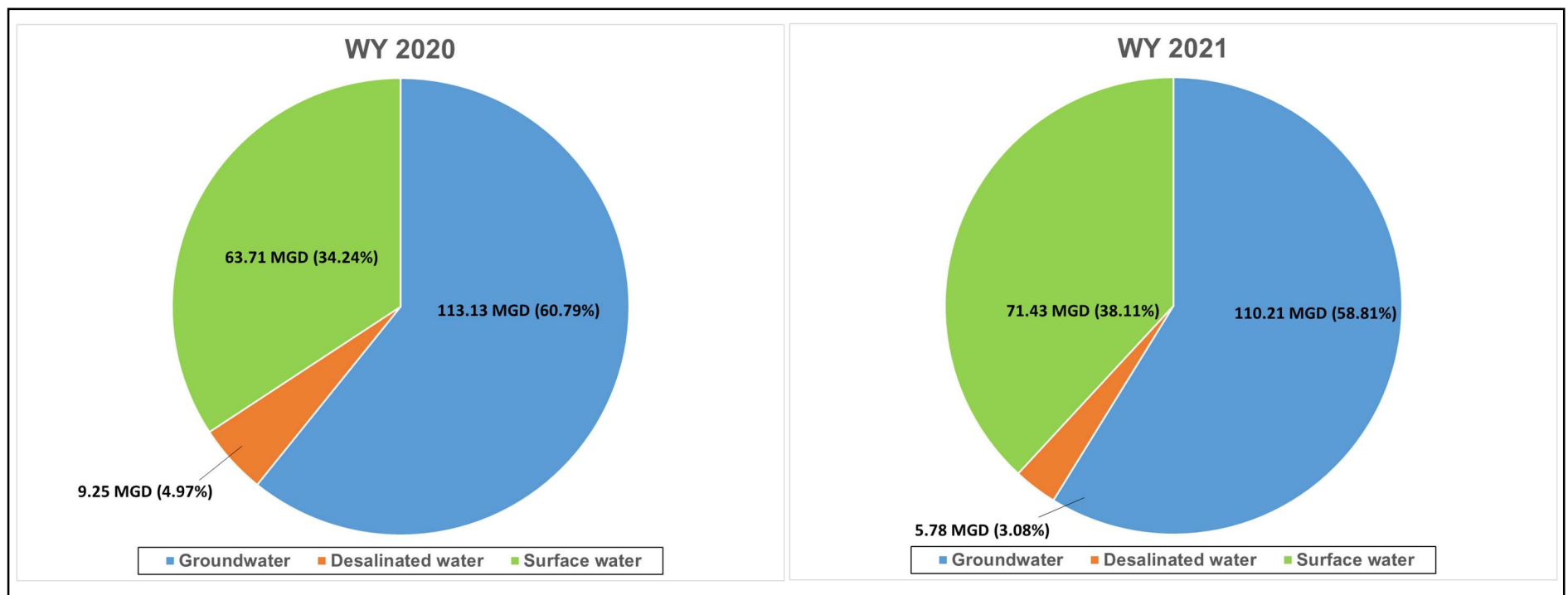


**Figure 4. South Central Wellfield Production**





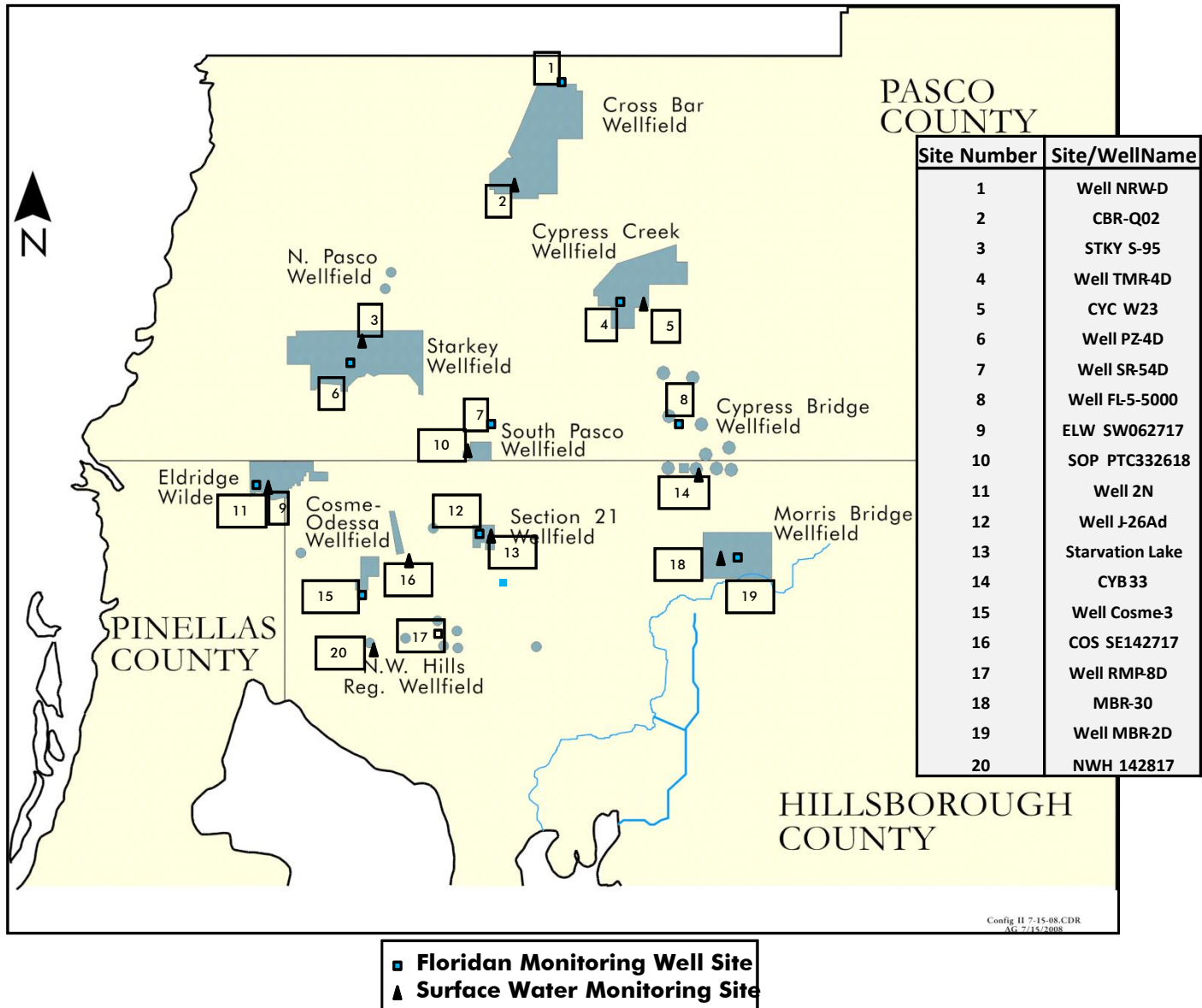
**Figure 5: Tampa Bay Water Supply Sources Through August  
Water Year 2021 Compared To Water Year 2020**





# Monitoring Site Location Map

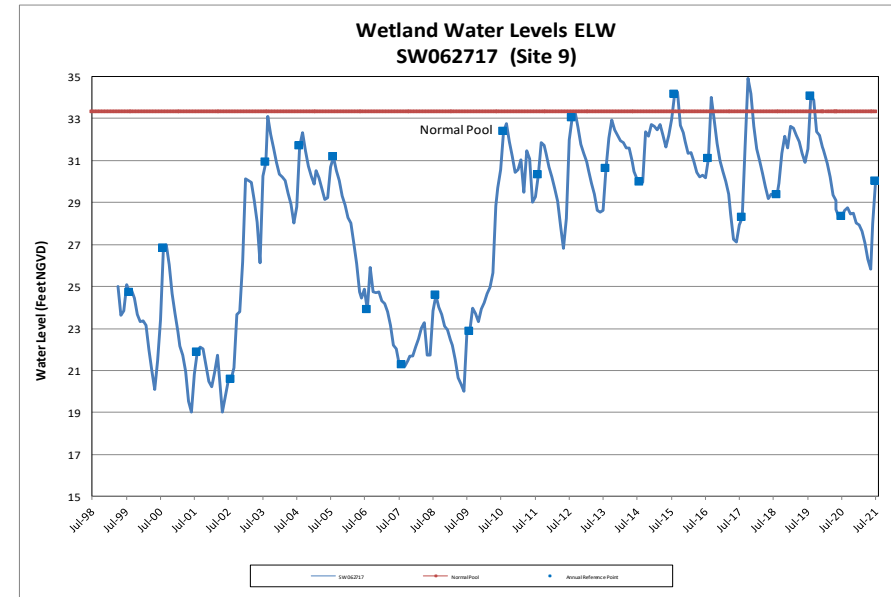
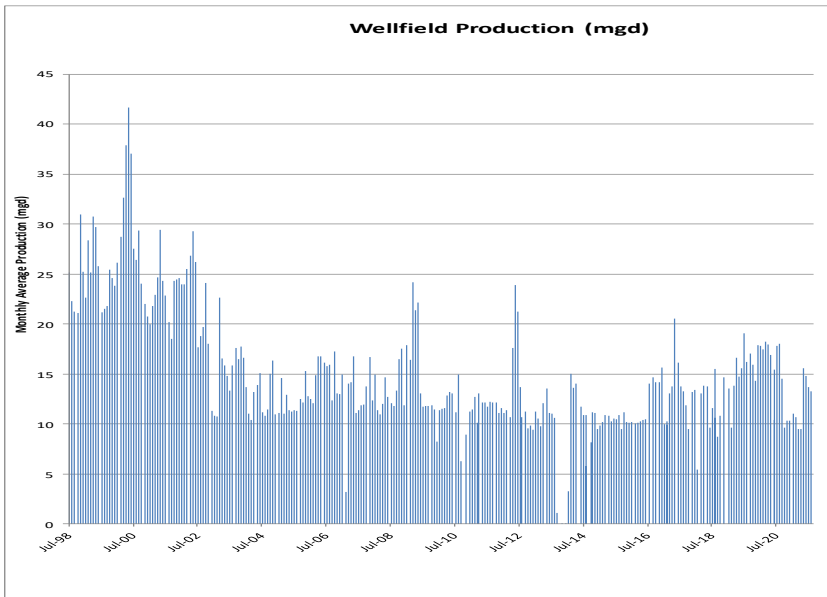
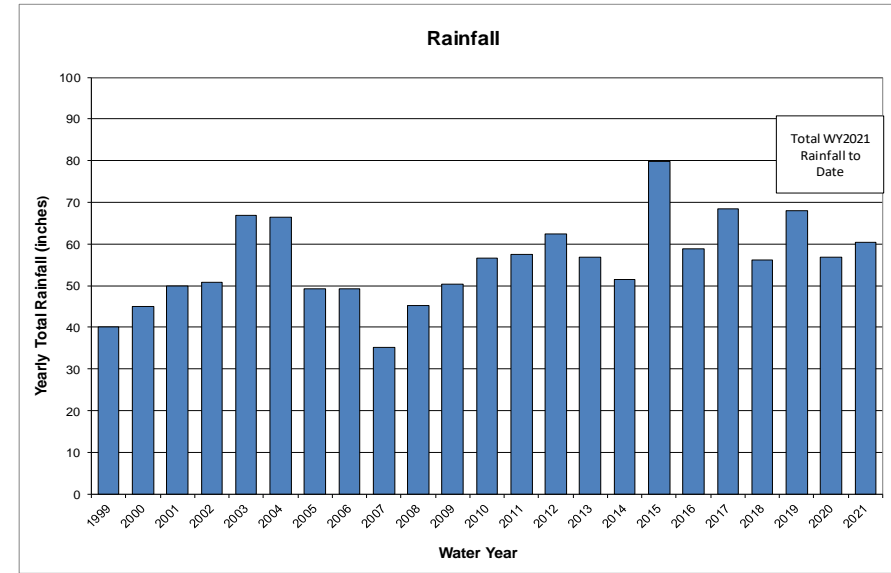
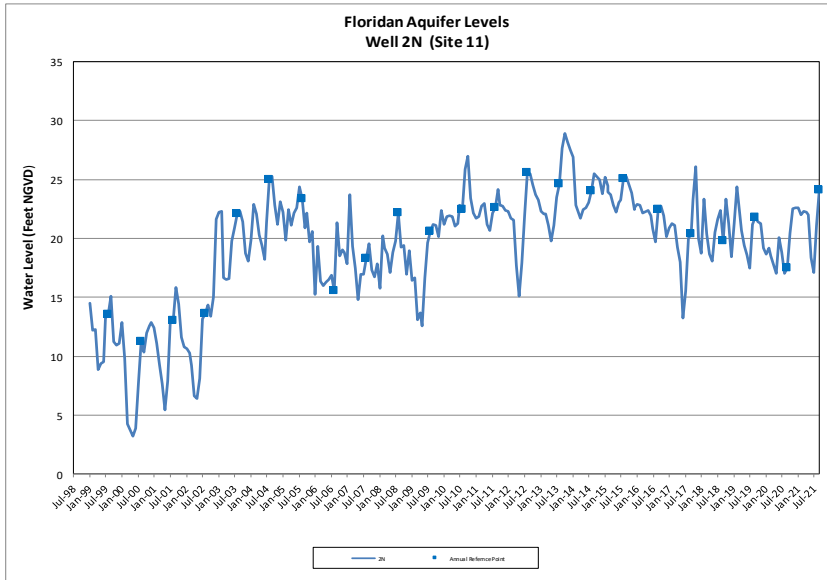
# Figure 6





# Eldridge Wilde Wellfield

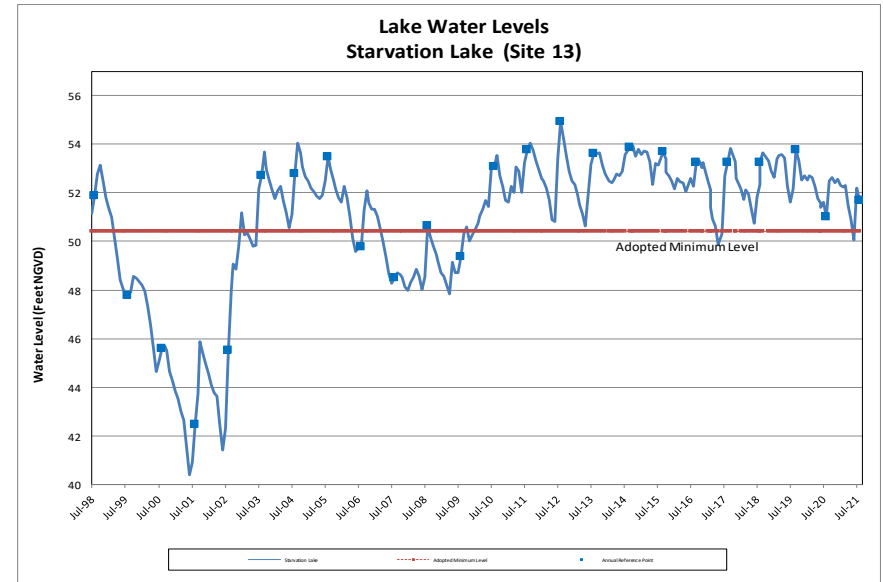
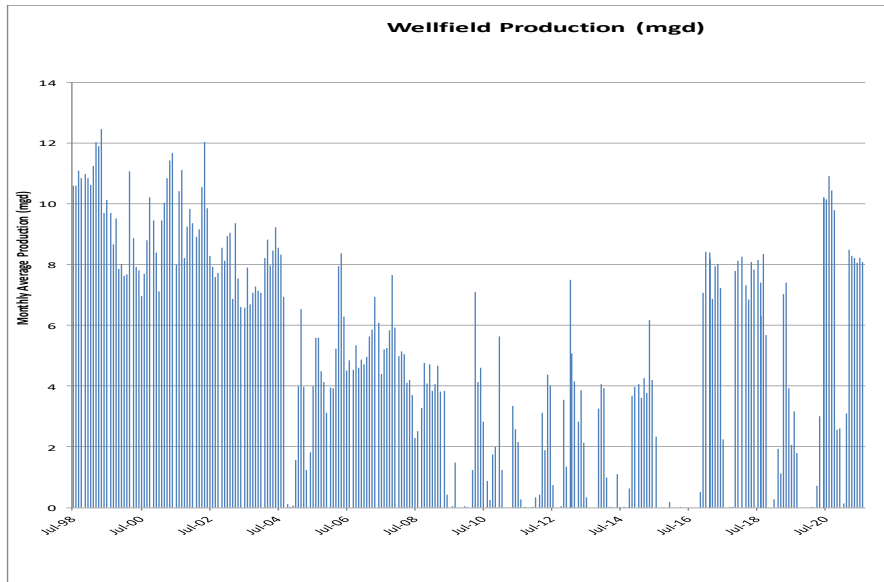
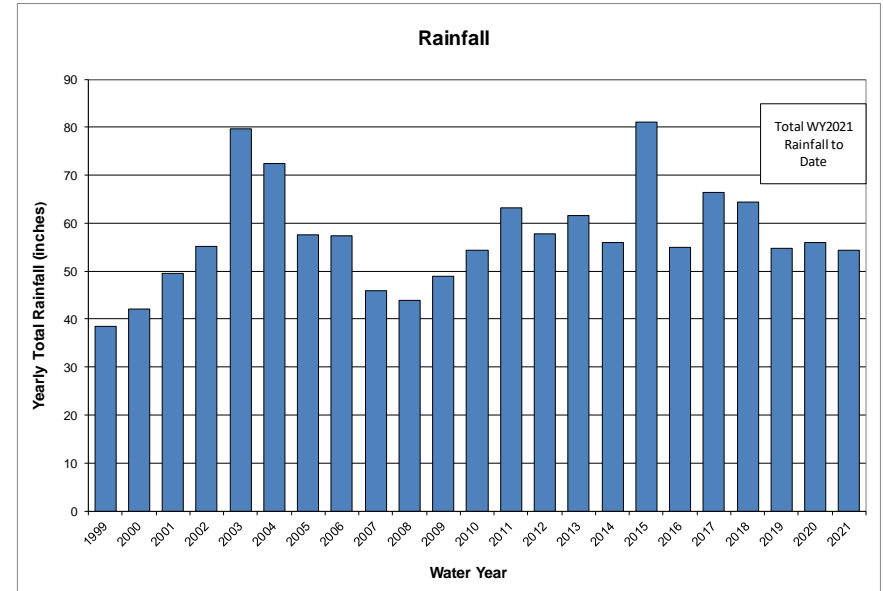
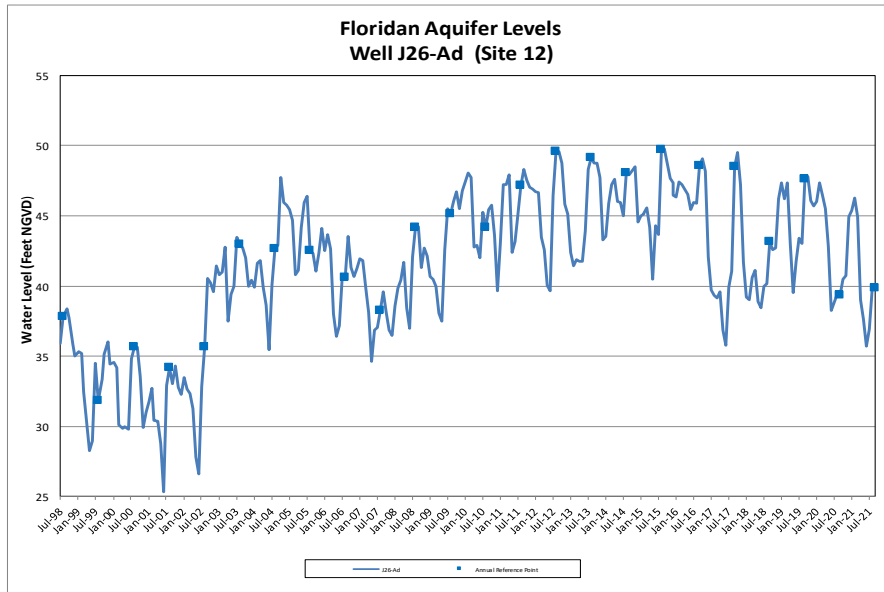
Figure 7





# Section 21 Wellfield

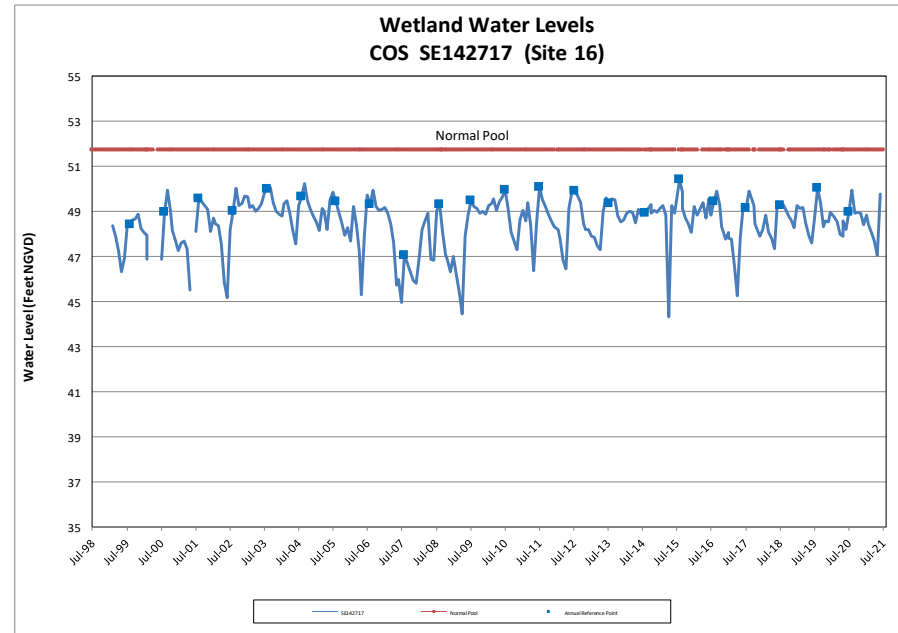
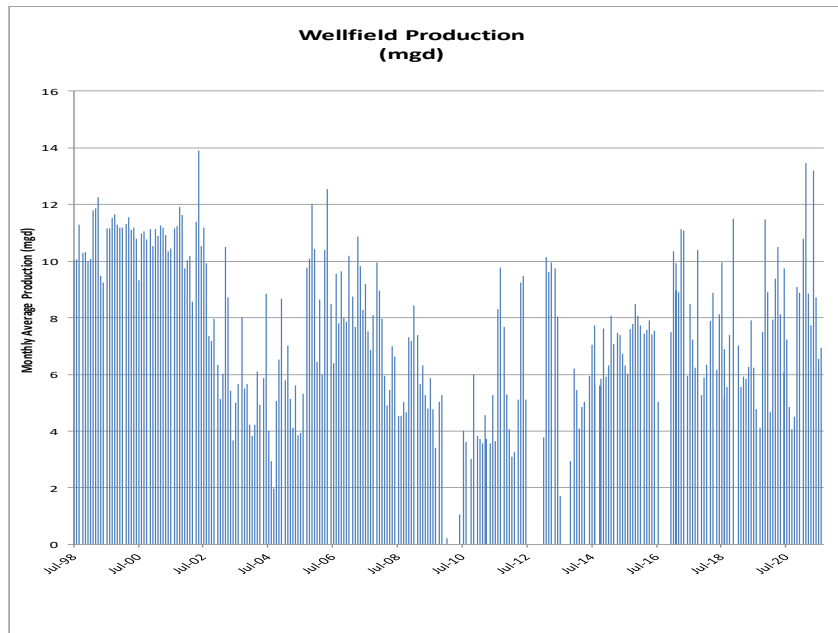
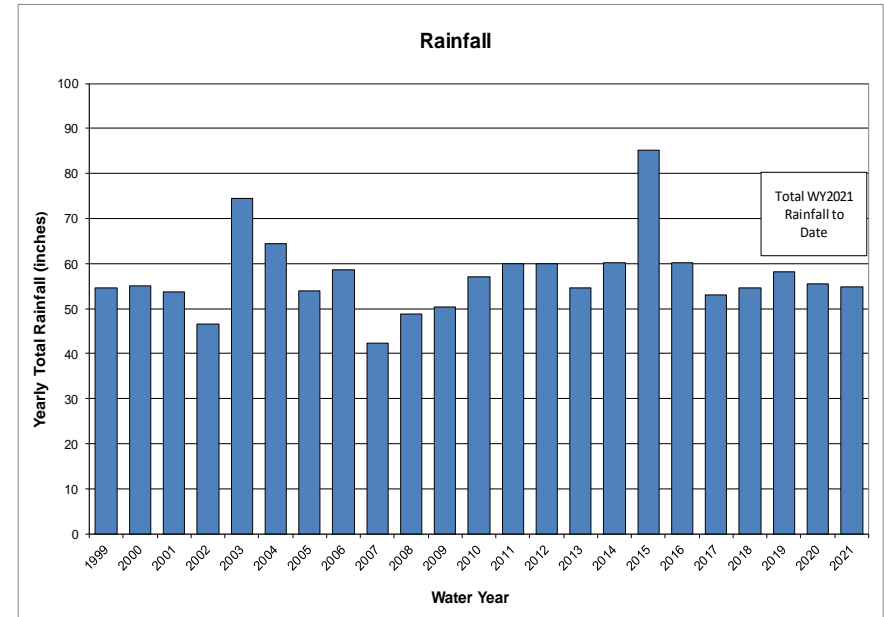
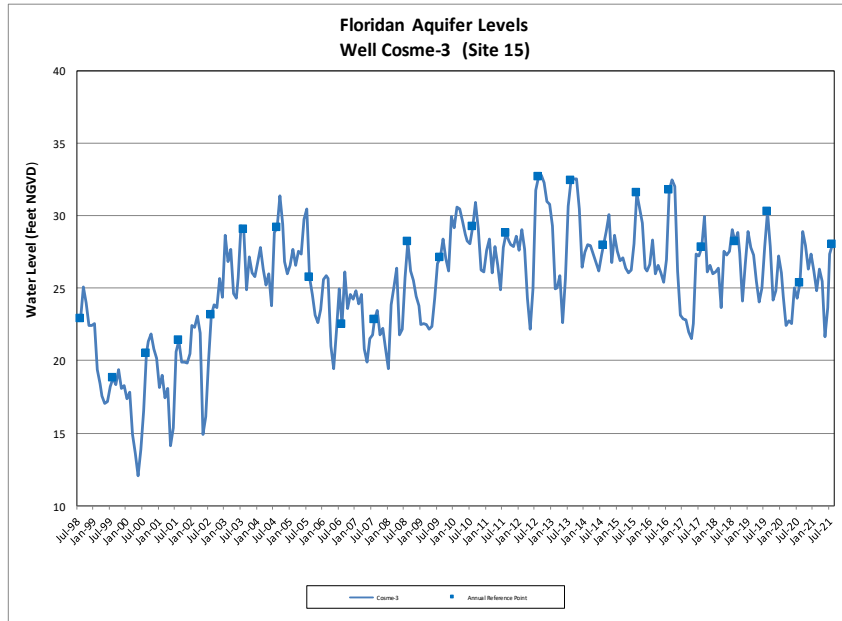
Figure 8



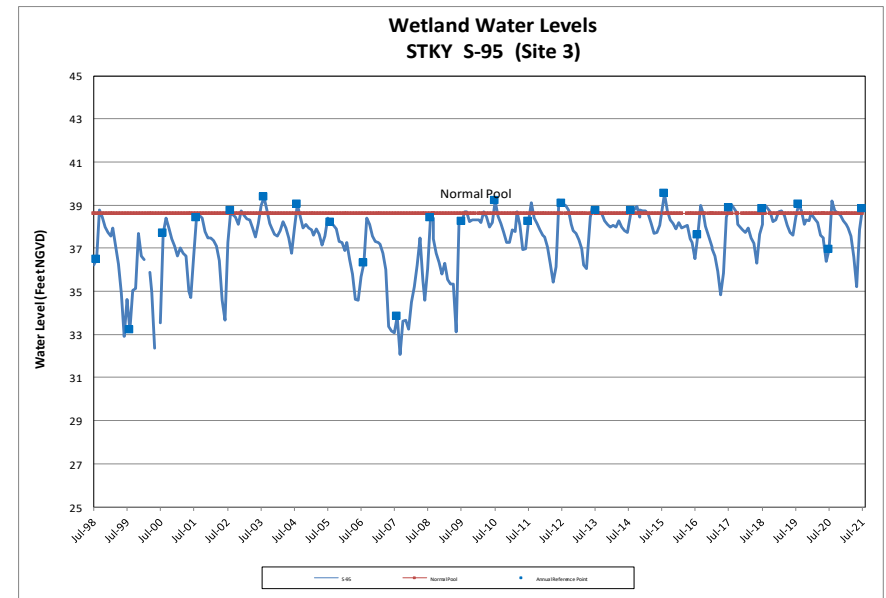
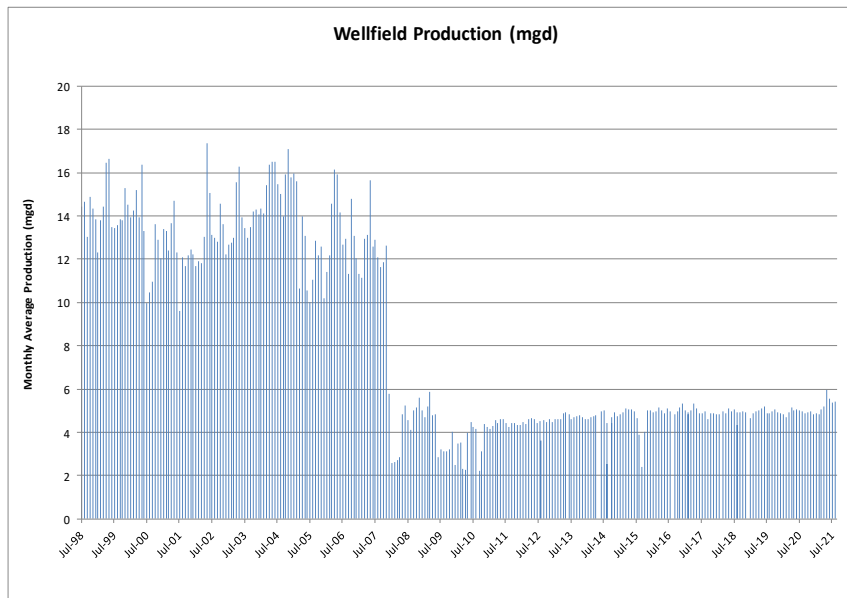
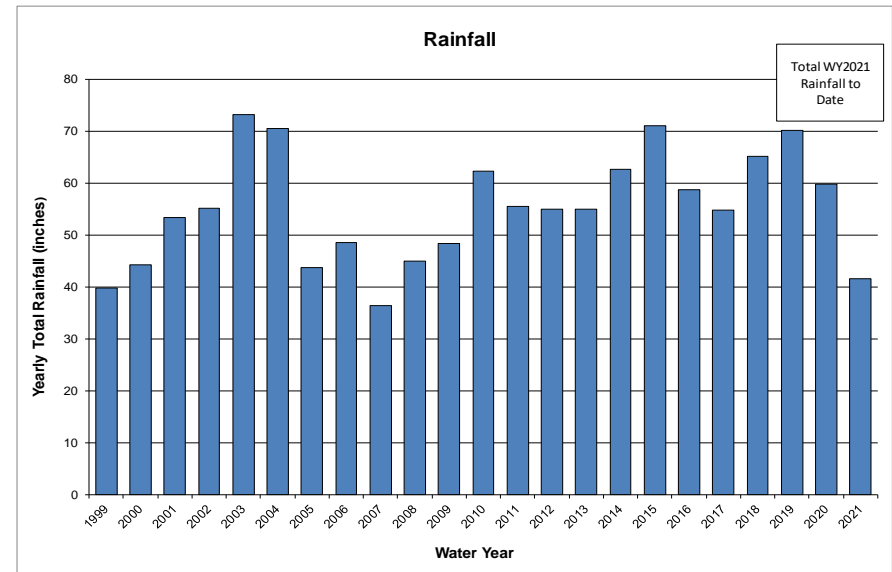
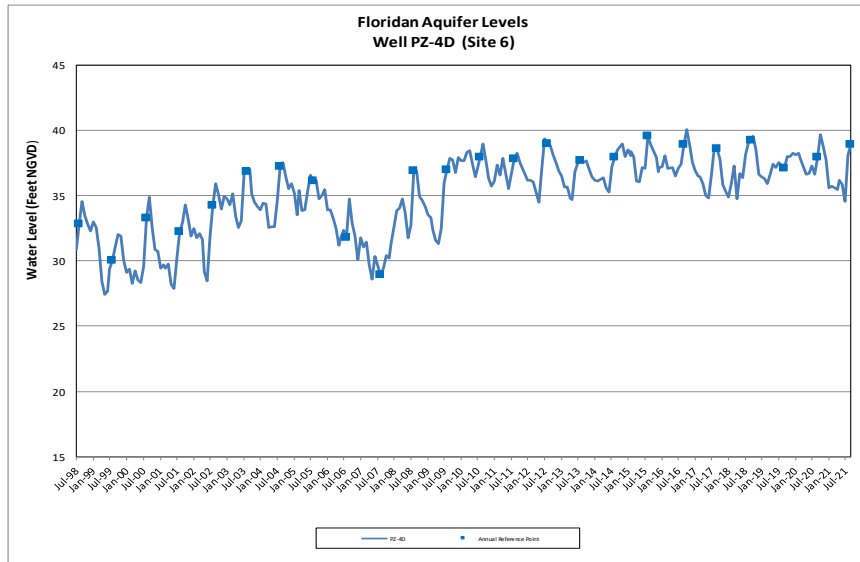


# Cosme-Odessa Wellfield

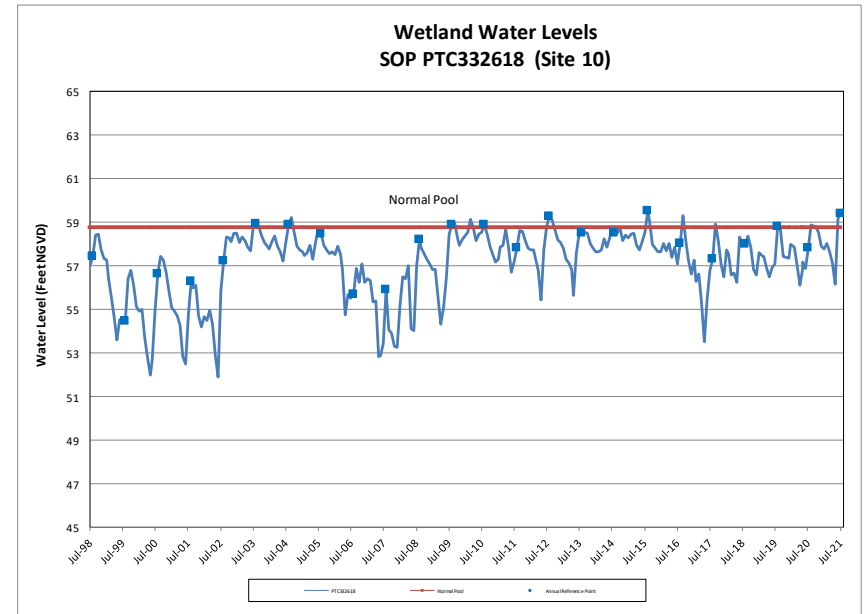
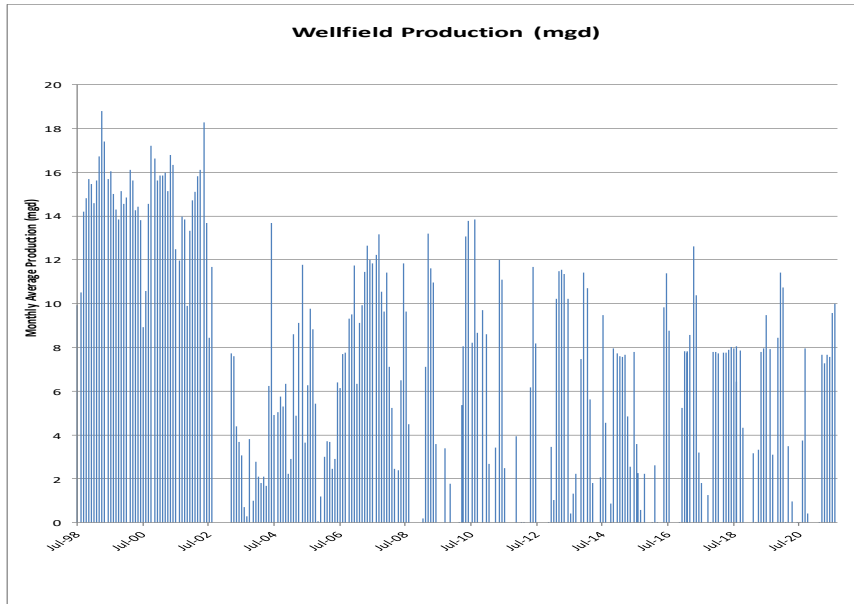
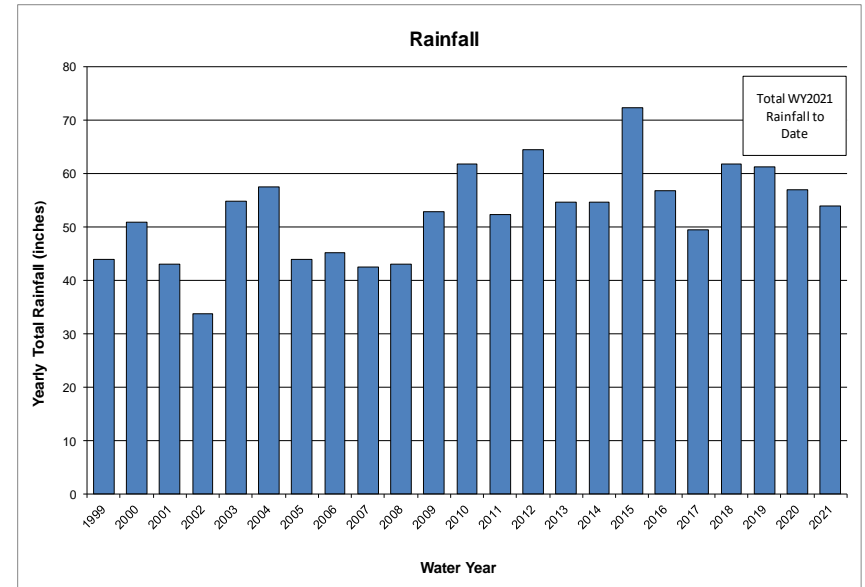
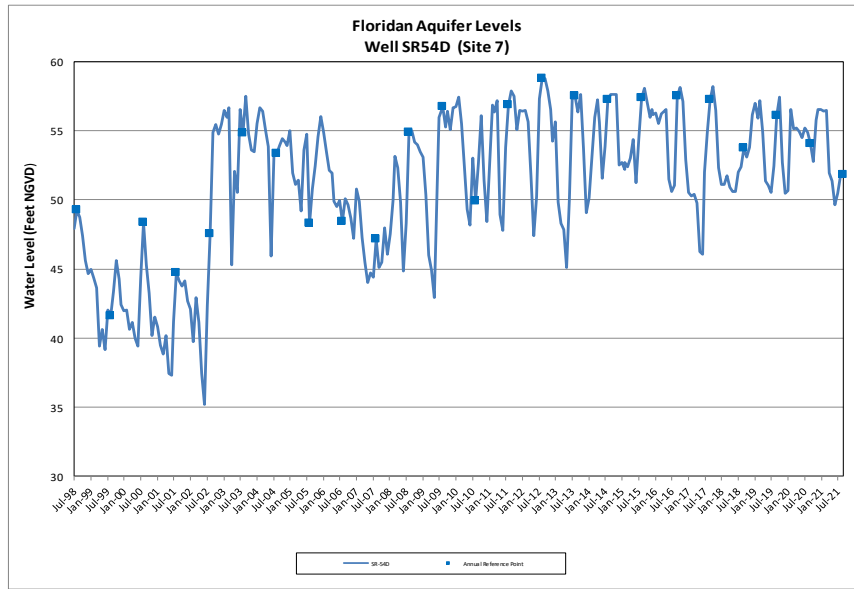
Figure 9







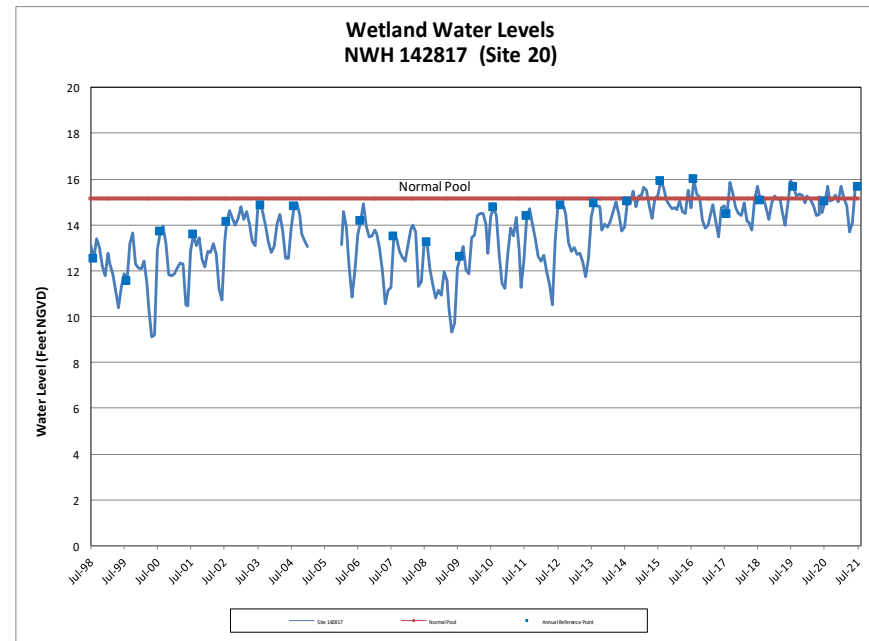
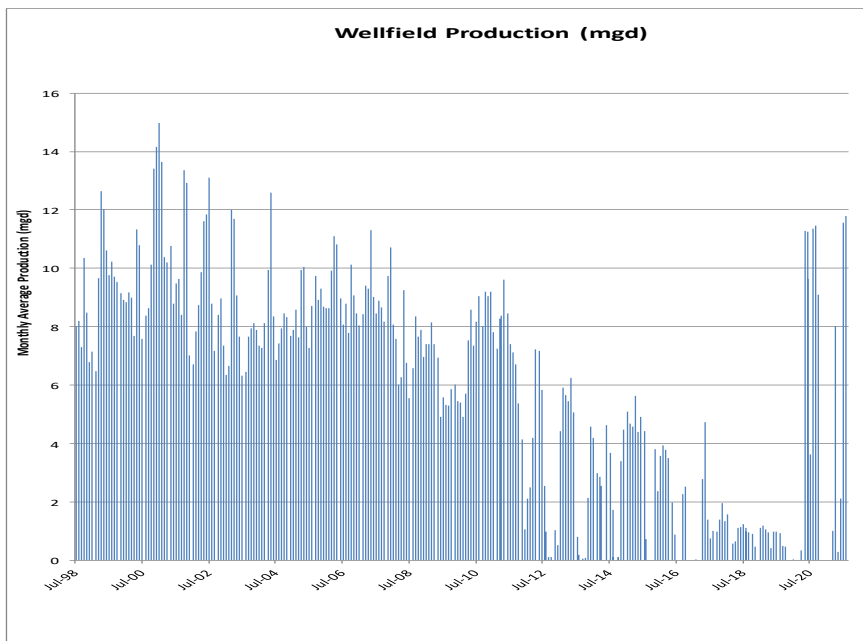
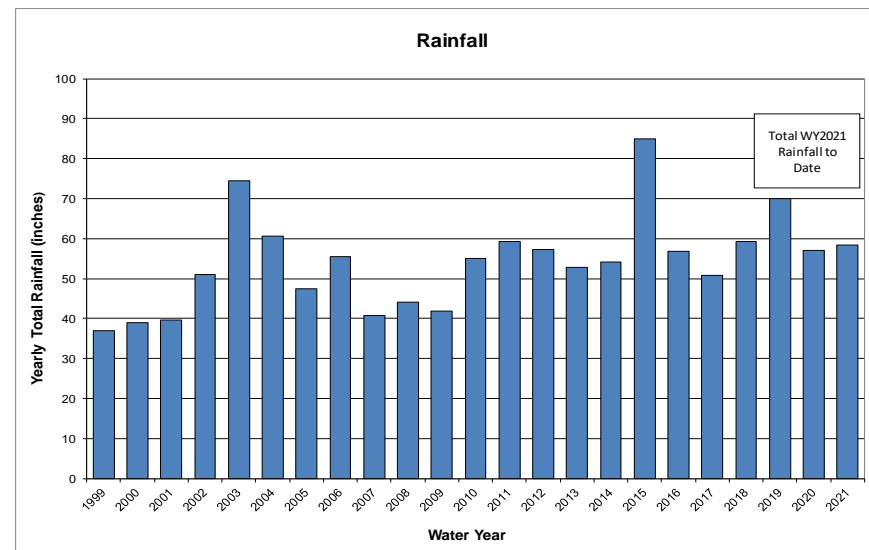
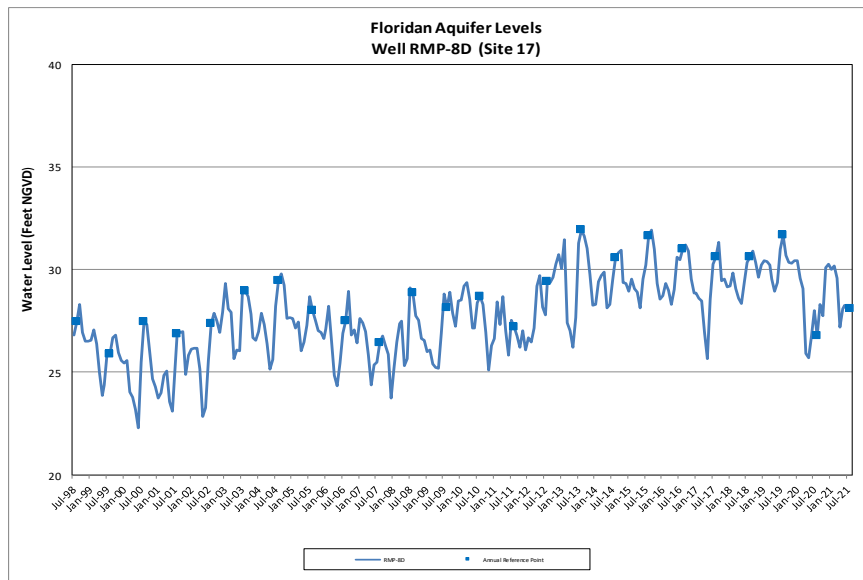






# Northwest Hillsborough Regional Wellfield

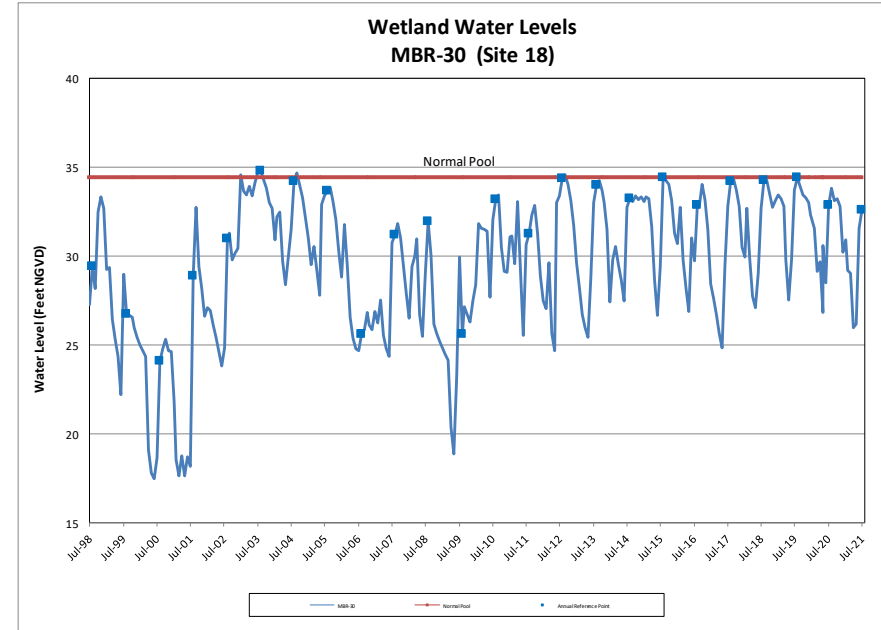
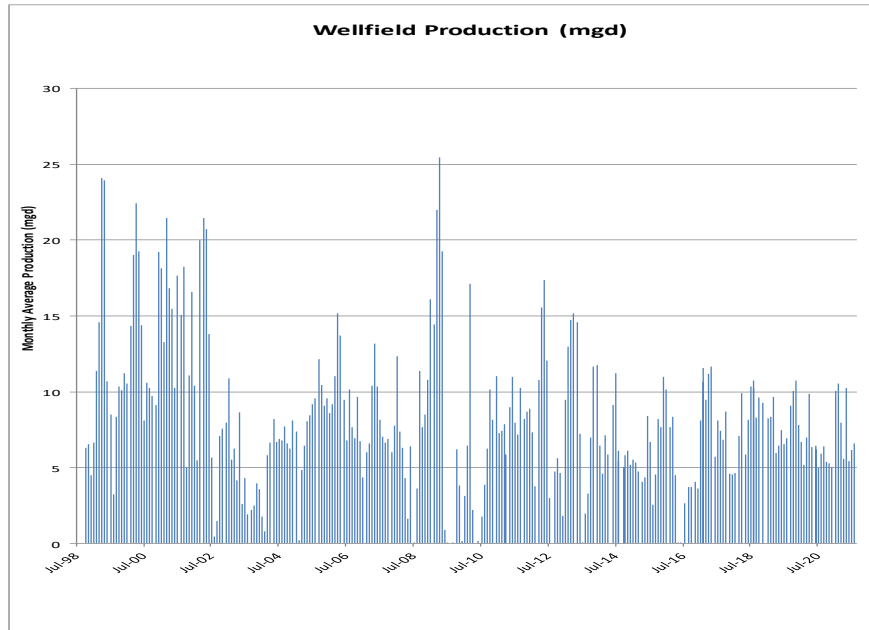
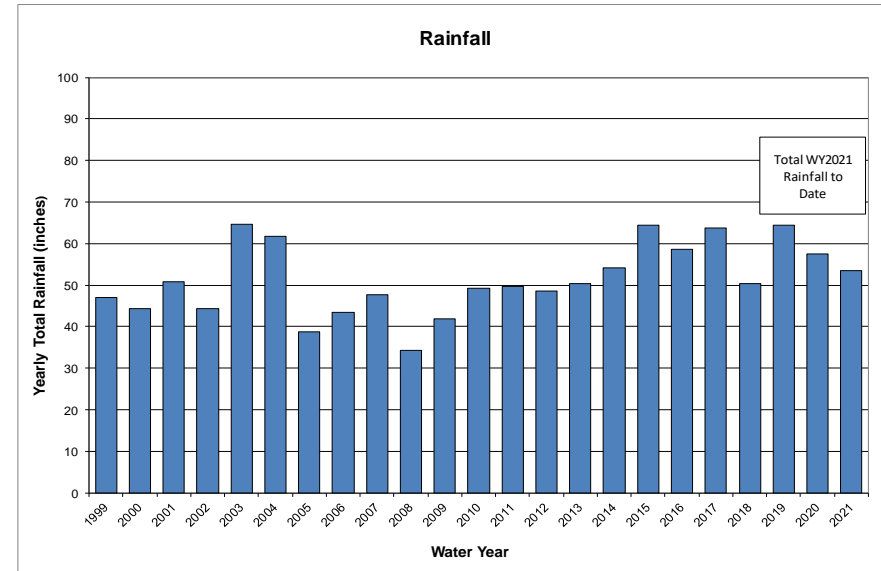
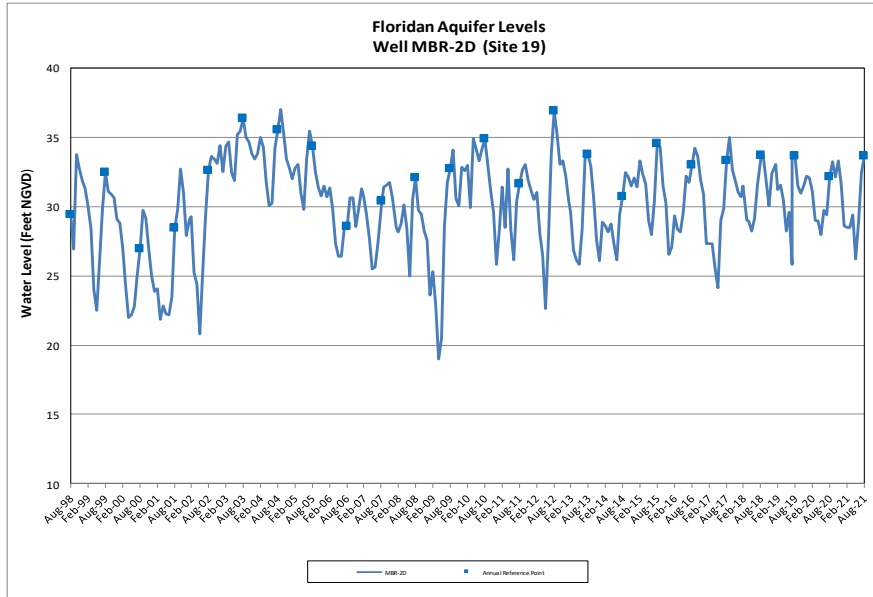
Figure 12



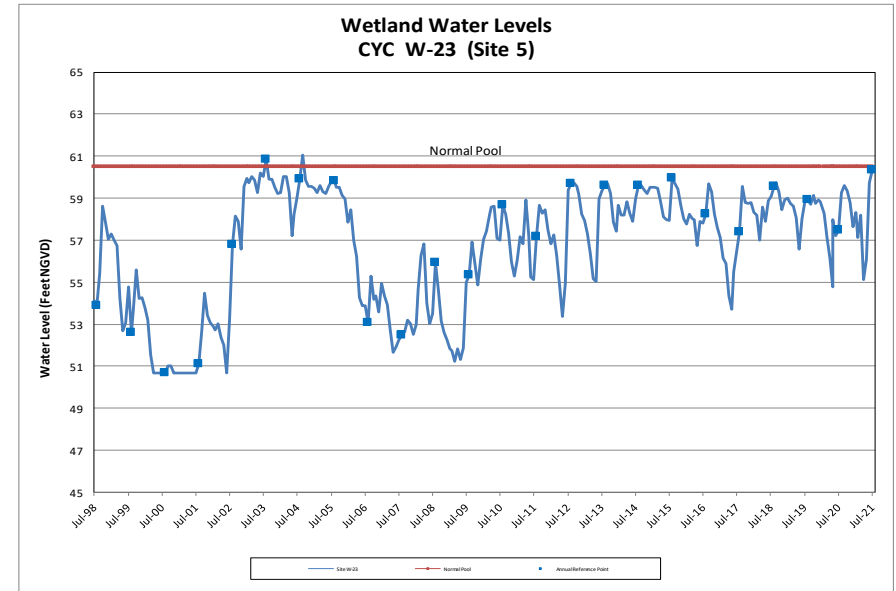
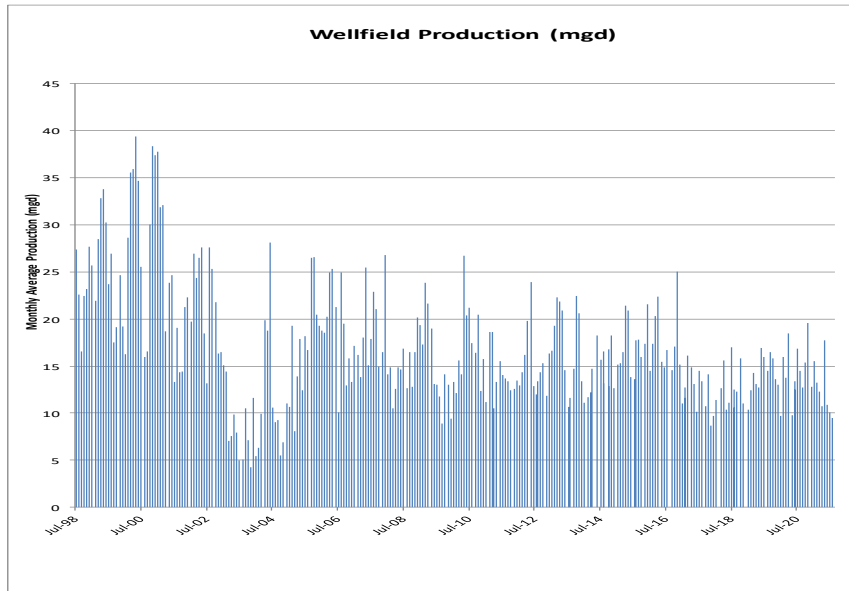
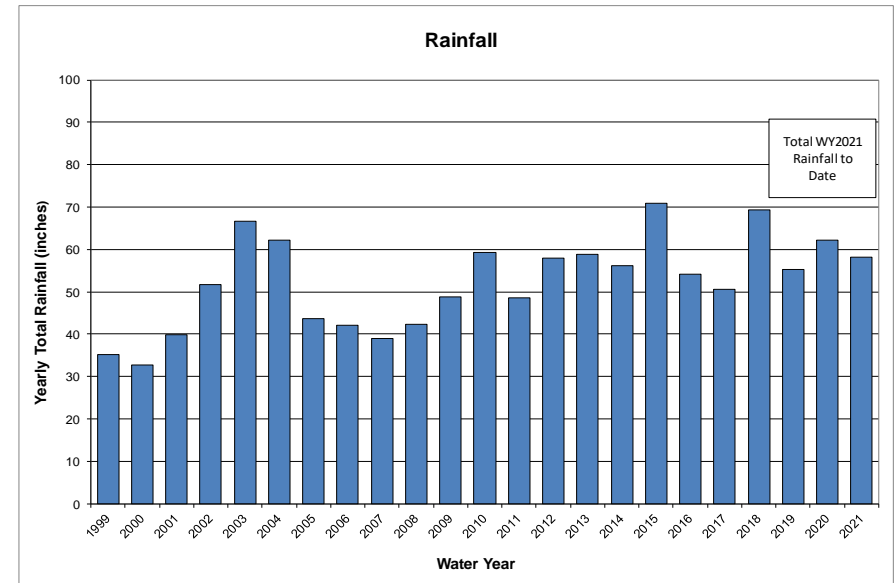
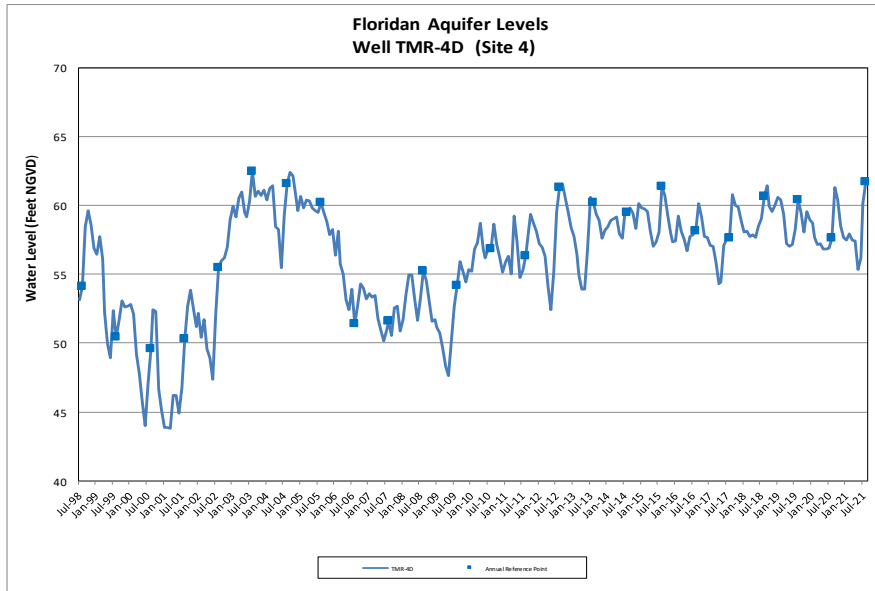


# Morris Bridge Wellfield

Figure 13





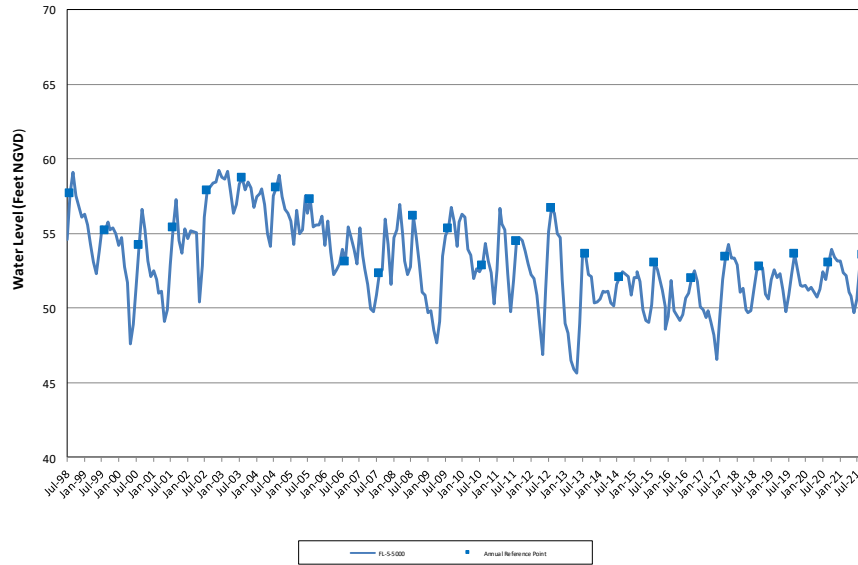




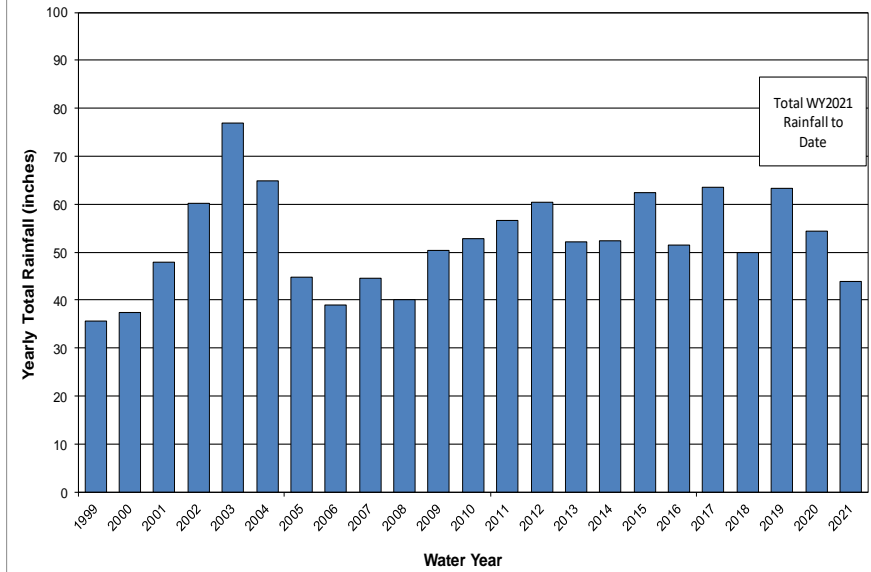
# Cypress Bridge Wellfield

Figure 15

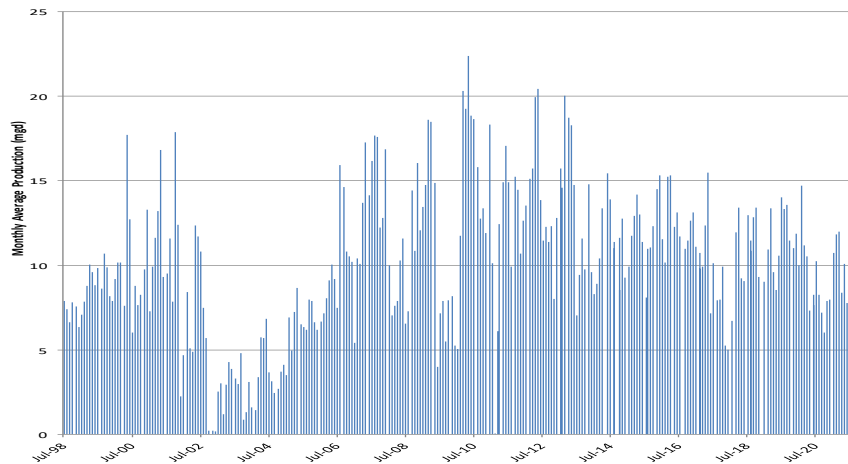
**Floridan Aquifer Levels  
Well FL-5-5000 (Site 8)**



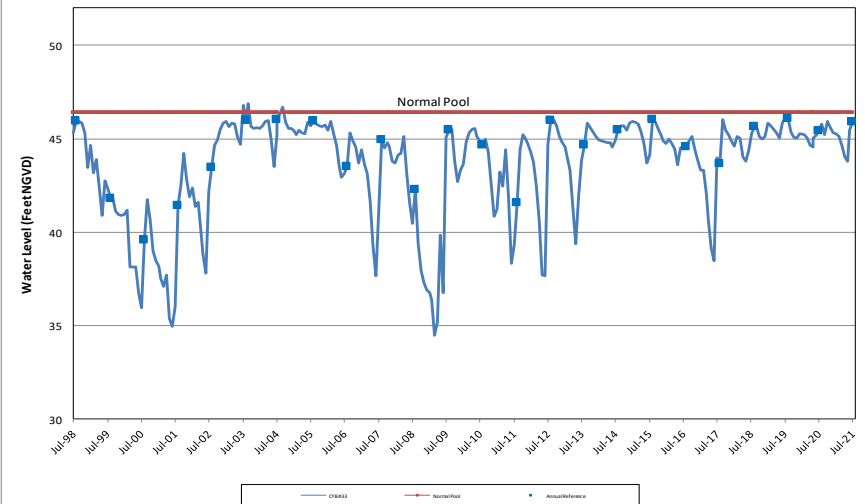
**Rainfall**



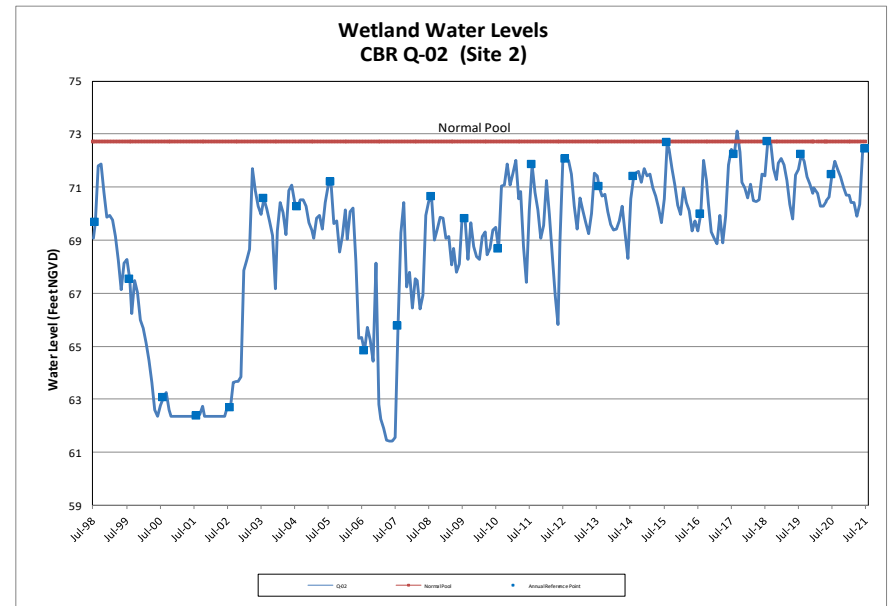
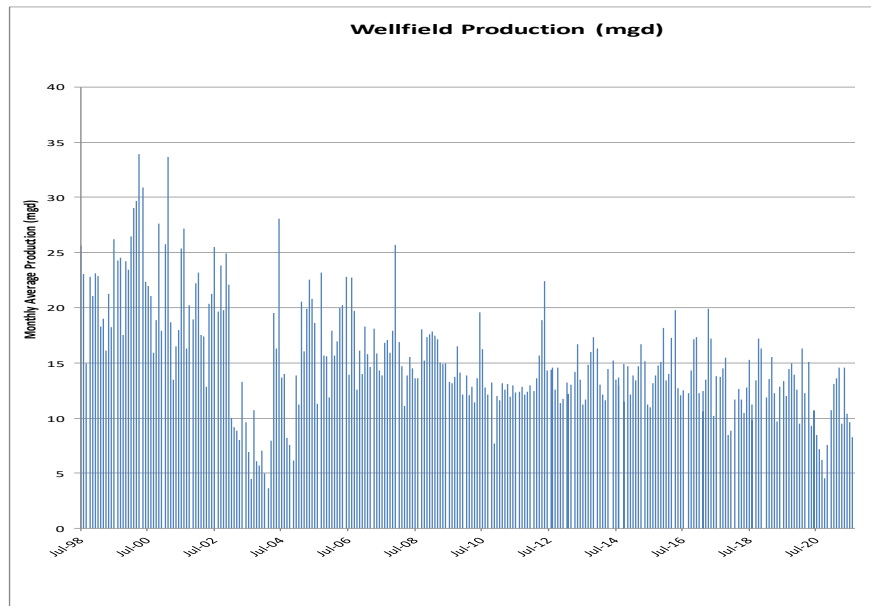
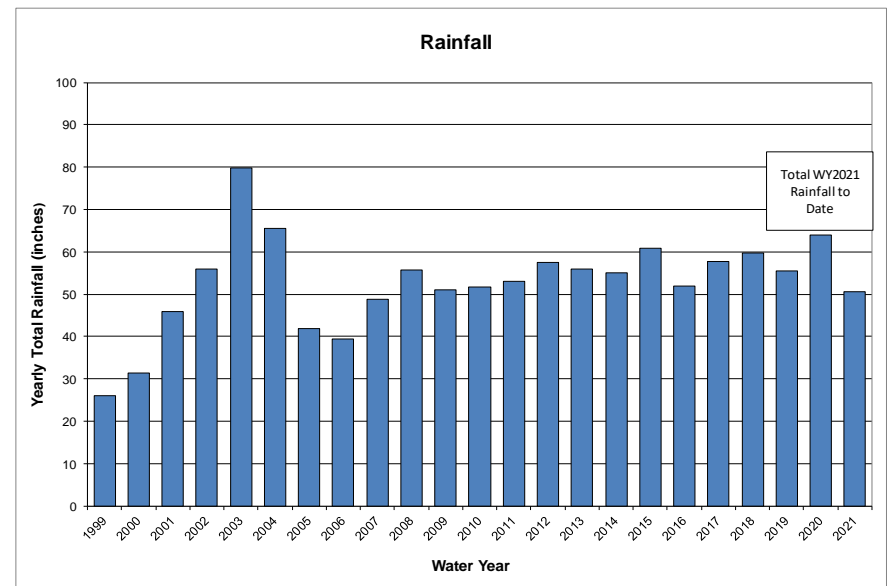
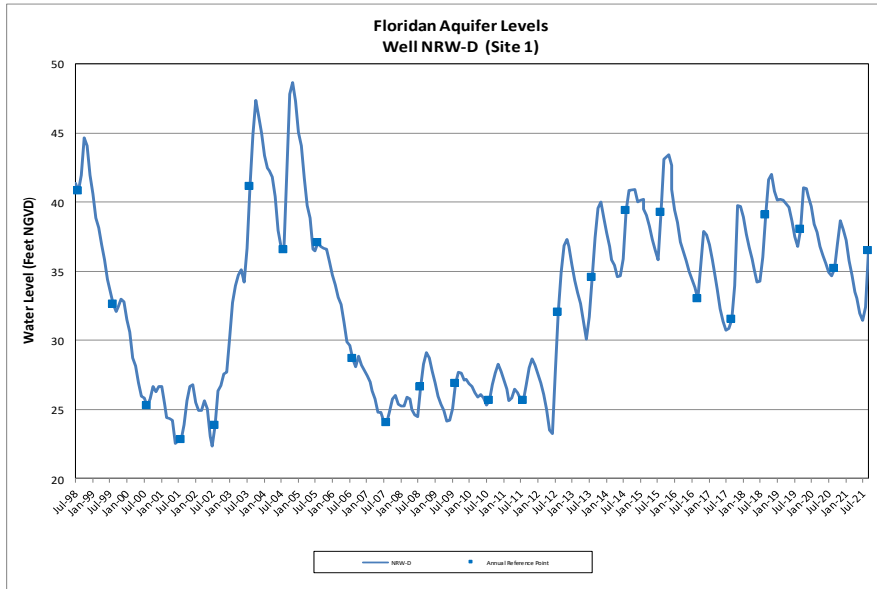
**Wellfield Production (mgd)**



**Wetland Water Levels  
CYB #33 (Site 14)**









**DATE:** August 2, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Jonathan M. Kennedy, Engineering Senior Manager

**SUBJECT:** South-Central Hillsborough County Memorandum of Understanding - *Receive Report*

**SUMMARY**

Tampa Bay Water and Hillsborough County staff continue to develop additional pumping and transmission (pipeline) capacity to increase supply to rapidly growing South Hillsborough County through the August 2020 Memorandum of Understanding. A status report will be provided at each regular meeting of the Tampa Bay Water Board of Directors until the projects are operational.

**SUGGESTED ACTION**

Receive Status Report

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

Tampa Bay Water continues to meet with Hillsborough County staff to coordinate facilities to increase wholesale system capacity to serve South-Central Hillsborough County. Wholesale facilities being developed include: expansion to the existing High Service Pump Station (under construction); a new booster pumping station on the existing Brandon Transmission Main to increase its capacity by at least 5 million gallons per day (mgd) (in design and bidding) and a new pipeline system to deliver up to 65 mgd (in planning).



**High Service Pump Station Expansion:**

Change order materials have been ordered and are expected to arrive October 1.  
Startup projected for mid-October.

**Brandon Booster Station:**

Issued Notice to Proceed for Guaranteed Maximum Price (GMP) Packages #1 and #2.  
Prepared bid packages for GMP #3 (temporary pumping equipment) and GMP#4 (piping installation) for consideration by the Board at a future Board meeting.  
Preparing a design exemption request to Hillsborough County for sidewalk and roadway restoration width.

**Pipeline System:**

Task 1 kickoff meeting scheduled for early October.

**Spring 2022 Program:**

As reported to the Board of Directors at its June meeting, delivery of drinking water to the South-Central service area continues to rapidly increase and peaked at 71 mgd during the spring 2021 dry season. Tampa Bay Water's permanent booster station will be on line in 2024 and the pipeline system on line in 2028. To meet increasing demands between now and then, Tampa Bay Water and Hillsborough County are coordinating activities and have screened several projects that can help increase water supply in an early-action program within the wholesale and retail systems. In addition, the agency and the County are exploring demand management options. Making progress on several initiatives at the same time is necessary. The most promising supply-side initiatives for Tampa Bay Water to provide benefit as early as spring 2022 are:

- Remove the control valve bottleneck on the existing Brandon Transmission Main. This was approved in GMP #1 by the Board of Directors and is on scheduled for completion by spring 2022.
- Seek an increased capacity re-rate from FDEP for the Lithia hydrogen sulfide treatment facility- the field work and engineering report work has started.
- Install a temporary booster pumping station on the permanent booster station site- This will be included as GMP #3 for consideration by the Board of Directors this fall.
- Demand Management-

A demand management task force has been formed, comprised of Agency staff, Hillsborough County staff and a consultant. The group met in mid-August and together clarified the focus of their intended efforts, and made an initial prioritization of general demand management activities



to pursue. These activities include a focus on outdoor water use, identification of large water users, and identification of viable alternative water sources. Task force participants agreed to reconvene in late August after gathering some necessary data and information.

## **BACKGROUND**

### *Historic drinking water supply initiatives in South Hillsborough County*

In the 1980's, the West Coast Regional Water Supply Authority (the predecessor agency to Tampa Bay Water) constructed temporary supply, treatment and pumping facilities to maintain pressure on behalf of the County and constructed the South-Central Hillsborough Regional Wellfield (SCHRWF), the Lithia Treatment Plant, the 42, 36 and 24-inch south county transmission mains and Brandon Transmission mains. The agency retained the wellfield but turned over the treatment, pumping, and transmission facilities to the County.

Again, in the early 2000's, some of the facilities built in the 1980's were nearing capacity, and Tampa Bay Water constructed temporary pumping and treatment facilities under a joint project agreement for the county's use while the county completed construction of its Central Water Treatment and Pumping Facility. Tampa Bay Water also provided a new Point of Connection to the new Central facility to provide access the larger Regional System. The supply initiatives of the early 2000's are now nearing capacity.

At the end of Water Year 2020, Tampa Bay Water supplied 49.6 million gallons per day (mgd) to the south county area, nearing but not exceeding the existing wholesale system capacity for the three sources that supply the south county area.

### *New Point of Connection*

A new Point of Connection was contemplated in the 2020 Memorandum of Understanding approved by Tampa Bay Water and Hillsborough County, and Section 10 of the 1998 Master Water Supply Contract provides for changes to Points of Connection at the cost of the requesting party. Hillsborough County requested a new Point of Connection for its South Hillsborough service area and Tampa Bay Water's Board approved in July 2021. The new Point of Connection for Segment B was approved by Hillsborough County in June 2021 and by Tampa Bay Water in July 2021.

### *Joint Project Agreement*

A Joint Project Agreement with Hillsborough County for Segment B was approved by the Tampa Bay Water Board of Directors at its July 2021 meeting and has been scheduled for approval by the Hillsborough County Board of County Commissioners.



### *Cooperative Funding*

Tampa Bay Water applied in October 2020 for co-funding through the Southwest Florida Water Management District (District) Cooperative Funding Initiative. The Project is a regional project and was ranked high by the District. Initial co-funding for eligible costs (up to the Basis of Design Report included in Task 1) was approved by the District. Upon completion of the Basis of Design Report, the District will conduct a third-party review to consider approval of additional co-funding to complete design and construct the pipeline. The District will fund up to 50% for eligible project costs (currently estimated at \$145 million).



**DATE:** September 7, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Kenneth R. Herd, Chief Science & Technical Officer

**SUBJECT:** Water Quality Update - *Receive Report*

**SUMMARY**

The monthly Water Quality Update summarizes member government water quality reports, compliance with Exhibit D of the Master Water Supply Contract water quality parameters and related activities, and other water quality issues and research. This update includes data from June and July 2021 and some information from August 2021.

**SUGGESTED ACTION**

Status Report

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

Tampa Bay Water (Agency) monitors water quality for the regional system through sampling at member Points of Connection (POC), regulatory compliance sampling locations (identified in the Florida Department of Environmental Protection (FDEP)-approved Comprehensive Regional Water Quality Monitoring Plan), and online instruments. These data are reported through the Master Water Supply Contract Exhibit D process and regulatory compliance, and reports to the members each month.



**The Agency is currently in compliance with all state and federal drinking water standards.**

Agency staff, the Members, and local regulatory agencies in the region meet monthly as the Water Quality Working Group to discuss water quality issues of local, regional and national concern. These discussions include member customer complaints, regulatory compliance, and water quality monitoring and distribution system activities. Updates on federal and state rule making, research and water supplies are shared by the participants.

### **Exhibit D Water Quality Compliance**

Exhibit D standards were met for all parameters and locations during this reporting period. Total Sulfides exceeded Exhibit D Running Annual Average (RAA) of less than 0.1 mg/L from groundwater at Starkey Well Field (WF) to Maytum Water Treatment Plant (WTP) Influent (New Port Richey) and Northwest Hillsborough WF influent to Northwest Hillsborough WTP (Hillsborough County). These locations, however, are satisfied with monetary credits per the Master Water Supply Contract.

### **Evaluation of Exhibit D Water Quality**

#### ***Interim Implementation Activities***

One recommendation identified in the "Evaluation of Exhibit D Water Quality" report, sodium hydroxide addition at the South Pasco WTP, continues to progress. The project objective is to improve chloramine stability when South Pasco WF water is added to the regional transmission system, which will aid Hillsborough County's effort to maintain distribution system disinfectant residuals. Engineering design work was completed in July 2021 and a contractor was selected and kick-off meeting held in August 2021.

Tampa Bay Water also has worked with the City of Tampa to evaluate options to relocate the City's point of connection upstream of the Morris Bridge Well Field. By excluding well field water, the regional water at the point of connection would more closely match the City's distribution system water quality from the Hillsborough River.

#### ***Regional Water Quality Study***

Carollo Engineers has completed Task 1-Supplemental Characterization Studies, Task 2-Update Water Quality Blending Tool, Task 3a-Desktop Validation, and the laboratory work for Task 3b-Bench-Scale Testing. A progress report and presentation was made by Carollo Engineers at the Water Quality Working Group meeting on August 12, 2021 (described further below). Performance test data are currently being evaluated and a technical memorandum is being prepared at this time. Recommendations will be made for Pilot-Scale Testing (e.g., treatment processes and representative source water locations). Pilot performance tests will continue through the end of this year, and perhaps longer as a demonstration project to further evaluate variable influent conditions from multiple source waters at the regional surface water treatment plant. Interim progress updates will continue to be provided at the Board and Water Quality Working Group meetings.



The project technical work is scheduled for completion by March 2022. A three-month deliberation period is envisioned for Members to develop consensus recommendations on selection of different treatment projects and implementation timing. This would then be followed by Board consideration and approval by December 2022, which would be the same time Master Water Plan project feasibility study findings will be concluded. This would allow these potential capital improvement projects and renewal and replacement projects to all be considered simultaneously relative to debt service obligations and uniform rate implications.

### **Water Quality Working Group**

A Water Quality Working Group meeting was held on August 12, 2021. Meeting minutes are attached. Topics discussed at this meeting included monthly performance and status reviews. Tampa Bay Water discussed the reservoir, surface water sources and treatment plants, and ground water sources and treatment. Additional topics included: Exhibit D compliance status, a presentation by Carollo Engineers on the Regional Water Quality (TOC) study, Regional Chlorine Maintenance Evaluation, Northwest Transmission Service Area Chloramine Residuals Assessment, and Northwest Hillsborough Well Field Potential Odor and Chloramines Study. Members presented bacteriological testing results, recorded customer water quality complaints and flushing volumes associated with distribution systems, and other water quality issues. The meeting concluded with an update on a PFAS sampling plan and analytical protocol proposed by outside counsel's technical expert, Weston & Sampson.

### **Regional Free Chlorine Maintenance**

Next steps include meetings with member governments to more closely examine disinfection byproducts (DBP) formation potential by conducting bench-top tests to simulate free chlorine additions in the regional system and in member distribution systems; and pilot tests to gauge biological sloughing potential in Tampa Bay Water transmission mains. Technical details are provided in the attached Water Quality Working Group minutes. Other tasks include coordination with the Florida Departments of Health and Environmental Protection on implementation requirements for the timing and duration of chlorine conversion events, and development of detailed step-by-step chlorine conversion operational and implementation plans with each member.

### **Northwest Transmission System - Chloramines and Nitrites**

Although regional water quality continued to satisfy Exhibit D requirements, members have observed fluctuations in chloramine residuals and nitrites at different points of connection in the northwest regional service area. Operations staff continue to optimize chloramine formation at Tampa Bay Water's Cypress Creek WTP (i.e., increase chloramine stability) in order to increase chloramine residuals and reduce nitrites, particularly at the furthest points of connection to Pasco County's Little Road WTP and Hillsborough County's Fawn Ridge WTP. A short-duration chlorine maintenance and flushing event was performed on one of the northwest transmission mains in August 2021. It showed minimal to no biofilm accumulation in the transmission main.



## **Northwest Hillsborough Wellfield Evaluation**

Water Quality Services completed benchtop tests on Northwest Hillsborough Wellfield water to characterize odor potentials before and after different chloramine dosages and at different pH conditions. This was done in response to Hillsborough County's earlier concerns about "musty" odors observed during prior distribution system flushing events. Results showed chloramine residuals are strongly influenced by pH (i.e., higher pH results in a more stable chloramine for disinfection). However, threshold odor numbers showed minimal odors (i.e., magnitude equal to or close to one unit) before and after the addition of chloramines. A meeting was held with Hillsborough County in August 2021 to discuss these findings and potential next steps.

Potential follow-up activities include consideration of continuous online monitoring to assess short-term transient conditions and potential negative impacts on chloramine stability and odor potential; as well as potential discussion of Fawn Ridge WTP operational procedures to identify possible strengthening of chloramines residuals. As of this writing, "musty" odors have not been reported in the distribution system downstream of Hillsborough County's Fawn Ridge WTP after the Northwest Hillsborough Wellfield was returned to service in late-June 2021.

## **Proposed PFAS Monitoring**

In accordance with the Board's direction, outside counsel's technical expert, Weston & Sampson, developed a sampling plan and PFAS analytical protocol to establish baseline conditions for decision-making for joining ongoing litigation against PFAS manufacturers. Weston & Sampson proposed collecting 45 source water samples from Tampa Bay Water's groundwater and surface water supplies, and an analytical method recommended by their analytical subcontractor, Eurofins Lancaster Laboratories. The U.S. Environmental Protection Agency (EPA); however, recently issued newly-approved, PFAS analytical methods in July and August 2021. These methods are now being evaluated by Weston & Sampson, Eurofins Lancaster Laboratories, and Tampa Bay Water staff. Once completed, an analytical method will be proposed for use, and presented to member governments.

## **Additional Water Quality Updates**

### ***Red Tide***

Red tide is an environmental condition where nuisance algae species undergo large population level increases. The species of algae most commonly identified in Gulf of Mexico red tide events is *Karenia brevis*. Population increases are linked to excess nutrient loading in the nearshore Gulf waters. These algae produce toxins (brevetoxins) that can cause a variety of health effects. Red tide sampling and reporting, which are performed by Mote Marine Laboratory, the University of South Florida, Florida Fish and Wildlife Conservation Commission, the Environmental Protection Commission of Hillsborough County, and others are reviewed by Tampa Bay Water staff.



The presence of red tide was also being monitored this year for potential influence from controlled discharges of Piney Point Reservoir nutrients in March and April 2021. Elevated levels of *Karenia brevis* were identified in May, June, and July 2021 at locations north of lower Tampa Bay. This included monitoring stations near the TECO cooling water withdrawal location that is used to supply source water to Tampa Bay Water's desalination facility. Tampa Bay Water also collected samples of TECO cooling water in August 2021, as part of the ongoing desalination pilot plant upgrade feasibility study. Samples were analyzed for *Karenia brevis* and its associated algal toxin (brevetoxin). Neither were detected in the influent waters to the pilot plants.

As previously reported, the desalination plant has been out-of-service the past few months for pipeline repairs and is not scheduled to return to service until November-December 2021 (i.e., when red tide concentrations typically decrease because of cooler temperatures). It is important to note that while treatment at the desalination facility (coagulation/flocculation and reverse osmosis) would effectively remove *Karenia brevis* and brevetoxins to non-detectable levels, if the plant was needed to operate to a red tide algal bloom. The current operating protocol for the desalination plant is to shutdown and use alternate source waters when *Karenia brevis* concentrations are measured at high levels (i.e., more than 1,000,000 cells per liter).

### ***Research and Stakeholder Activities***

The Agency continues to engage in drinking water quality and regulatory compliance-related research efforts with the Water Research Foundation and others to address utility treatment needs and/or regulatory requirements. Agency staff continue to participate in the following water quality projects and committees:

- AWWA/ANSI G300 Standard Committee - Source Water Protection
- AWWA Emerging Water Quality Issues Committee
- AWWA Joint Section Research Committee
- AWWA Microbiological Contaminants Research and Organisms in Water (Joint) Committee
- National Science Foundation - Disinfection Byproducts Formation in Desalination Plants
- National Science Foundation - Micropollutant Degradation Potential in Biological Filters
- National Science Foundation - Regulated/Emerging Halogenated DBPs in Distribution Systems
- USEPA - Online Water Quality Monitoring Forum and Steering Committee
- WRF 4920 - Decision Support Framework for Drinking Water Treatment Plants
- WRF 4953 - Blending Strategies for Drinking Water System Integration with Alternate Supplies
- WRF 5038 - Research Roadmap for Prioritizing Permitting Linkages in Water Quality
- WRF 5079 - Water Quality Tools for Potable Reuse
- WRF 5080 - Assessment of Vulnerability of Source Waters to Toxic Cyanobacterial Outbreaks
- WRF 5082 - Alternative Management Strategies to Prevent PFAS from Entering Drinking Water
- WRF Leaders Innovation Forum for Technology (LIFT) - Drinking Water
- WaterSuite Users Group - Source Water Monitoring and Assessment (public/private utilities)



## Updates from Member Governments

The Agency receives monthly updates from the Members on customer complaints, compliance, monitoring, and other relevant distribution system information. These data provide the Agency and its Members the baseline information needed to evaluate water quality issues and concerns related to the regional water sources and treatment practices.

Updates included in this report are based on information and data provided by Members at the August 2021 meeting; attached Tables 1-3 include 2018-2021 data for total coliform rule compliance, customer complaints and distribution system flushing.

**Table 1. Regional Total Coliform Rule Compliance** (percent positive samples) provides a summary of Total Coliform Rule compliance data for members.

**Table 2. Customer Water Quality Complaints received by Members** (not normalized for population served) provides a summary of customer complaint data collected by Members.

**Table 3. Distribution System Flushed Water** (reported in million gallons per month, not normalized for production) summarizes the reported quantities of water flushed for distribution system maintenance by the members.

No compliance issues were reported by the Members or their consecutive systems for this reporting period. For customer complaint and system maintenance-flushing data, note that these data are not normalized for total population or production but provide a relative indicator of water quality and distribution system activity.

## BACKGROUND

Water quality was a key part of the negotiations leading to the development of the Agency's governing documents. The Interlocal Agreement and Master Water Supply Contract require the Agency to deliver Quality Water to member government points of connection. Quality Water is defined as water that meets state and federal drinking water standards as well as additional parameters defined in Exhibit D, an attachment to the Master Water Supply Contract. These documents provided the funding and operational framework for the regional supplier to interconnect the Members' previously stand-alone distribution systems. Each system was unique in age, layout, type of pipeline material used and treatments such as corrosion control, softening and fluoridation.

- The fundamental premise of the Master Water Supply Contract is to provide a common benefit at a common cost at defined delivery points.
- Regional compliance with Exhibit D water quality parameters establishes a common regional baseline for water quality which is important because the Agency has no jurisdiction beyond the points of connection with the member distribution systems.



Compliance with Exhibit D standards is based on a 12-month running annual average for sample data collected at each POC for 17 different parameters. Exhibit D standards were initially developed through expert input in 1998-1999 and were modified in 2004 to address additional treatment issues and concerns.

### **Evaluation of Exhibit D Water Quality**

In 2018, Hazen and Sawyer was retained to evaluate reducing TOC and other priority water quality parameters, at the request of members. This study characterized source water quality, prioritized treatment locations, evaluated potential treatment approaches, and identified benefits and associated costs as highlighted below:

- Total organic carbon (TOC) and other water quality parameters could be lowered across the regional system by implementing treatment changes at various locations throughout the system. These changes would be expected to improve water quality for the entire region and provide a more consistent water quality at each point of connection.
- Adding water quality treatment for the regional system could help members manage water quality in their distribution systems by increasing disinfectant residual stability, reducing the potential for taste and odor issues and decreasing flushing volumes.
- Lower TOC levels could reduce disinfection byproduct formation during free chlorine maintenance events, which are performed periodically by some members.
- Preliminary estimated costs to implement recommended additional water quality treatment range from approximately \$125 million to \$210 million in capital costs and approximately \$5 million to \$13 million in annual operating costs. The ranges depend on the desired level of TOC reduction and do not include calcium hardness reduction.
- These actions could result in a net savings of \$1-\$2 million per year collectively for the members from reduced flushing in their distribution systems.
- Any consideration of changes to Exhibit D water quality parameters would be recommended for implementation only after new treatment changes become operational across the regional system. This approach is recommended to ensure continued compliance.

This study was completed and approved by the Board, along with recommendations for additional study, at the Board's meeting on December 16, 2019.

### **Regional Water Quality Study**

Carollo Engineers was approved by the Board to perform the additional study, at the Board's meeting on August 17, 2020 meeting. Consultant selection was performed in accordance with Florida's Consultants' Competitive Negotiation Act (CCNA) requirements, and all member governments participated on the Consultant Selection Committee (CSC). A Purchase Order for services was issued on September 2, 2020. Details of this nine-month procurement process are reported in earlier updates to the Board.

Technical work began with a kick-off meeting on September 11, 2020. Carollo Engineers completed their review and analysis of the Tampa Bay regional system in November/December 2020. Available



historical water quality data were reviewed and analyzed to understand trends and variations, and to validate treatment alternatives identified in the 2019 Hazen report. This effort led to identification of data gaps, and development of a checklist for guiding future data collection for disinfection byproducts (DBPs) and other sampling.

### **Regional Free Chlorine Maintenance**

Nitrification in a distribution system is typically the driver for periodic chlorine maintenance activities, especially when flushing activities become excessive. Nitrification occurs in a distribution system when there is an observed loss of disinfectant residual. This is usually accompanied by increases in Heterotrophic Plate Count (HPC) organisms and nitrite concentrations as well as decreases in pH, alkalinity and dissolved oxygen. Conditions that promote the development of nitrification include water age, warm water temperature, and unstable chloramine formation.

The benefit of performing a regional system free chlorine maintenance has been discussed at the WQWG meetings since December 2016. Members have historically expressed differing opinions and preferences on this issue. Following Utility Directors meetings in June and July 2018, all Members agreed to proceed with retaining a consultant to evaluate how best to plan for and implement a regional chlorine maintenance program and identify program advantages and disadvantages as well as potential unintended consequences.

Arcadis was selected to perform this work in late 2018. However, a decision was made to first perform the "Evaluation of Exhibit D Water Quality Study", which was completed in December 2019. Arcadis presented the study scope and schedule at the WQWG meeting on February 13, 2020. Follow-up meetings were held with individual Member Governments and Tampa Bay Water at different times in 2020. Progress presentations and discussions were held at all WQWG meetings in 2020, and concluded in March 2021. Progress details were reported in previous updates to the Board.

Attachments (2)

[Water Quality Working Group Meeting Minutes](#)  
[Water Quality Tables](#)



# Meeting Minutes



## Water Quality Working Group

August 12, 2021 - 1:30 p.m.

GoToMeeting

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### **HANDOUTS - sent by email prior to meeting**

- a. Member Government monthly data
- b. August 2021 WQWG Agenda Packet

### **A. WATER DELIVERY**

#### **1. SYSTEM UPDATES**

- a. Reservoir – 13.8 BG
- b. Desal – shut down for the season and repair, will return to service in December 2021
- c. Regional SWTP – 85 MGD
- d. Wellfields – 90-135 MGD - demand lower due to recent summer rains

#### **2. UPDATES FROM MEMBER GOVERNMENTS**

##### **a. Hillsborough County**

- i. July 2021 TCR Reporting North Service Area 3 TCP out of 139 samples – 2.16%
- ii. July 2021 TCR Reporting South Service Area 2 TCP out of 225 samples – 0.89%
- iii. July 2021 Complaint Report North Service Area – 28 complaints, mostly color and pressure
- iv. July 2021 Complaint Report South Service Area – 51 complaints, mostly pressure and odor
- v. July 2021 Flushing Report North Service Area – 8.10 MG



- vi. July 2021 Flushing Report South Service Area – 22.74 MG
- vii. Hillsborough noted that they were maintaining their residuals over the last month.

**b. City of New Port Richey**

- i. July 2021 TCR Reporting – 0 TCP out of 41 samples – 0%
- ii. July 2021 Complaint Report – 2
- iii. July 2021 Flushing Report – 1.115 MG (0.785 MG from auto flushers)

**c. Pinellas County**

- i. July 2021 TCR Reporting – 4 TCP out of 222 samples – 1.8%
- ii. July 2021 Complaint Report – 69 complaints, 40 customer issues
- iii. July 2021 Flushing Report – 11.10 MG (5.80 MG from auto flushers)
- iv. Pinellas County remarked they are looking forward to the meeting with Tampa Bay Water and Pasco County about the regional free chlorine maintenance evaluation.

**d. Pasco County**

- i. July 2021 TCR Reporting – 2 TCP out of 159 samples – 1.3%
- ii. July 2021 Complaint Report – 17 complaints, mostly color and odor
- iii. July 2021 Flushing Report – 32.23 MG (31.10 MG from auto flushers)
- iv. Flushing numbers are trending a bit higher than recent months.
- v. Pasco noted that they are experiencing high pressure issues at Odessa intertie.
- vi. Jack Thornburgh will check to see why, although he noted that there has been more production from the South Pasco WF lately.
- vii. Pasco is tracking production from the Odessa intertie and will forward that information to Tampa Bay Water.

**e. City of St. Petersburg**

- i. July 2021 TCR Reporting – 1 TCP out of 183 samples – 0.55%
- ii. July 2021 Complaint Report – 48 complaints, mostly premise issues



- iii. July 2021 Flushing Report – 7.0 MG (3.53 MG from auto flushers)

**f. City of Tampa**

- i. July 2021 TCR Reporting – 0 TCP out of 240 samples – 0%
- ii. July 2021 Complaint Report – 26 complaints, mostly color and pressure
- iii. July 2021 Flushing Report – 4.68 MG (2.23 MG from auto flushers)
- iv. The City of Tampa has scheduled their free chlorine maintenance event to begin September 7<sup>th</sup>.

**B. WATER TREATMENT**

**1. EXHIBIT D PERFORMANCE**

All Exhibit D performance requirements were met in July 2021.

**2. REGIONAL WATER QUALITY STUDY**

- a. Carollo Engineers updated the WQWG with a Regional Water Quality Study Progress Summary presentation that was emailed to WQWG members after the meeting.
- b. The purpose of this ongoing study is to provide an optimized solution and an implementation plan to achieve the regional objective of enhanced water quality.
- c. Reduction of total organic carbon (TOC) is a regional priority, certain locations require reduction of other parameters (e.g., sulfide, nitrate, etc.).
- d. Bench-scale treatability testing has been completed. A draft technical memorandum on these findings is currently being completed by Carollo Engineers.
- e. Pilot study recommendations and startup are pending.
- f. Pilot study work is scheduled for completion in late 2021 or early 2022.
- g. All technical work is scheduled for completion in March 2022.
- h. Sessions with member governments to review study findings, conclusions, and recommended implementation strategies are planned for the April-May 2022 timeframe.



### 3. **REGIONAL CHLORINE MAINTENANCE EVALUATION AND UPDATE ON NORTHWEST TRANSMISSION SYSTEM - CHLORAMINES AND NITRITES**

#### a. DBP Formation Potential Benchtop Testing

- i. Initial testing was performed and supplemental testing was recommended by Arcadis following discussions with member governments and Tampa Bay Water.
- ii. Supplemental testing will be performed to:
  - Simulate member governments' chlorine adjustments downstream of their regional system points of connections, where applicable.
  - Ensure chlorine decay curves represent the longest contact times in member government distribution systems.
- iii. Meetings will be scheduled with member governments to select benchtop parameters (e.g., chlorine residuals, contact times, etc.).

#### b. Potential Biological Sloughing Pilot Testing

- i. Testing was recommended by Arcadis following discussions with member governments and Tampa Bay Water.
- ii. Supplemental testing will be performed to identify potential biological sloughing from the inner walls of Tampa Bay Water's large-diameter pipelines.
- iii. Potential biological sloughing will be identified by increases in turbidity levels.
- iv. Tampa Bay Water recently observed no increase in turbidity after injecting a high-chlorine dose into the out-of-service, 36-inch Cosme-to-NWH Fawn Ridge WTP.
  - An approximate 150 mg/L free chlorine "slug" was injected and flushed through this transmission main after a 24- to 36-hour contact period.
  - This maintenance began on August 9, 2021; and ended on August 11, 2021.
  - Turbidity and iron concentrations were monitored at two discharge locations with no increases in turbidity or iron.
  - Approximately 1.5 million gallons were dechlorinated and flushed to ground.
  - This chlorine concentration was higher, the contact period shorter, and pipeline velocities higher than a "routine" chlorine maintenance period.
  - The resulting maintenance data indicated minimal to no biofilm accumulation in the Cosme-to-NWH Fawn Ridge WTP transmission main.



- v. Recognizing biofilms may not be the same in different transmission mains, further pilot testing is recommended to assess conditions at other northwest locations.
- vi. Meetings will be scheduled with Tampa Bay Water Operations and member governments to select pilot test locations and conditions.
- c. Once testing programs are finalized, a meeting will be scheduled with Utility Directors to discuss the overall chlorine maintenance program and obtain consensus on a path forward.

#### **4. NORTHWEST HILLSBOROUGH WELL FIELD EVALUATION**

- a. Tampa Bay Water performed an odor potential evaluation using Northwest Hillsborough Well Field water before and after simulated chloramine addition conditions.
- b. Raw water samples were collected on two occasions from six production wells in the Northwest Well Field (NWH Well Nos. 1-6).
- c. Threshold odor number (TON) tests were initially performed on the untreated raw water samples, and all TONs resulted in a value of “one”, which indicated no odors.
- d. Total organic carbon (TOC) concentrations for each well were similar at about 3 mg/L.
- e. Chlorine and ammonia were subsequently added to each “fresh” raw water sample (chloramine residuals of 3.5 and 4.0 mg/L), and pH adjusted (7.5 and 8.0 standard units).
- f. Chloramine contact periods of 0 hours, 2 hours, 24 hours, 48 hours, 72 hours, and 96 hours showed no increase in TON, concluding that treatment did not for odor compounds.
- g. The data, as expected, also showed considerable improvement in chloramine stability at the higher pH values.
- h. Discussions are ongoing with Hillsborough County about using higher pH to maintain a more stable residual, which would need to be balanced with calcium precipitation concerns.

#### **5. OTHER TOPICS**

- a. Proposed PFAS Monitoring
  - i. Steve Fleischacker provided an update on a PFAS sampling plan and analytical protocol proposed by outside counsel’s technical expert, Weston & Sampson.
  - ii. 45 source water samples are proposed for collection from selected production wells in each wellfield, and surface water feeds to the desal and regional surface water plants.
  - iii. The sampling is proposed to establish baseline conditions in raw water sources.
  - iv. Weston & Sampson plans to use Eurofins Lancaster Laboratories for the PFAS analyses.



- v. Eurofins Lancaster Laboratories is a leading authority on PFAS analytical methodology.
- vi. In the absence of an EPA-approved method for untreated groundwater and surface water, Eurofins recommended their Method 537 IDA (Isotope Dilution Analysis).
  - This analytical method was proposed to analyze the 29 PFAS compounds that are listed in the EPA-approved methods 537.1 and 533 for finished drinking water.
  - These 29 PFAS compounds are also listed in the Fifth Round of Unregulated Contaminant Monitoring Rule (UCMR5) that is schedule to begin in 2023.
  - At the time of Eurofin’s recommendation, EPA had approved PFAS analytical methods for “finished” drinking water only.
  - All waters in the proposed initial PFAS baseline sampling would be untreated (“unfinished”), and therefore, without an EPA-approved analytical method.
- vii. Other reasons for Eurofins recommending Method 537 IDA, included:
  - Their laboratory is certified to perform this analytical method in states that provide PFAS accreditation (e.g., PA, NJ, NH, etc.).
  - Those other states follow NELAC Institute (TNI) standards as does Florida.
  - To maintain PFAS certification in other states, Eurofins must pass proficiency tests twice per year with test results submitted directly to the states.
  - Eurofins has been passing PFAS proficiency tests since they were first made available in January 2017.
  - Eurofins also maintains Method 537 IDA certification with the Departments of Defense and Energy.
  - These federal certifications are based on “Quality Assurance Manual (QSM) for Environmental Laboratories”, which are based on TNI standards used in Florida.
  - Florida does not currently have a laboratory certification for PFAS compounds.
  - Florida guidance is available in the FDEP document, “PFAS Dynamic Plan (February 2021)” that states:
    - The FDEP laboratory uses its internally developed analytical method that incorporates isotope dilution analysis.
    - This “PFAS Dynamic Plan” states:



- “It is important to note that laboratory methodologies for analysis of PFAS are evolving.”
  - “EPA is currently validating methods to measure PFS in groundwater, surface water, wastewater and solids, but these methods are still in draft form.”
- viii. As anticipated in the FDEP guidance document (February 2021), EPA published new SW-846 Methods 3512 and 8327 a couple of weeks earlier on July 30, 2021.
- This new analytical method is for 24 PFAS compounds in surface water, groundwater, and wastewater.
  - It must now be evaluated relative to Eurofin’s Method 537 IDA, and an updated method recommendation provided following this new development.
- ix. Discussions with Eurofins and Weston and Sampson will be held to determine the appropriate path forward regarding PFAS analytical method selection.
- b. Caustic Feed at South Pasco WTP – Update Request
- i. Design was completed in July 2021.
  - ii. Contractor selection was completed on early-August 2021.
  - iii. Kick-off meeting to be held with the contractor in late-August 2021.
  - iv. Construction is scheduled through July 2022.

**Next WQWG/OCC Joint Meeting was originally scheduled online for September 9, 2021. It was subsequently changed to September 30, 2021.**



## **WQWG August 2021 Meeting Attendees**

Chris Wetz, Hillsborough County  
Luke Mulford, Hillsborough County  
Paul Kavanagh, Hillsborough County  
Kevin Jenkins, Pasco County  
Jake Cuarta, Pasco County  
Kendra Phillips, Pasco County  
Jim Kaplan, Pasco County  
Kelsey Current, Pasco County  
Matt Wotowiec, Pinellas County  
Dave Hansen, Pinellas County  
Joel Brown, Pinellas County  
Bina Nayak, Pinellas County  
Royce Rarick, Pinellas County  
Dawn Lei, City of Tampa  
Greg Wikholm, City of New Port Richey  
Waunda Henry, City of St. Petersburg  
Scott Lewis, City of St. Petersburg  
Erik Lynch, City of St. Petersburg  
Jim Kramer, City of St. Petersburg  
Susan MacPherson, City of St. Petersburg  
Evelyn Dooley, Tampa Bay Water  
Steve Fleischacker, Tampa Bay Water  
Ken Herd, Tampa Bay Water  
Bob McConnell, Tampa Bay Water  
Shawn Jones, Tampa Bay Water  
Jack Thornburgh, Tampa Bay Water  
Laila Martin, Tampa Bay Water  
Maribel Medina, Tampa Bay Water  
Danielle Keirse, Tampa Bay Water  
Timothy Smith, CDM Smith  
David MacNevin, CDM Smith  
Bobby Burchett, Black and Veatch  
Charlie He, Carollo Engineers  
Erica Stone, Carollo Engineers  
Sandeep Sethi, Carollo Engineers  
Wen Zhao, Carollo Engineers  
Andre Dieffenthaler, Hazen and Sawyer  
Paul Biscardi, Hazen and Sawyer





# Regional Water Quality Study

Progress Summary



August 12, 2021



## // Agenda

- Purpose
- Background
- Summary of completed tasks
- Bench-scale testing results
- Preliminary cost analysis
- WQ blending tool and analysis
- Next steps



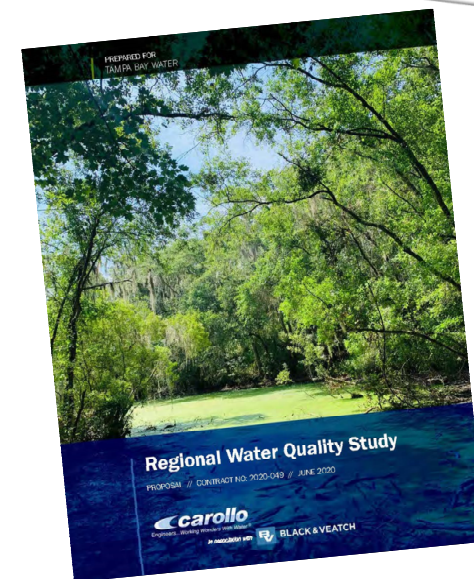
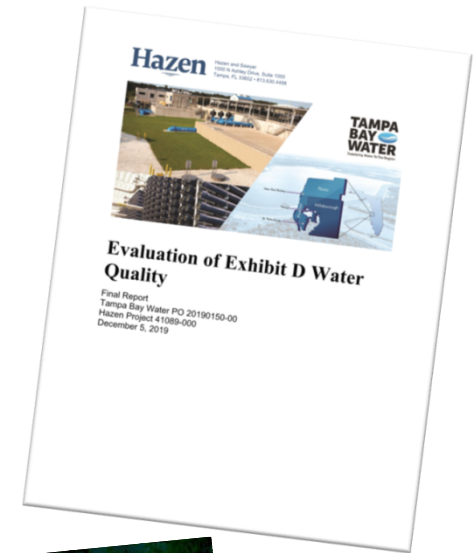
## // Purpose of Regional Water Quality Study

Provide optimized solution and an implementation plan to achieve the objective of enhanced water quality. Reduction of TOC is a priority, along with other priority water quality parameters.



## // Background

- Previous desktop study (2019, Hazen and Sawyer) proposed treatment technologies and costs to meet enhanced water quality goals
- Carollo Team was selected in 2020 to carry this study to the next step:
  - Supplemental data characterization
  - Conduct bench-scale and pilot testing
  - Update and refine WQ blending tool
  - Develop conceptual designs and costs
  - Identify implementation approach and recommended treatment projects





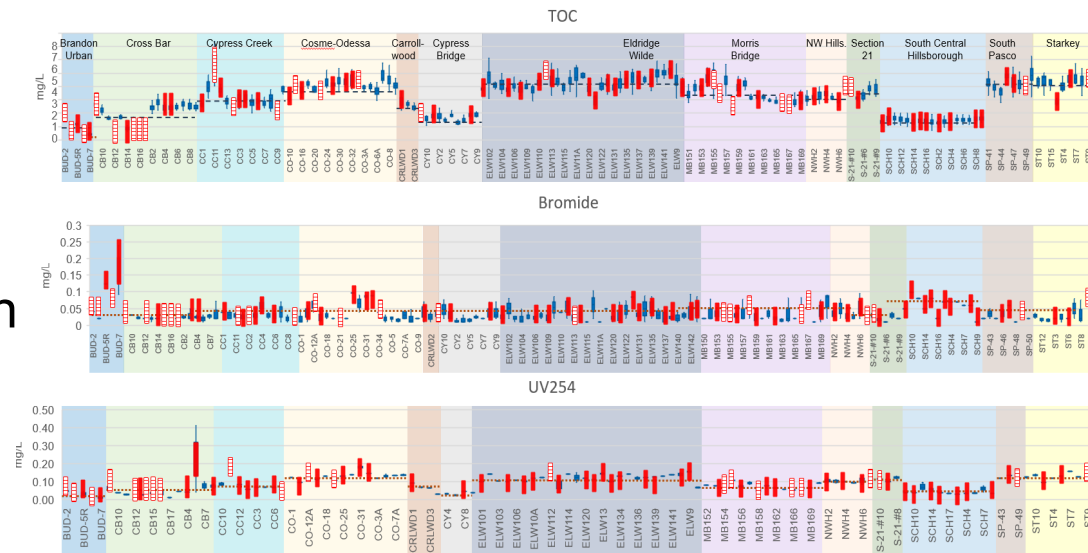
## // Summary of Completed Tasks

- Supplemental Data Characterization
  - Identified data gaps
  - Filled data gaps with supplemental sampling
- Desktop Validation
  - Established evaluation criteria
  - Developed initial design criteria and cost estimates
- Bench-Scale Testing
  - Bench-scale tests complete
  - Refining design criteria and cost estimates
- Water Quality Blending Tool
  - Model built with historical and supplemental water quality
  - Completed calibration and calculations



## // Supplemental Characterization

- Identified data gaps
- Filled gaps with supplemental sampling
- Wells were filtered and grouped based on historical and current water quality
- DBP formation potential, corrosion and stability at each POE and POC were evaluated
- Data will be used in Blue Plan-it® Decision Support System
- Results will aid decisions for treatment location and technologies to meet water quality goals





## // Desktop Validation

- Established evaluation criteria
- Developed initial design criteria and cost estimates

Cost Related Factors	Non-Cost Related Factors
Capital cost (\$ and \$/1000 gal)	Performance (contaminant removal efficiency)
O&M cost (\$/yr and \$/1000 gal)	Proven technology
Life cycle cost (30 years, 6% interest)	Proprietary equipment
	Residuals disposal
	Ease of maintenance, labor
	Relative process flexibility <ul style="list-style-type: none"><li>- Flexibility to treat variable water quality</li><li>- Scalability to mitigate PFAS</li><li>- Constructability (footprint, expandability, modular)</li></ul>

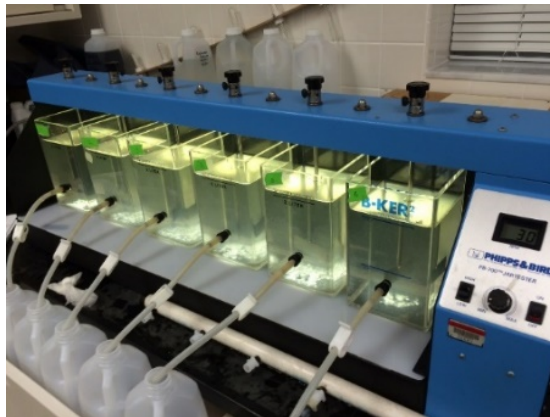


## // Bench-Scale Testing

RSSCTs for GAC



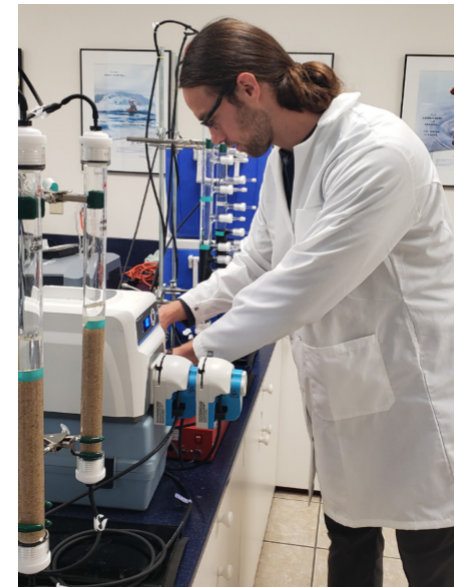
Fixed Bed IX



Ozone

Suspended IX  
Jar Test

*Sixteen 55-gallon drums and 8 5-gallon carboys from 9 sites were shipped in refrigerated truck to Carollo's Water ARC®.*





## // Water Quality Blending Tool: Blue Plan-it® Updates

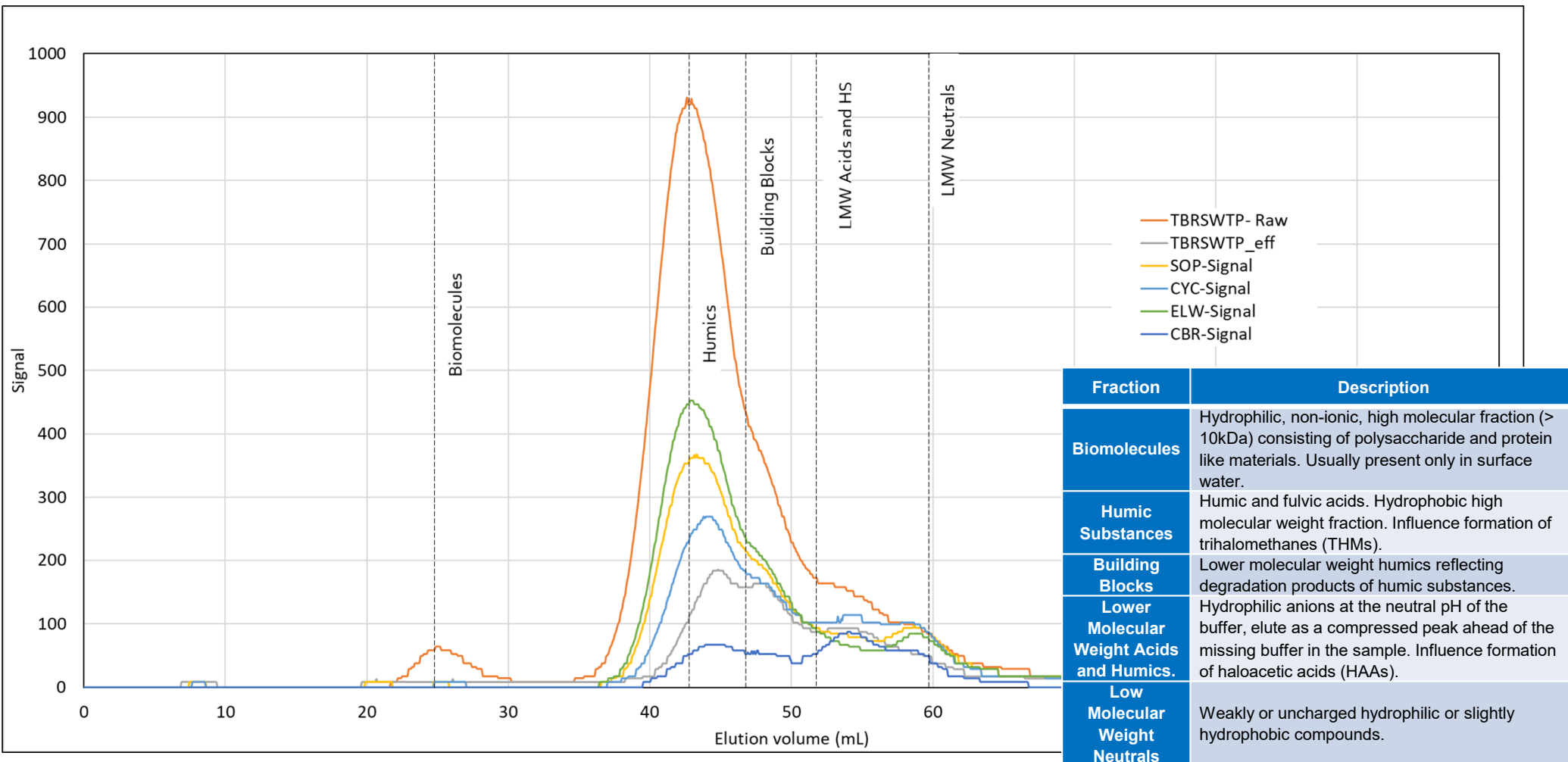
- Work completed:
  - Integrated historical water quality for wells, RSWTP, and DESALEFF
  - Calibrated THM and chlorine residual model using SDS results
  - Validated THM and chloramine model using distribution system data
  - Integrated distribution system modeling results (water age and source contribution) for dry and wet conditions
  - Completed projected water quality calculation and percent source to/at POC
- Ongoing
  - Integrating bench testing results to simulate treatment impacts
  - Evaluating various treatment scenarios with chlorine and different TOC goals



# Bench-Scale Testing Results



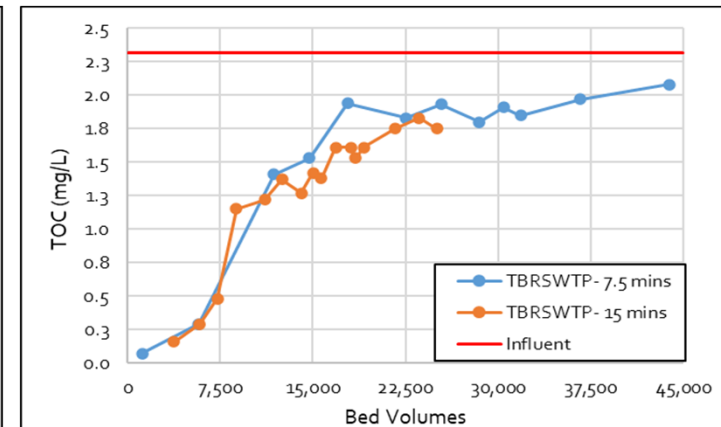
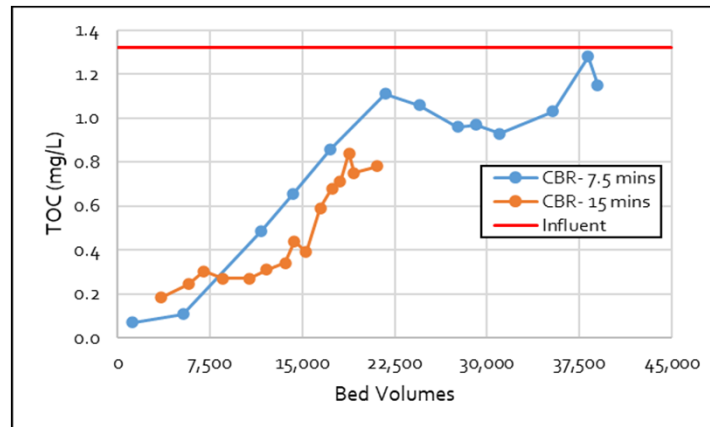
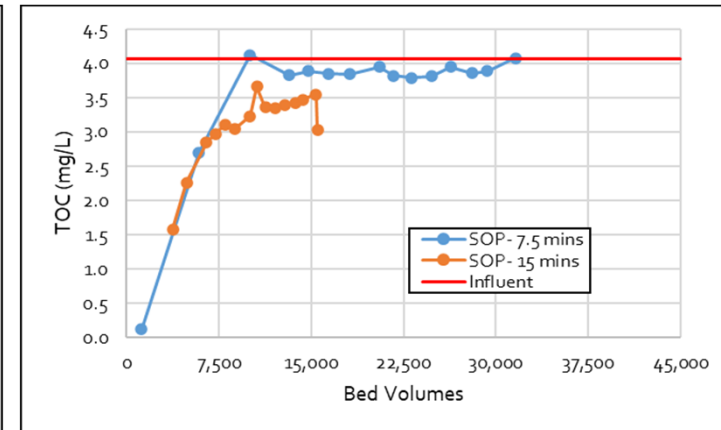
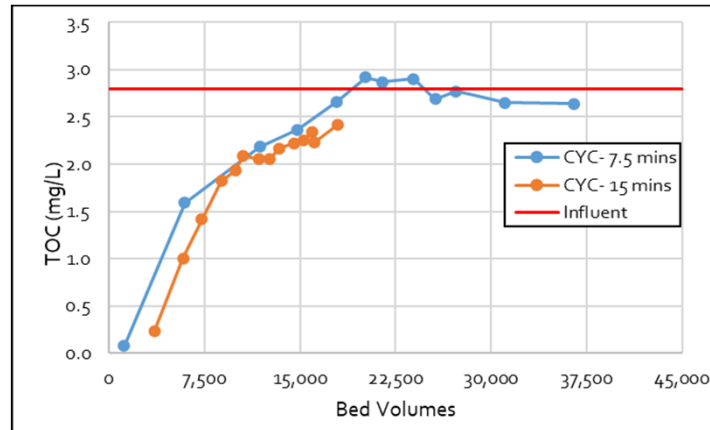
## // Source Water Characterization- LC-OCD





## // Granular Activated Carbon Rapid Small-Scale Column Tests (RSSCTs)

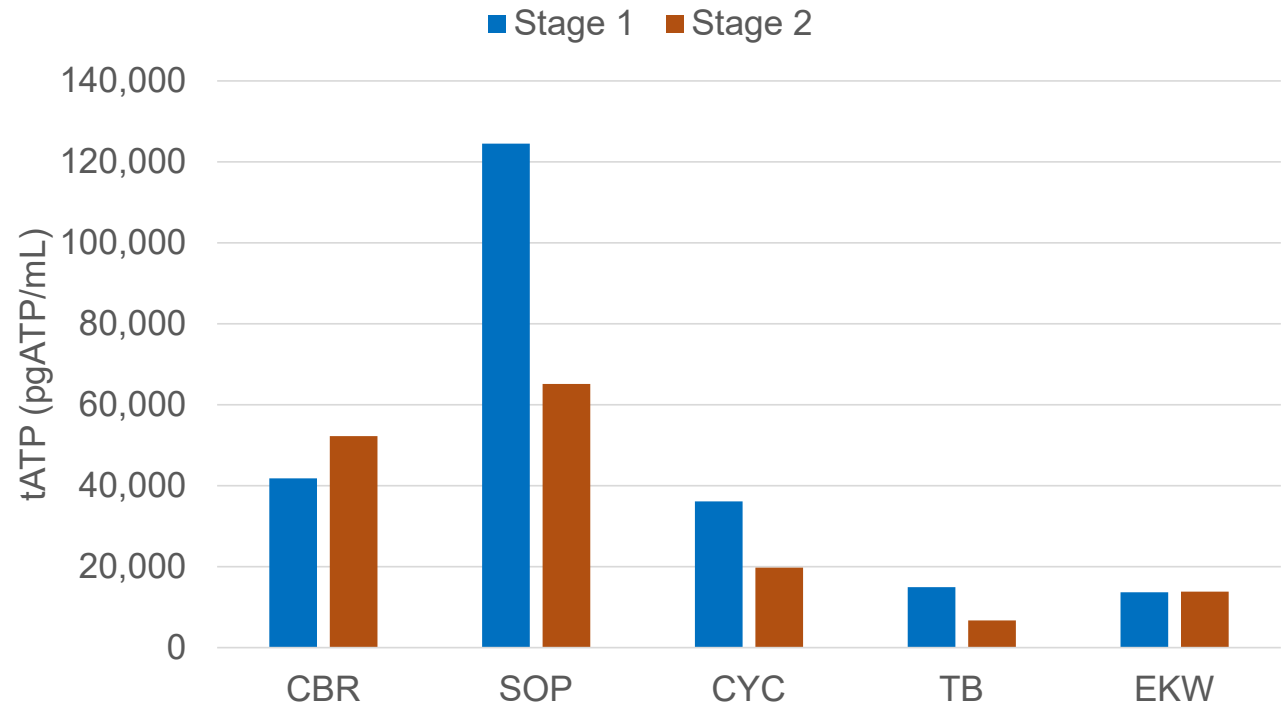
- Variable breakthrough speeds corresponding to feed TOC concentration
- Life cycle cost estimates will inform feasibility of GAC at each site





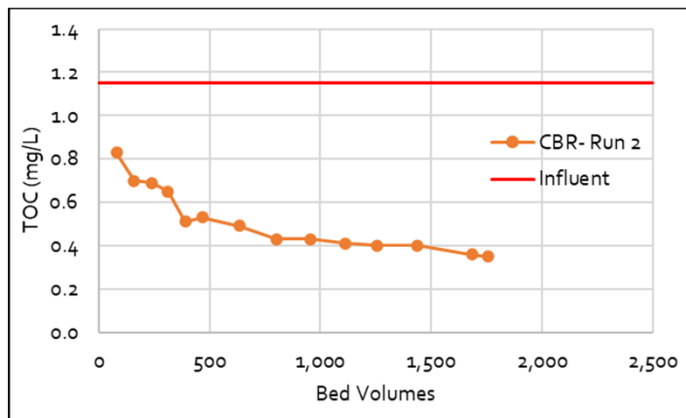
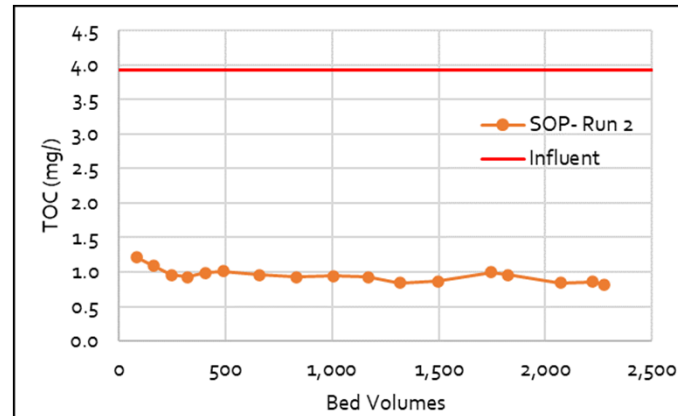
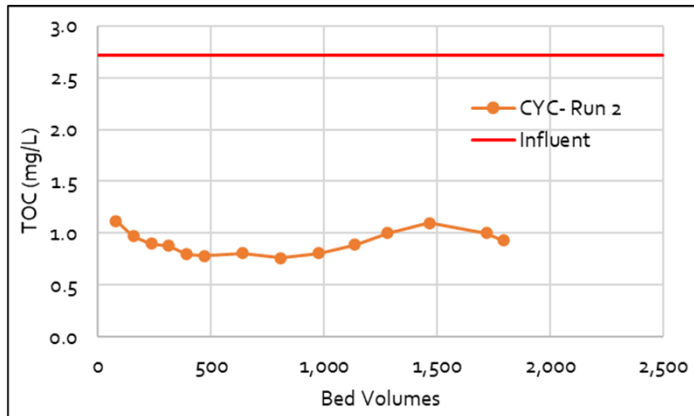
## // ATP of RSSCT Media

- General trends as expected
- Some biological activity observed
- Biological TOC removal accounts for 5-10% without ozone, 10-30% with ozone





## // Fixed Bed Ion Exchange (FBIX)

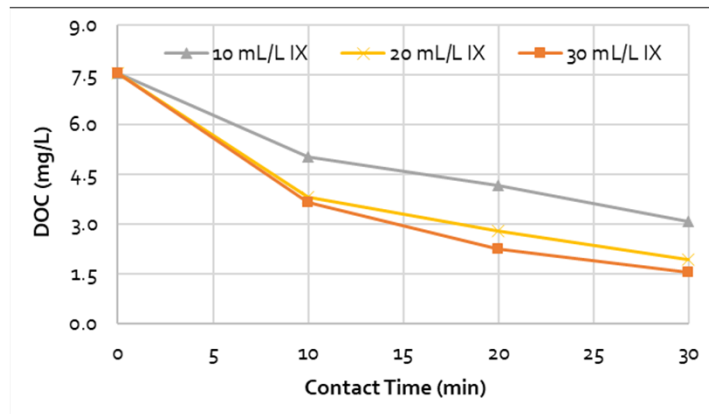


- At around 1,500 BV, TOC removal was 65%, 59%, and 78% for CBR, CYC, and SOP, respectively.
- For all columns, TOC levels remained at or below 1 mg/L
- Performance confirms FBIX is a suitable TOC reduction alternative for these sites

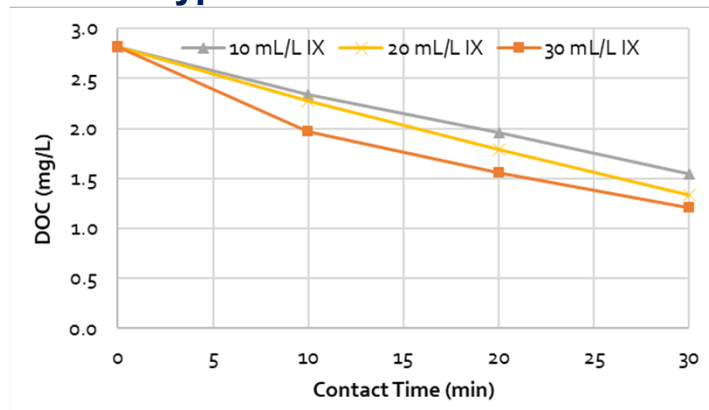


## // Suspended Ion Exchange (SIX)

**RSWTP Raw Influent**



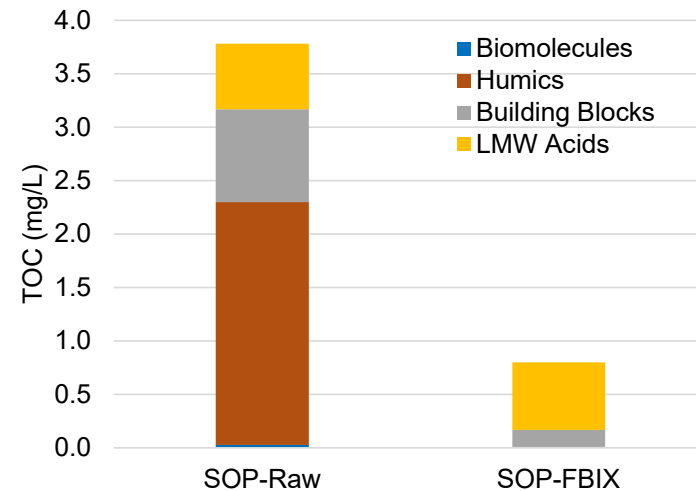
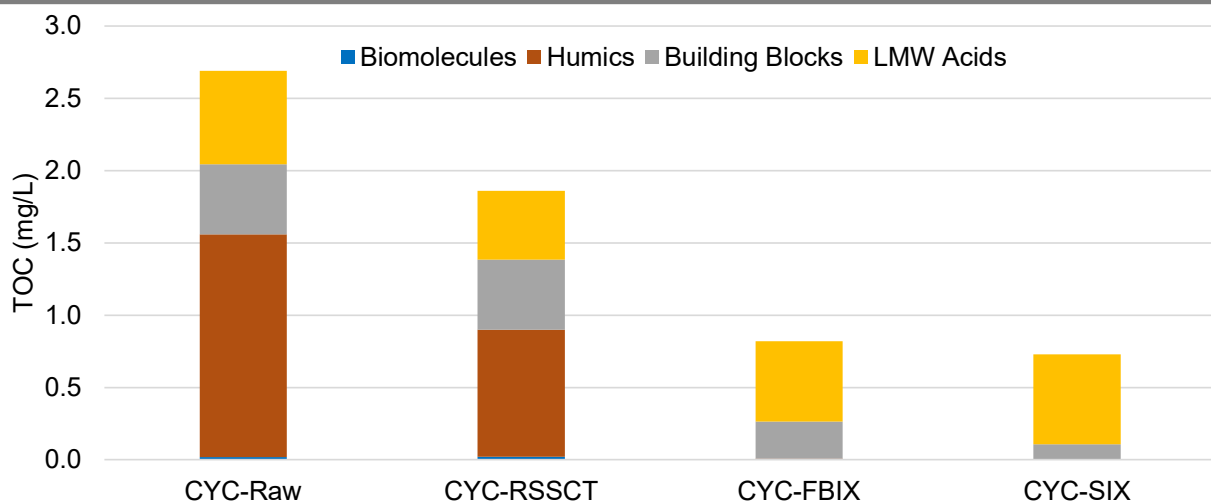
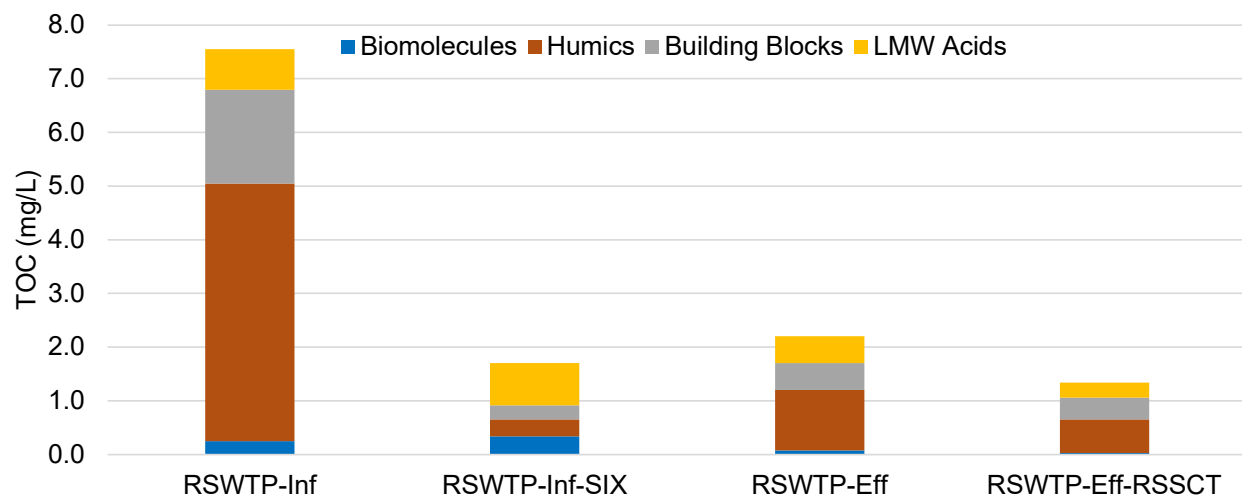
**Cypress Creek Wellfield**



- RSWTP:
  - Comparable to results observed at D.L. Tippin WTP pilot testing.
  - Achieved TOC concentrations down to 1.5 mg/L on raw surface water (prior to coagulation, ozone, filtration, etc.)
- The dose of 30 mL/L and 30 minutes contact time showed the best TOC removal for both RSWTP (79%) and CYC (57%).



## // Organics Removal Comparison (LC-OCD)

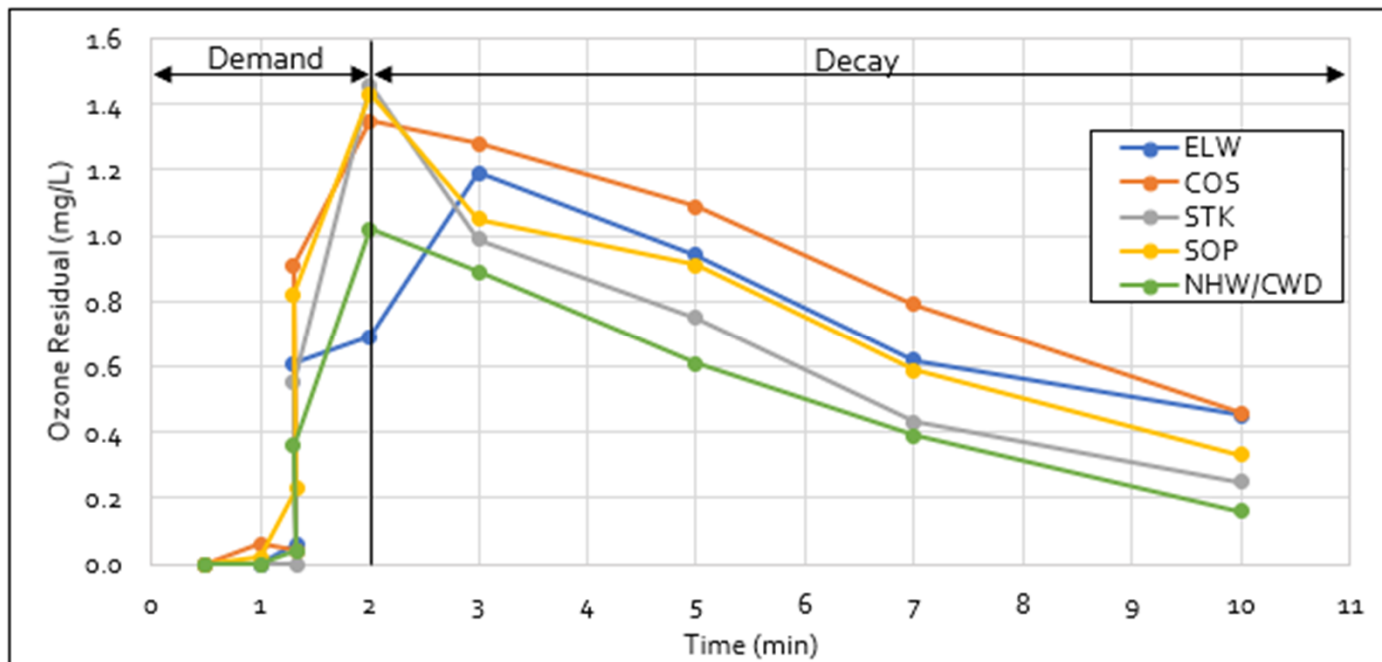




## // Ozone Demand/Decay

- The ozone to sulfide ratio is typically expected to be in the range of 4:1.

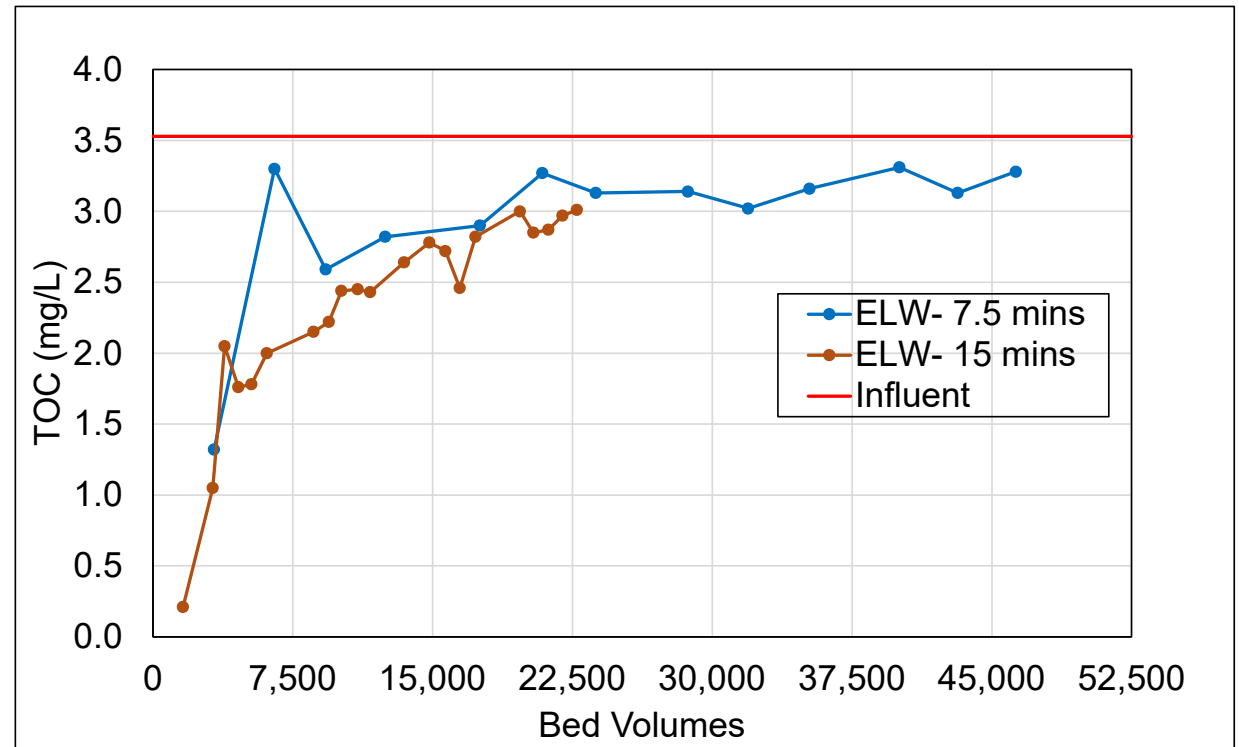
Source Water	Ozone dose (mg/L)	Ozone residual (mg/L)	Ozone demand: sulfide ratio
ELW	4.98	0.06	3.78
COS	2.66	0.06	3.77
STK	5.29	0.55	4.19
SOP	2.18	0.02	6.75
NWH/CWD	3.00	0.04	6.30





## // RSSCT on Ozonated Water

- Slightly improved performance compared to sites with similar TOC concentrations

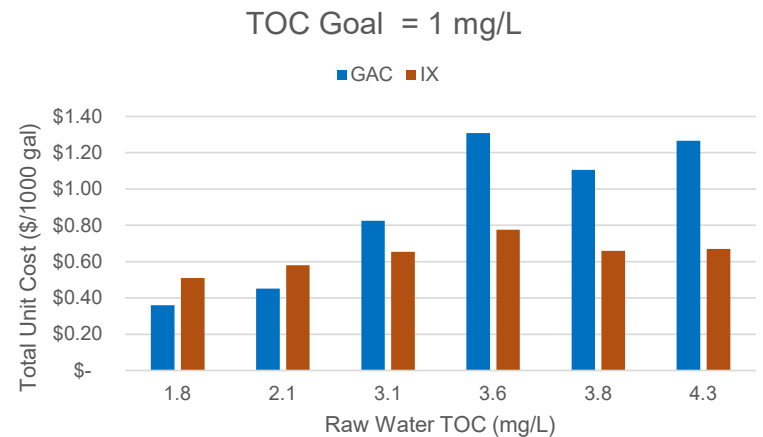
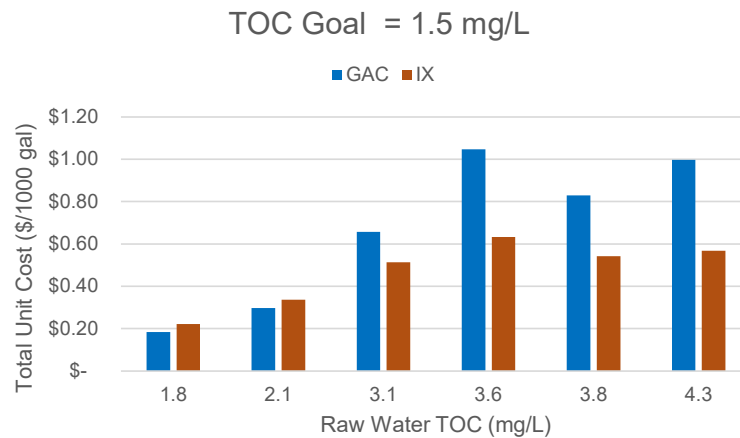
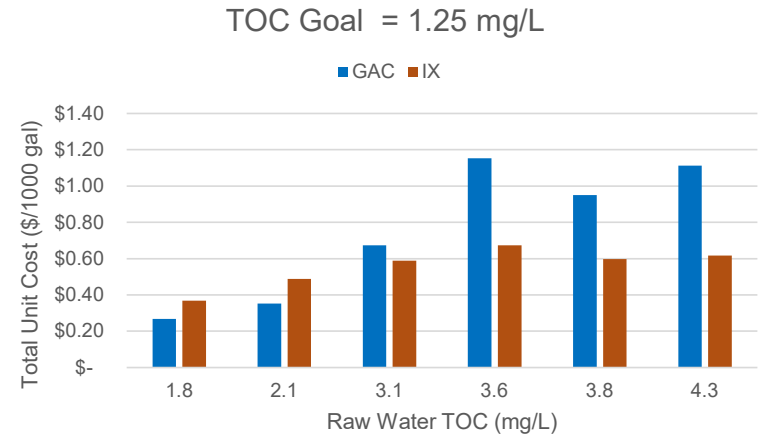
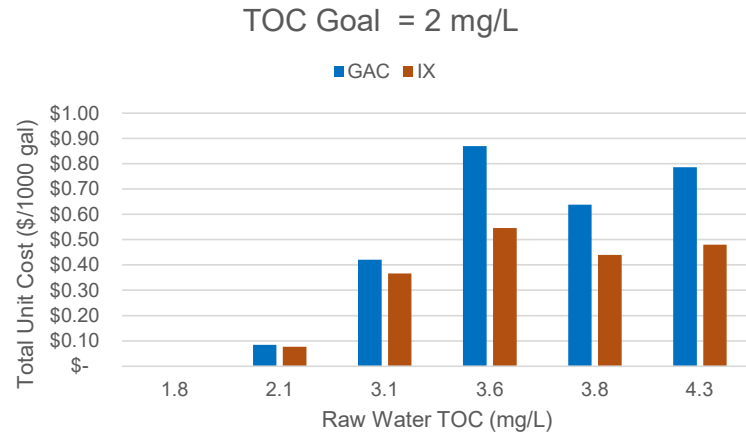




# Technology Screening Preliminary Cost Estimates



## // Total Unit Cost Estimates – Groundwater TOC Removal





## // Total Unit Cost Estimates

### Surface Water TOC Removal

Technology	Total Unit Cost (\$/1000 gal)
MIEX	\$0.34
SIX	\$0.29
Post-GAC	\$0.32

### Nitrate Removal

Technology	Total Unit Cost (\$/1000 gal)
<b>BUD5</b>	
Anion Exchange	\$2.20
Biottta®	\$1.69
<b>BUD7</b>	
Anion Exchange	\$2.42
Biottta®	\$2.11



# Water Quality Blending Tool










# Excel Blending Model vs. BPI



# Blue Plan-it® (BPI) Blending Model Offers All Seven Major Functions Similar to the Excel Model ...

Click a sheet description below to jump to that sheet.



	<b>WQ Input Table:</b> This table represents the source water quality assumptions for the blending spreadsheet. All units are mg/L except for pH (s.u.) and turbidity (ntu)		<b>Supply and Demand:</b> The tables on this tab contains the input flow assumptions for the sources and POCs. These inputs can be manually adjusted, however the user must make sure the total source flow equals the total POC flow.
	<b>Percent Source at POC:</b> This table contains the blending calculations which determine the % breakdown of sources for a given POC.		<b>Percent Source to POC:</b> This table contains the blending calculations which determine the % breakdown of POCs for a given source.
	<b>Existing Water Quality:</b> This sheet presents the projected blended water quality for existing conditions for "best", "worst", and "average" source water quality conditions.		<b>Proposed Water Quality:</b> This sheet presents the projected blended water quality for proposed conditions for "best", "worst", and "average" source water quality conditions, with proposed treatment.
	<b>Water Quality Sheet:</b> There are 9 Water Quality Tables beginning with TOC. Treatment for proposed conditions can be specified on these sheets. Blended water quality for proposed an existing conditions are also shown for the specific parameter.		

2/28/2020  
 Draft Preliminary Blending Model  
 Version 0.1 (BETA)  
 This spreadsheet blending tool is a preliminary draft which requires additional validation. It is being provided for review and feedback. It is not recommended that this spreadsheet be used for operational decisions.

**WARNING:**  
  
**ONLY ADJUST CELLS HIGHLIGHTED IN BLUE**



## ...and Several Additional Features

<div>   </div>		
Water Quality Data	Pre-loaded average, max and min. User adjustable.	Load monthly or 90 <sup>th</sup> , 50 <sup>th</sup> , 10 <sup>th</sup> percentile data using drop down menu. User adjustable.
Graphical Interface	Charts and Warning. Limited	Animation, Warning, Map, Dashboards, Charts, etc.
Geographic Map	N/A	Built-in map + web app options
THM Modeling	N/A	EPA Mechanistic Model
Corrosion and Stability	N/A	Built-in 12 Corrosion Index. Lead and Copper Dissolution Calculation
Warning	Limited	More Dynamic. Warning Log.
Scenario	Limited scenario management by duplicating tabs	Built-in scenario manager. Monte Carlo Simulation. Sensitivity Analysis.



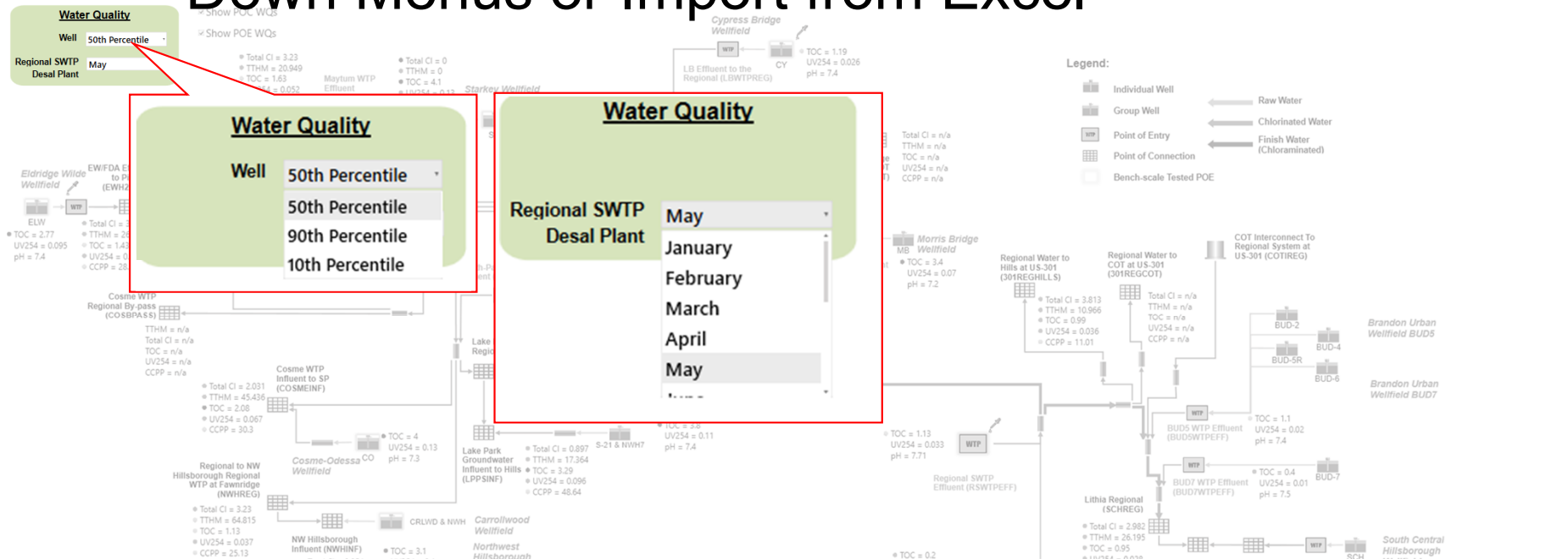
# Excel Blending Model Water Quality Input Table



WQ Input Table: This table represents the source water quality assumptions for the blending spreadsheet. All units are mg/L except for pH (s.u.) and turbidity (ntu)					<- Back to Main Page																			
Source Well	Level 1 Group	Level 2 Group	Ammonia	Arsenic	Bromide	Chloride	Fluoride	Iron	Nitrate	Nitrite	Ortho P	pH	Sulfate	TDS	Total Organic Carbon (TOC)	Total Sulfide	Turbidity							
BUD-2	1-1	1-1	0.51	0.0030	0.04	11.30	0.2110	0.07	0.01	0.01	0.02	7.43	125	383	2.2	0.68	0.0900							
BUD-4	1-2	1-2	0.05	0.0030	0.02	22.30	0.1760	0.01	2.33	0.01	0.02	7.40	60	286	0.7	0.01	0.2300							
BUD-5R	1-3	1-3	0.12	0.0000	0.12	11.36	0.2340	0.14	0.05	0.01	0.12	7.33	7	175	1.2	0.01	0.2752							
BUD-6	1-2	1-2	0.05	0.0030	0.07	20.50	0.1720	0.01	1.48	0.01	0.02	7.42	54	272	0.5	0.01	0.1300							
BUD-7	1-4	1-4	0.18	0.0035	0.09	26.60	0.1450	0.01	3.08	0.01	0.02	7.42	31	252	0.5	0.01	0.1500							
CB1	2-9	2-9	0.42	0.0030	0.03	6.87	0.0100	0.95	0.01	0.01	0.01	7.00	0	221	2.5	0.0400	0.9125							
CB10	2-2	2-1	0.29	0.0035	0.03	7.06	0.0400	0.26	0.04	0.01	0.01	7.31	1	200	2.2	0.0280	0.4800							
CB11	2-5	2-5	0.19	0.0035	0.03	6.53	0.0567	0.12	0.01	0.01	0.01	7.42	1	191	1.7	0.0550	0.0917							
CB12	2-6	2-6	0.09	0.0035	0.02	5.67	0.0433	0.28	0.01	0.01	0.02	7.35	1	186	0.9	0.0200	0.3417							
CB13	2-5	2-5	0.22	0.0030	0.03	6.23	0.0525	0.22	0.06	0.01	0.01	7.36	1	190	1.8	0.0280	0.2300							
CB14	2-3	2-3	0.11	0.0035	0.02	5.45	0.0475	0.02	0.07	0.01	0.02	7.58	2	187	0.9	0.0317	0.1417							
CB15	2-7	2-7	0.17	0.0035	0.03	6.40	0.0550	0.03	0.01	0.01	0.01	7.58	3	190	1.6	0.1833	0.1167							
CB16	2-4	2-4	0.10	0.0035	0.02	6.20	0.0800	0.10	0.39	0.03	0.04	7.44	7	182	1.1	0.0400	0.1667							
CB17	2-3	2-3	0.09	0.0035	0.02	5.44	0.0600	0.01	0.01	0.01	0.02	7.63	3	187	0.9	0.0733	0.0917							
CB2	2-10	2-8	0.38	0.0035	0.03	6.93	0.0400	0.59	0.01	0.01	0.01	7.24	0	205	2.5	0.0300	0.2700							
CB3	2-1	2-1	0.47	0.0035	0.02	7.14	0.0467	0.27	0.01	0.01	0.01	7.31	0	213	3.0	0.0800	0.0875							
CB4	2-1	2-1	0.37	0.0035	0.03	6.95	0.0450	0.33	0.01	0.01	0.01	7.23	0	216	2.7	0.0517	0.2500							
CB5	2-1	2-1	0.32	0.0035	0.03	7.06	0.0560	0.30	0.01	0.01	0.01	7.27	0	209	2.4	0.0567	0.1333							
CB6	2-1	2-1	0.33	0.0035	0.03	7.34	0.0450	0.30	0.01	0.01	0.01	7.33	0	213	2.5	0.0520	0.1500							
CB7	2-8	2-8	0.40	0.0035	0.03	6.89	0.0100	0.43	0.01	0.01	0.01	7.21	0	211	2.6	0.0550	0.1750							
CB8	2-1	2-1	0.38	0.0035	0.03	6.85	0.0520	0.41	0.01	0.01	0.06	7.30	0	213	3.0	0.0517	0.2300							
CB9	2-1	2-1	0.36	0.0035	0.07	6.97	0.0590	0.38	0.01	0.01	0.01	7.33	0	213	2.8	0.0333	0.1500							
CC1	3-1	3-1	0.20	0.0035	0.04	8.72	0.0650	0.05	0.01	0.01	0.02	7.31	3	227	2.5	0.04	0.0900							
CC10	3-8	3-4	0.13	0.0035	0.04	9.17	0.0100	0.10	0.01	0.01	0.01	7.19	27	298	3.8	0.19	0.1083							
CC11	3-9	3-5	0.17	0.0035	0.04	8.93	0.0100	0.08	0.01	0.01	0.02	7.23	18	280	4.8	0.13	0.1100							
CC12	3-10	3-3	0.12	0.0035	0.04	9.90	0.0100	0.09	0.01	0.01	0.01	7.19	24	283	3.9	0.06	0.1500							
CC13	3-10	3-3	0.14	0.0035	0.03	9.03	0.2067	0.08	0.01	0.01	0.01	7.32	27	283	3.0	0.13	0.1000							
CC2	3-2	3-2	0.18	0.0030	0.03	7.96	0.0700	0.02	0.01	0.01	0.02	7.40	6	234	2.4	0.17	0.1000							
CC3	3-3	3-3	0.21	0.0035	0.04	8.67	0.1100	0.06	0.01	0.01	0.01	7.27	21	275	3.0	0.16	0.1333							
CC4	3-4	3-1	0.13	0.0035	0.06	8.93	0.0695	0.02	0.01	0.01	0.02	7.28	26	297	3.6	0.24	0.1083							
CC5	3-4	3-1	0.14	0.0035	0.04	8.40	0.0100	0.02	0.01	0.01	0.02	7.28	25	297	2.8	0.35	0.0750							
< > ... WQ Input Table					Supply and Demand	BUD5	MB	CC	Existing WQ calc	percent source at POC	percent source to POC	Existing WQ	Prop ...	+	:									
Ready					Circular References													Display Settings						



# BPI Users Input Water Quality Using Drop Down Menus or Import from Excel



## Improved features:

- Built-in water quality for wells (Avg, 90<sup>th</sup> percentile, 10<sup>th</sup> percentile)
- Monthly quality for RSWTP and DESALEFF
- Adjustable inputs imported from Excel-like BPI workbook



# Supply and Demand Inputs Are Similar for Two Models



Supply and Demand: The tables on this tab contains the input flow assumptions for the sources and POCs. These inputs can be manually adjusted, however the user must make sure the total source flow equals the total POC flow.					
Sources	Existing Flow	Proposed Flow	Delivery Location	Existing Flow	Proposed Flow
Desalination	8.1	8.1	Lithia Regional (Hillsborough)	8.0	8
Surface Water	64.1	64.1	Lithia SCH Wellfield (Hillsborough)	20.0	20
South-Central Hillsborough	20.0	20.0	Central Hillsborough (Hillsborough)	11.0	11
Brandon 5	3.0	3.0	Morris Bridge (Tampa)	0.1	0.1
Brandon 7	1.5	1.5	Lake Bridge (Pasco)	8.0	8
Morris Bridge	10.0	10.0	US41 (Pasco)	11.0	11
Cypress Bridge	8.0	8.0	Odessa (Pasco)	6.0	6
Cross Bar Ranch	10.0	10.0	Little Road Regional (Pasco)	9.0	9
Cypress Creek	10.0	10.0	Lake Park Regional (Hillsborough)	4.0	4
South Pasco	8.0	8.0	Lake Park S21 Wellfield (Hillsborough)	4.0	4
Section 21	4.0	4.0	NWH Regional (Hillsborough)	5.0	5
Northwest Hillsborough	4.0	4.0	NWH Wellfield (Hillsborough)	4.0	4
Tampa Hillsborough Interconnect	1.0	1.0	Tampa Hillsborough interconnect (Hillsborough)	1.0	1
Cosme-Odessa	10.0	10.0	Cosme 42 (St. Petersburg)	8.0	8
Eldridge Wilde	11.0	11.0	Cosme TM (St. Petersburg)	12.0	12
Starkey	5.0	5.0	Cosme WF (St. Petersburg)	10.0	10
Total	177.7	177.7	Cosme Bypass (St. Petersburg)	0.1	0.1
			Maytum (New Port Richey)	3.5	3.5
			Keller Regional (Pinellas)	42.0	42
			Keller H2S Eldridge Wilde Wellfield (Pinellas)	11.0	11
			Total	177.7	177.7

Supply		Demand	
POE	Paste Supply	POC	Paste DMD
BUD5WTPEFF	4.1 mgd	301REGCOT	0.0 mgd
BUD7WTPEFF	1.8 mgd	301REGHILLS	12.5 mgd
CCWTPEFF	23.5 mgd	COSBPASS	0.0 mgd
DESALEFF	13.0 mgd	COSMEINF	27.9 mgd
LBWTPREG	7.5 mgd	COTIREG	0.0 mgd
MBWTPEFF	7.0 mgd	ENDOF64	0.0 mgd
CO	9.3 mgd	EW2SEFF	53.4 mgd
ELW	9.6 mgd	LBREGPASCO	10.1 mgd
NWH	11.5 mgd	LITHIAINF	41.7 mgd
S21	9.7 mgd	LPSPINF	12.0 mgd
SCH	26.3 mgd	LPREG	0.0 mgd
ST	5.2 mgd	MAYTMINF	3.2 mgd
RSWTPEFF	72.8 mgd	MAYTUMREG	0.0 mgd
SPWTPEFF	0.0 mgd	MBREGCOT	0.0 mgd
Total Supply	201.3 mgd	NWHINF	11.6 mgd
		NWHREG	0.0 mgd
		ODESSA	4.6 mgd
		PC1REG	12.0 mgd
		SCHINF	0.0 mgd
		SCHREG	0.0 mgd
		US41TIE	11.9 mgd
		Total Demand	200.9 mgd



## Calculated Flow Percentage at/to POC Are Similar for Two Models, But BPI Is More Graphic



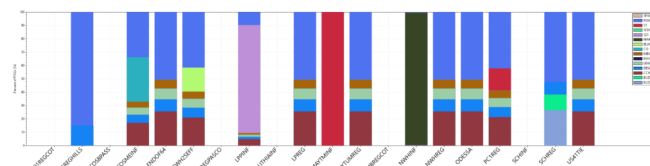
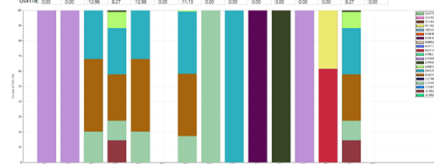
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Member source at POC. This table contains the breeding calculations and summarizes the % breakdown of who sired the progeny at POC.

Back to Main Page

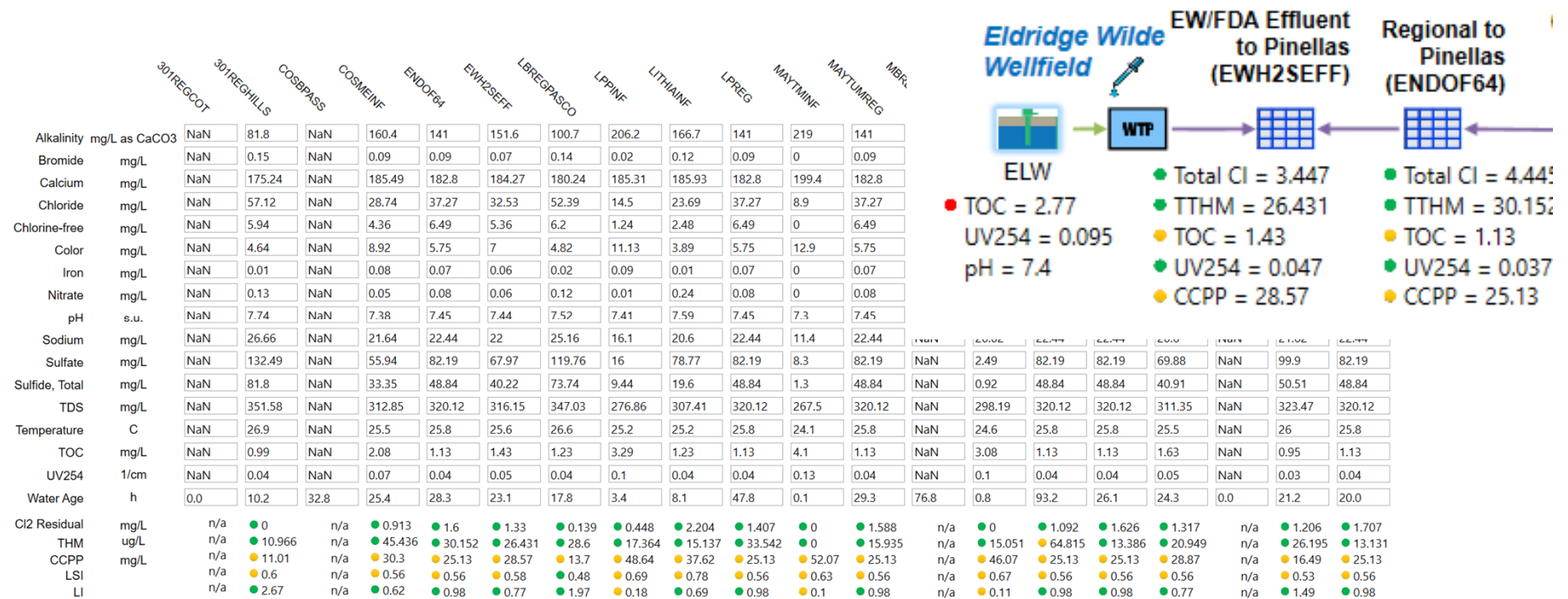
WARNING:  
ONLY ADJUST COWS MANIPULATED IN BLUE

	Source	Event	SWT1	SWC	BUDS	BUD2	MSB	CY	CB	CC	CP	SC	SZ1	MSB	THNC	CW	EW	SW	S
1	USA	6	60	20	5	1.5	0	0	0	0	0	0	0	4	1	1	10	1	5
2	USA	11	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
3	USA	20	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
4	USA	11	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
5	USA	8	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
6	USA	8	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
7	USA	31	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
8	USA	20	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
9	USA	11	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
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15	USA	20	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
16	USA	20	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
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[illegible][illegible][illegible]

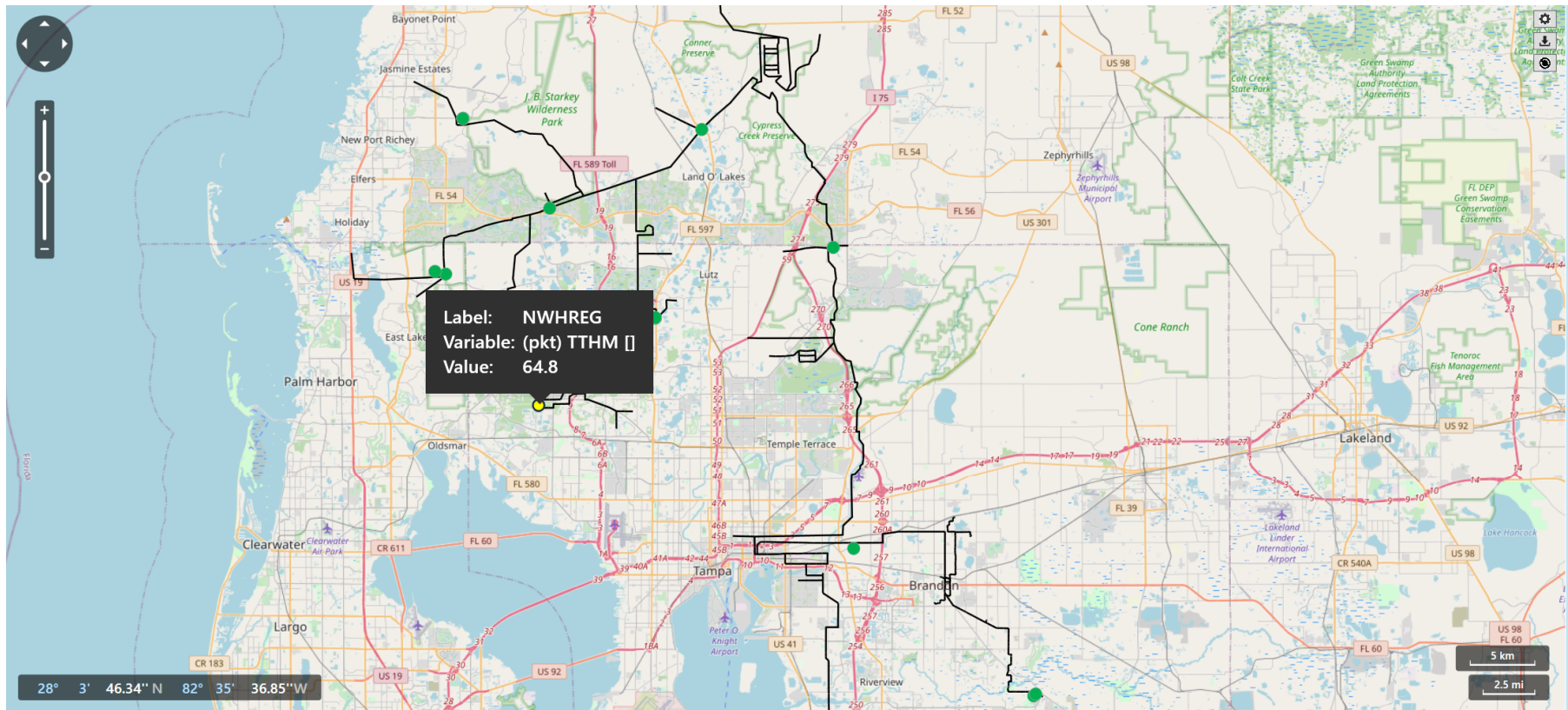


# BPI Presents THM and Corrosivity at POC Using Animated Warnings



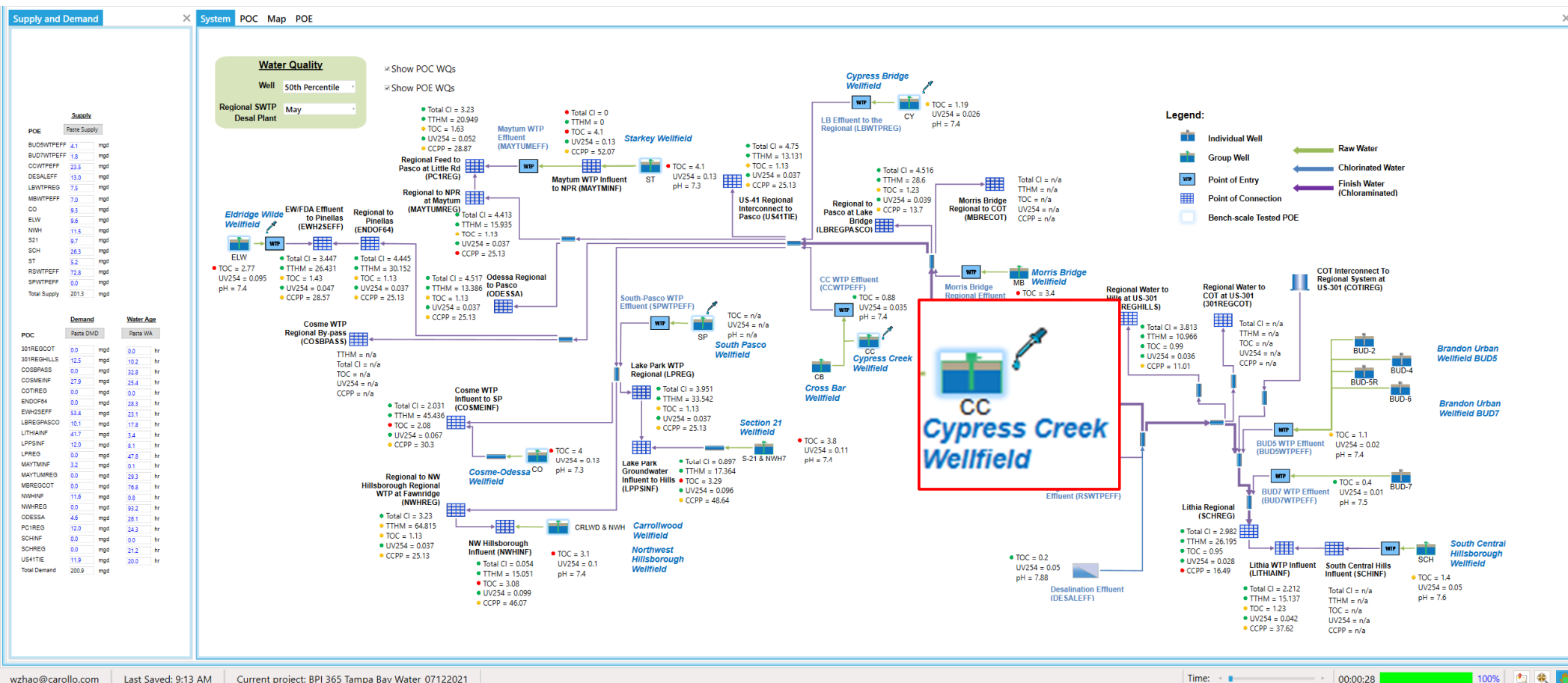


# BPI Presents THM and Corrosivity Results at POCs Geographically



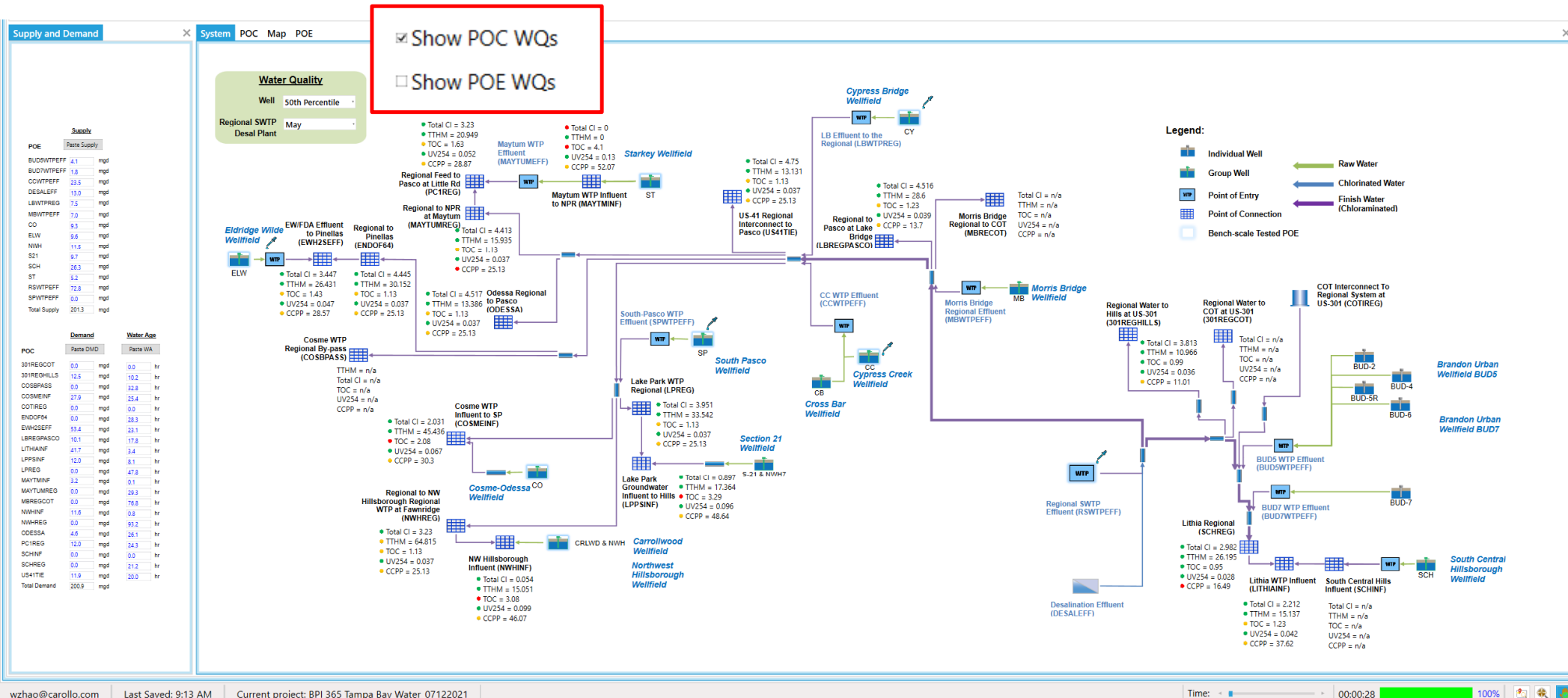


# Wellfield Treatment Locations Are Illustrated Graphically



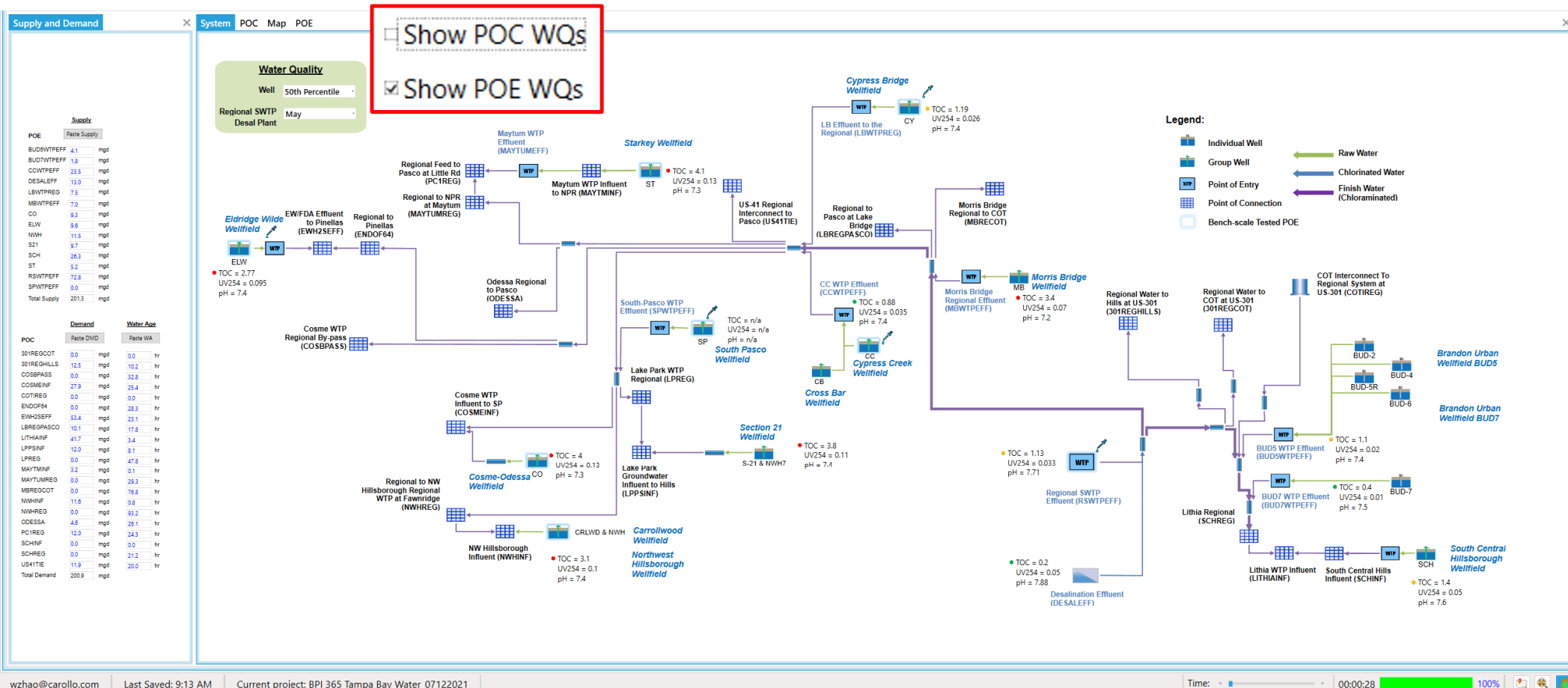


# BPI Hides and Shows POC/POE Water Qualities





# BPI Hides and Shows POC/POE Water Qualities





# User Can Adjust Chemical Doses (Cl<sub>2</sub>, NH<sub>3</sub>), TOC and UV<sub>254</sub> Removal Rates for Each POE

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Engineers...Working Wonders With Water®

☒ Calculate pH

Run Model

New a Scenario

Select Scenario: Dry

Save Scenario

Save as Scenario

Delete Scenario

Sync Value

Go to diagram: (\*Diagram Group)

Warning Center

Open Bpl Workbook

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DECISION SUPPORT SYSTEM

Supply and Demand × System POC Map POE

**Chemicals**

**Supply**

POE Paste Supply

POE	Supply
BUD5WTPEFF	4.1 mgd
BUD7WTPEFF	1.8 mgd
CCWTPEFF	23.5 mgd
DESALEFF	13.0 mgd
LBWTPREG	7.5 mgd
MBWTPEFF	7.0 mgd
CO	9.3 mgd
ELW	9.6 mgd
NWH	11.5 mgd
S21	9.7 mgd
SCH	28.3 mgd
ST	5.2 mgd
RSWTPEFF	72.8 mgd
SPWTPEFF	0.0 mgd
Total Supply	201.3 mgd

**Demand**

POC Paste DMD Paste WA

POC	Demand	Water Age
301REGOOT	0.0 mgd	0.0 hr
301REGHILLS	12.5 mgd	10.2 hr
COSBPASS	0.0 mgd	32.8 hr
COSBRENF	27.9 mgd	25.4 hr
COTIREO	0.0 mgd	23.3 hr
ENDOFM	0.0 mgd	23.3 hr
EWQSEFF	13.4 mgd	23.1 hr
LBREGASCO	10.1 mgd	17.8 hr
LITHANF	41.7 mgd	3.4 hr
LPPSINF	12.0 mgd	8.1 hr
LPREO	0.0 mgd	47.8 hr
MAYTHINF	3.2 mgd	0.1 hr
MAYTUMREG	0.0 mgd	29.3 hr
MBREGOOT	0.0 mgd	75.8 hr
NWANF	11.6 mgd	0.8 hr
NWAREO	0.0 mgd	93.2 hr
OCESSA	4.8 mgd	26.1 hr
PC1REG	12.0 mgd	24.3 hr
SCHNF	0.0 mgd	0.0 hr
SCHREG	0.0 mgd	21.2 hr
USATHE	11.9 mgd	20.0 hr
Total Demand	200.8 mgd	

	Cl2 Dose mg/L	NH3-N mg/L as N	Instant Cl2 Demand mg/L	Raw TOC mg/L	Raw UV254 1/cm	Raw pH	TOC RR %	UV254 RR %
BUD5WTPEFF	7.4	1.1	0	1.1	0.02	7.4	0	0
BUD7WTPEFF	4.9	0.9	0	0.4	0.01	7.5	0	0
CCWTPEFF	7.4	1.3	0	2.5	0.07	7.4	0	0
DESALEFF	12.3	0	0	0.2	0.05	7.88	0	0
LBWTPREG	6	1.6	0	1.8	0.05	7.4	0	0
MBWTPEFF	8.6	0.9	0	3.4	0.07	7.2	0	0
CO	0	0	0	4	0.13	7.3	0	0
ELW	0.2	0	0	4.2	0.12	7.4	0	0
NWH	0	0	0	3.1	0.1	7.4	0	0
S21	0	0	0	3.8	0.11	7.4	0	0
SCH	0.3	1.0	0	1.4	0.05	7.6	0	0
ST	0	0	0	4.1	0.13	7.3	0	0
RSWTPEFF	4.8	0	0	2.05	0.05	7.71	0	0
SPWTPEFF	12.3	1.6	0	0	0	0	0	0

Blue label: bench tested for ozone demand/decay  
Orange label: bench tested for GAC, FBIX, or SIX  
Red label: bench tested for GAC/FBIX and ozone demand



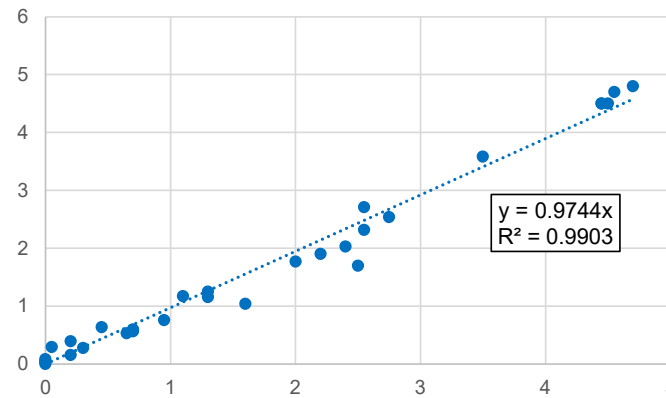
# Disinfection Model Calibration



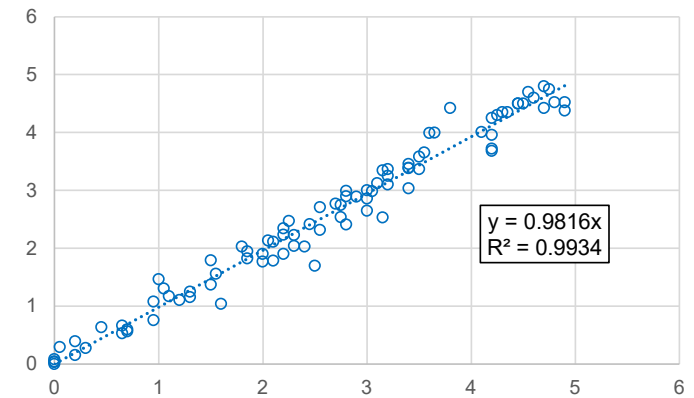
# Model Calibration – $R^2$ regression - Chlorine Disinfection

- $R^2 = 1$  represents model results are perfect fit with experimental results

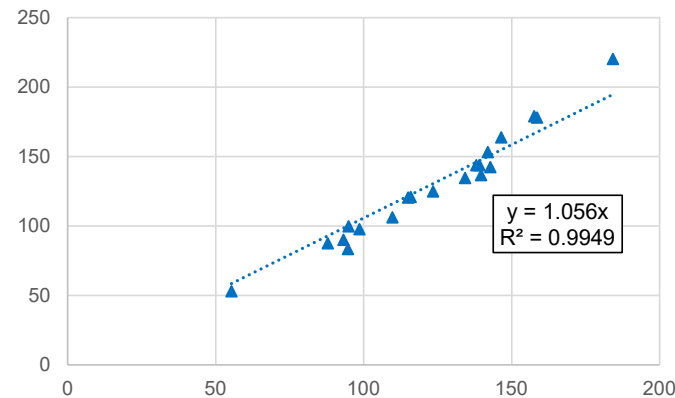
Raw Water - Cl<sub>2</sub> Residual



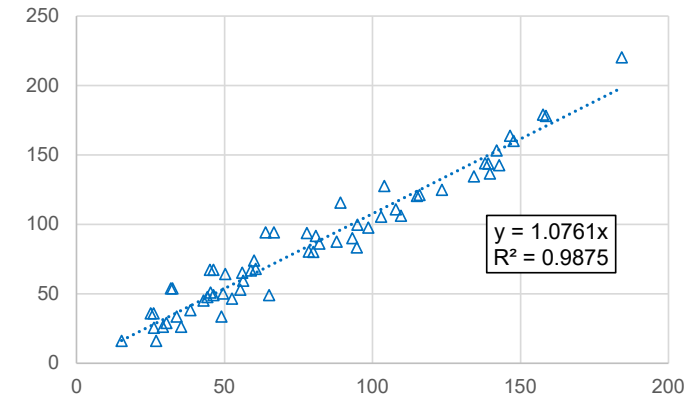
Raw + Diluted Water - Cl<sub>2</sub> Residual



Raw Water - THM



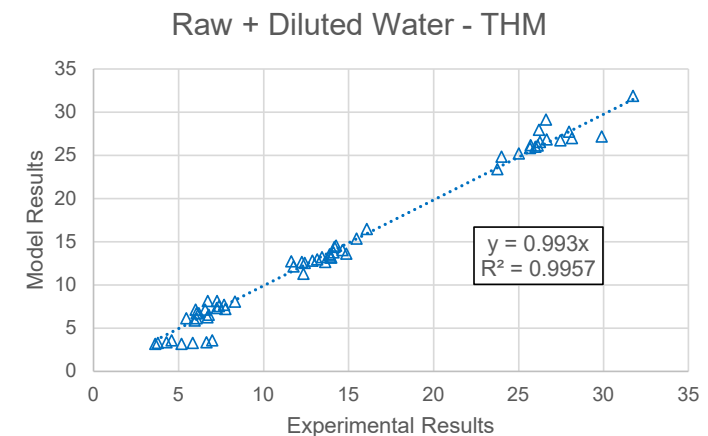
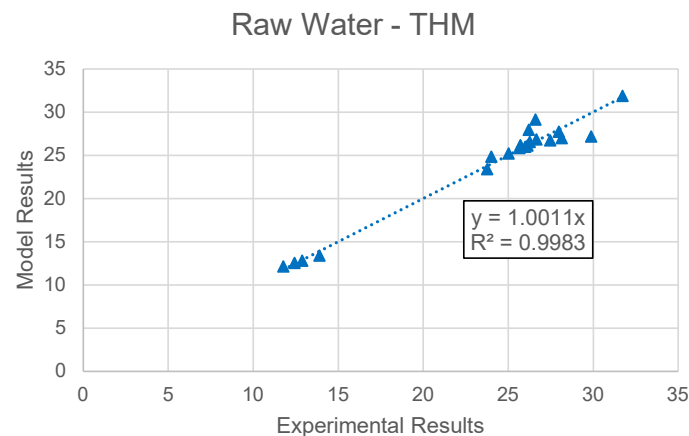
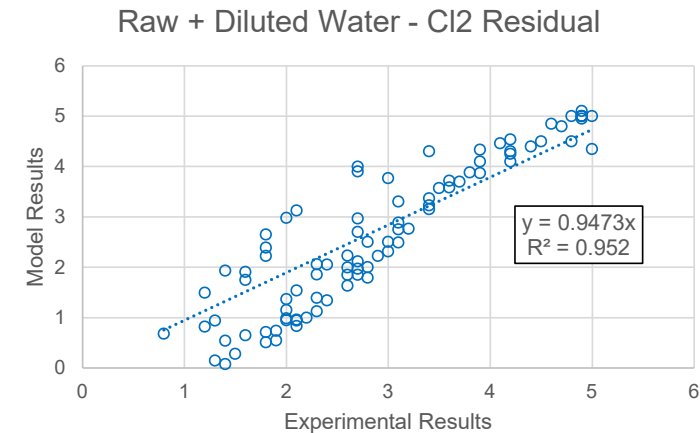
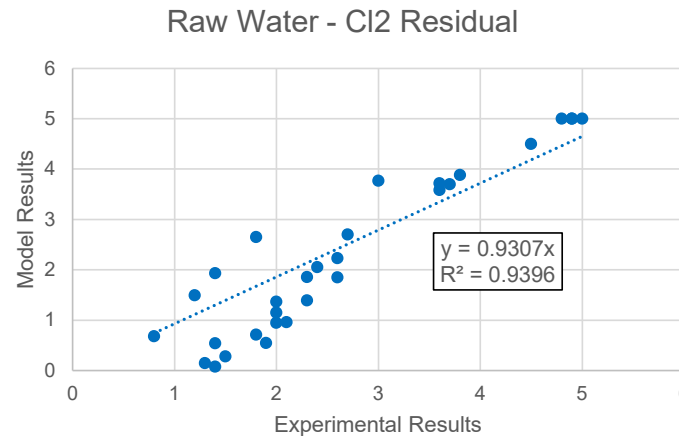
Raw + Diluted Water - THM





# Model Calibration – $R^2$ regression - Chloramine Disinfection

- $R^2 = 1$  represents model results are perfect fit with experimental results





# Disinfection Model Validation



# Combine hydraulic model results to Blue Plan-it®



**BLUE PLAN-IT®**  
DECISION SUPPORT SYSTEM

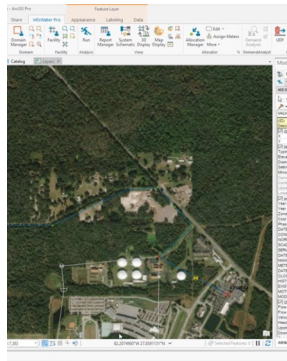
**Historical Water Quality Data**

**Hydraulic Model**

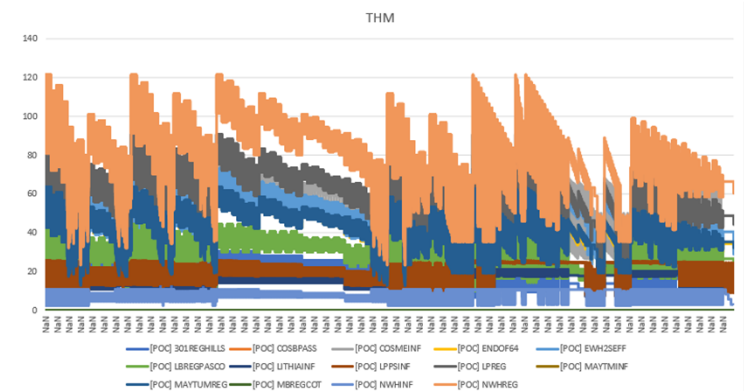
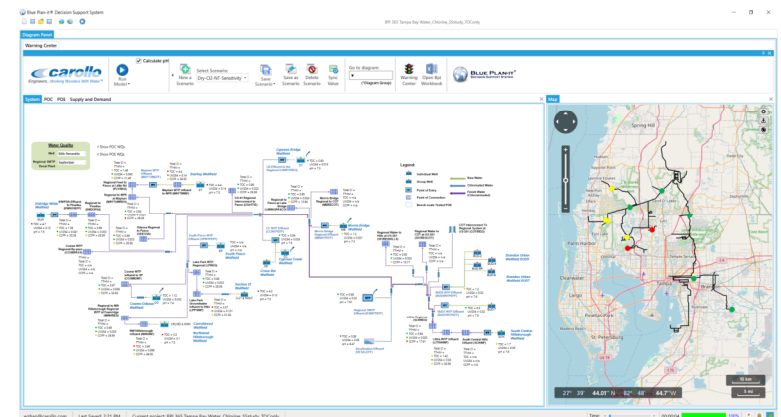
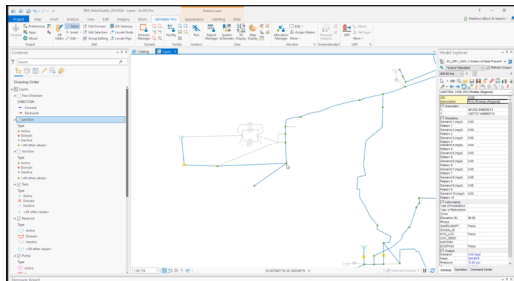
**Import Hydraulic  
Results into BPI365**

**Water Age Source Trace**

**Hydraulic Scenarios –  
Dry and Wet  
System Demands**



**Solve for each POC**  
**Multiple scenario (e.g.,  
chlorine vs chloramine,  
multiple TOC goals)**

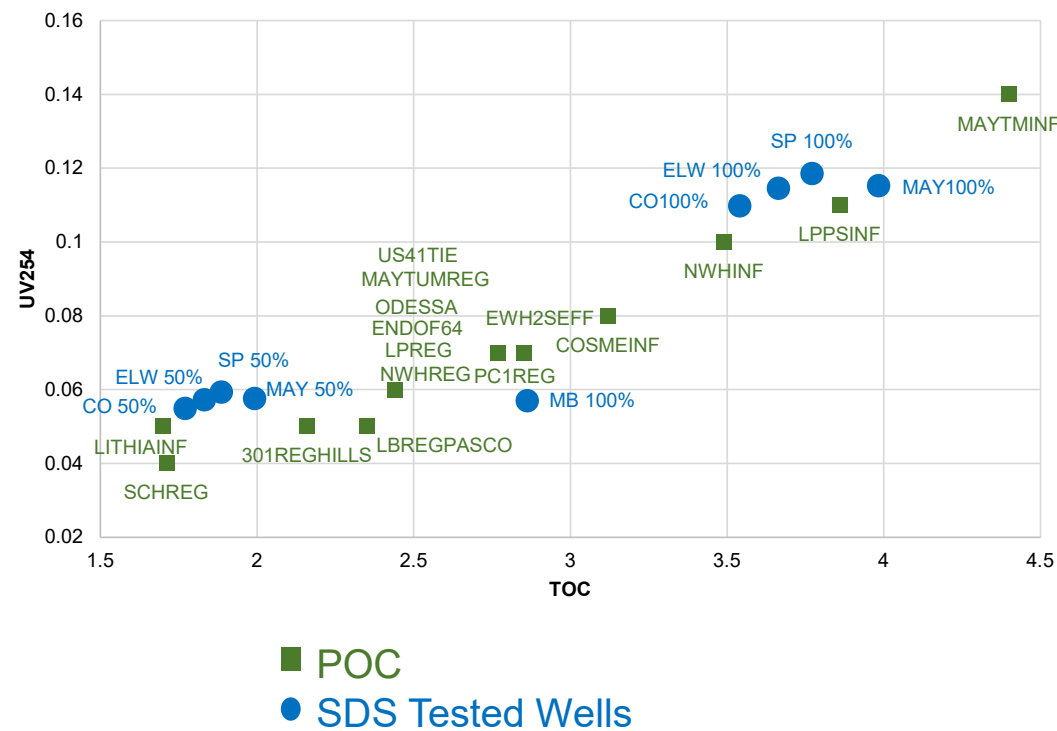


**POE treatment THM Study**

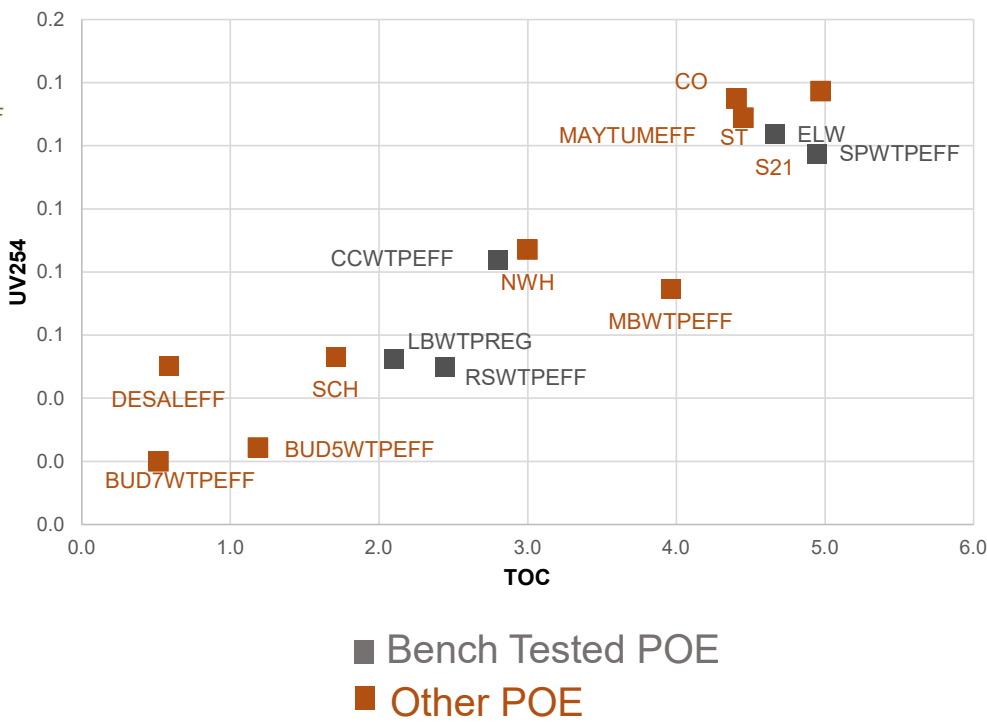


# Assumption of model validation

SDS water quality data vs POC water quality



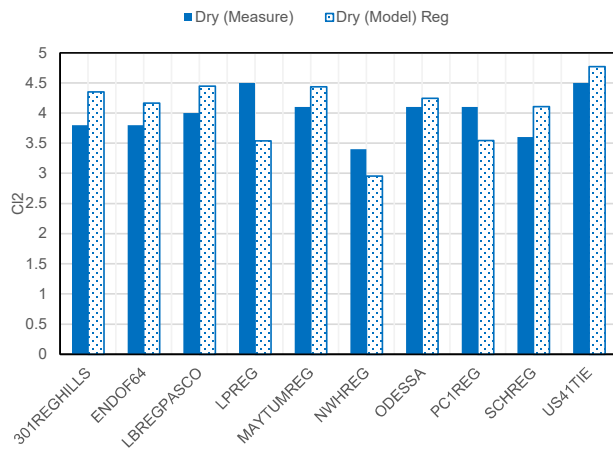
Bench tested POE water quality and other POEs



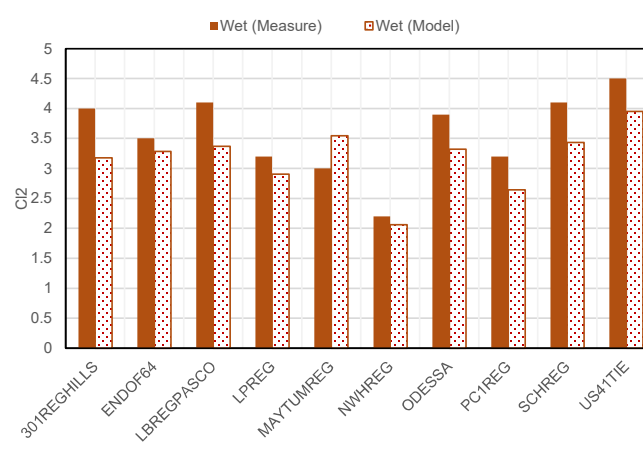


# Chloramine disinfection validation based on hydraulic model results

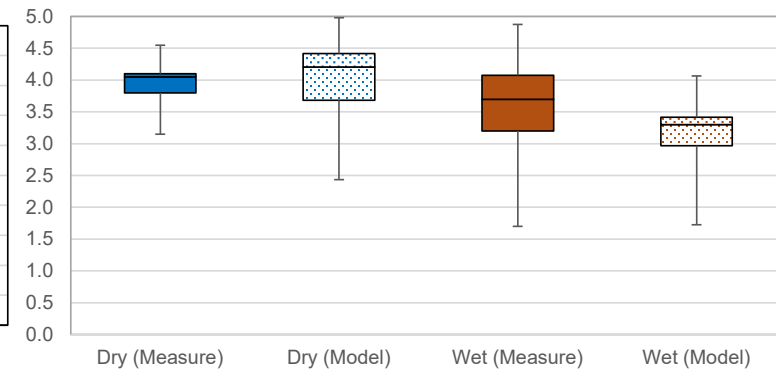
Dry Season Cl2



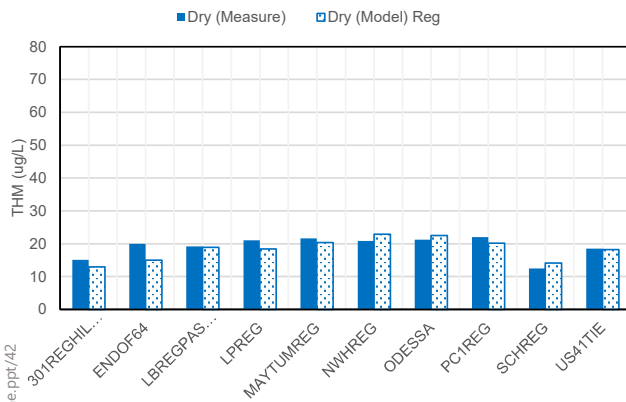
Wet Season Cl2



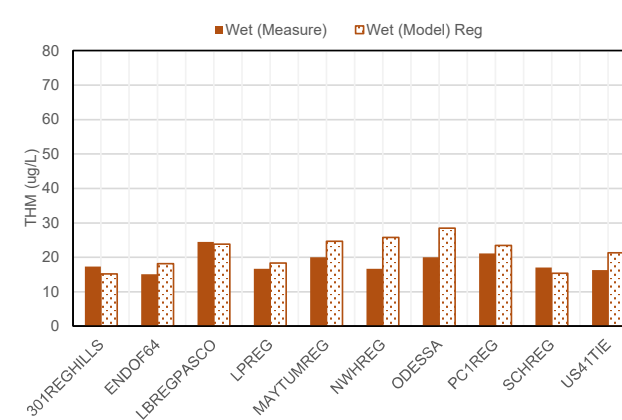
Cl2



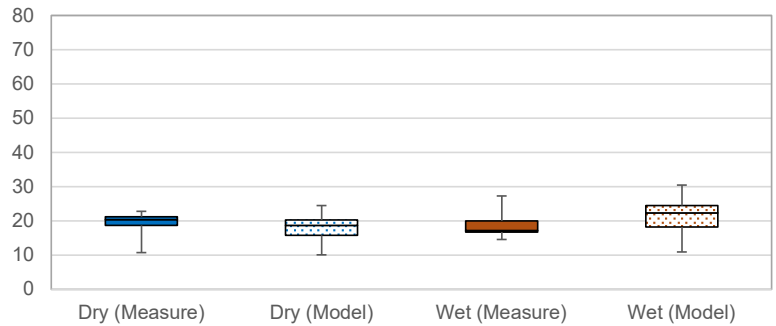
Dry Season THM



Wet Season THM



THM

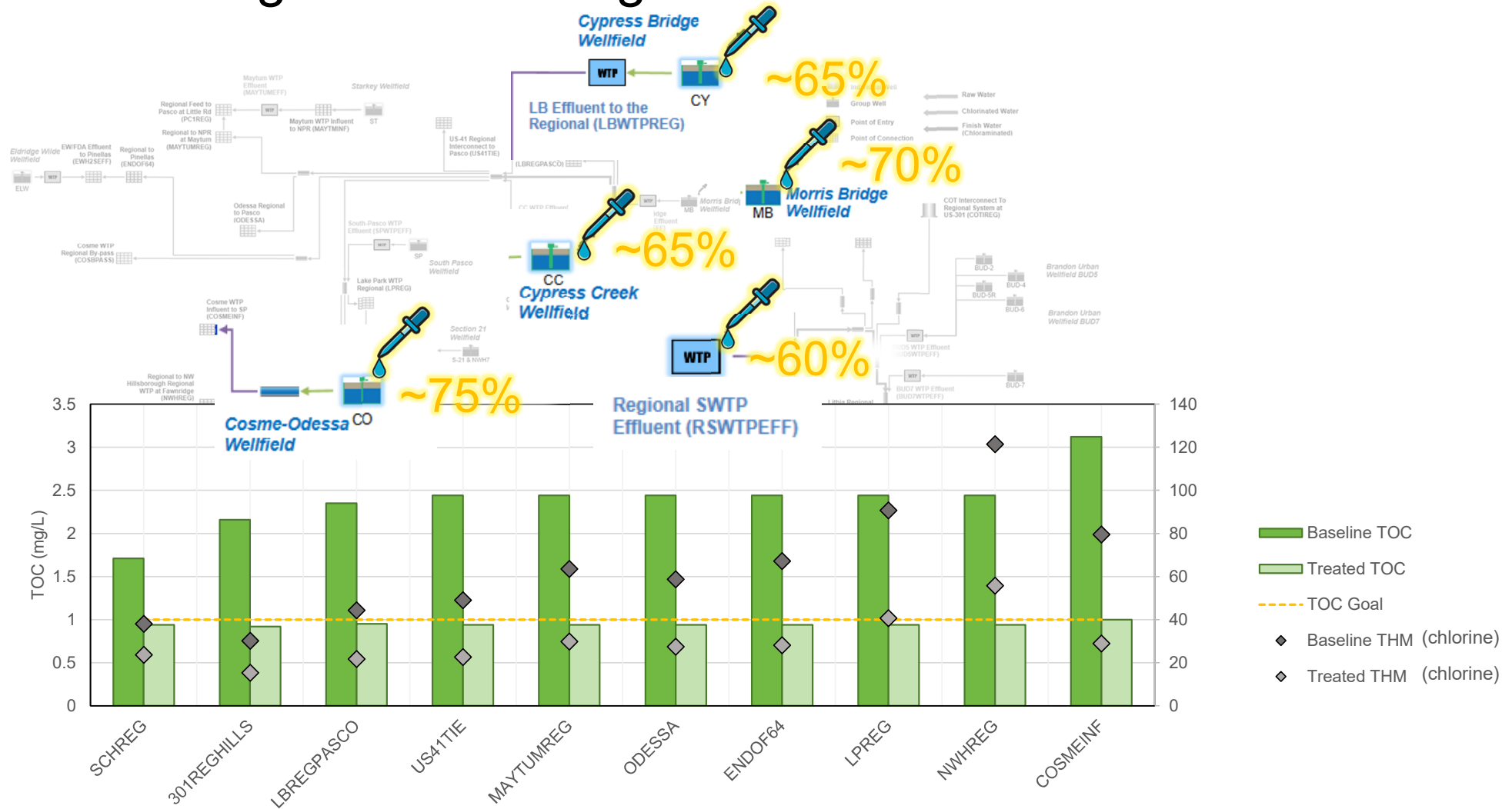




# Preliminary WQ Blending Model Results on Treatment

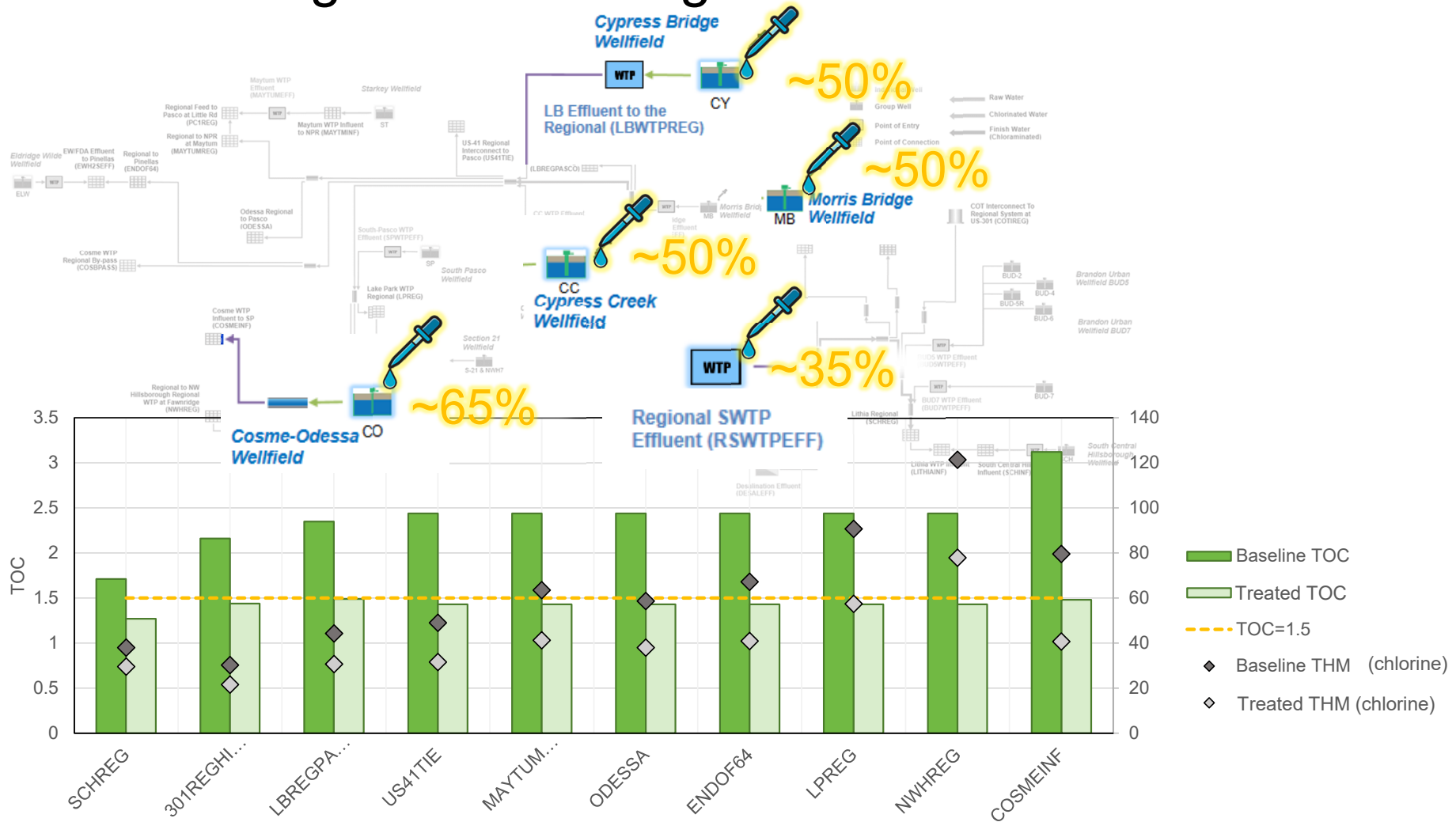


# When 1 mg/L TOC is the goal....



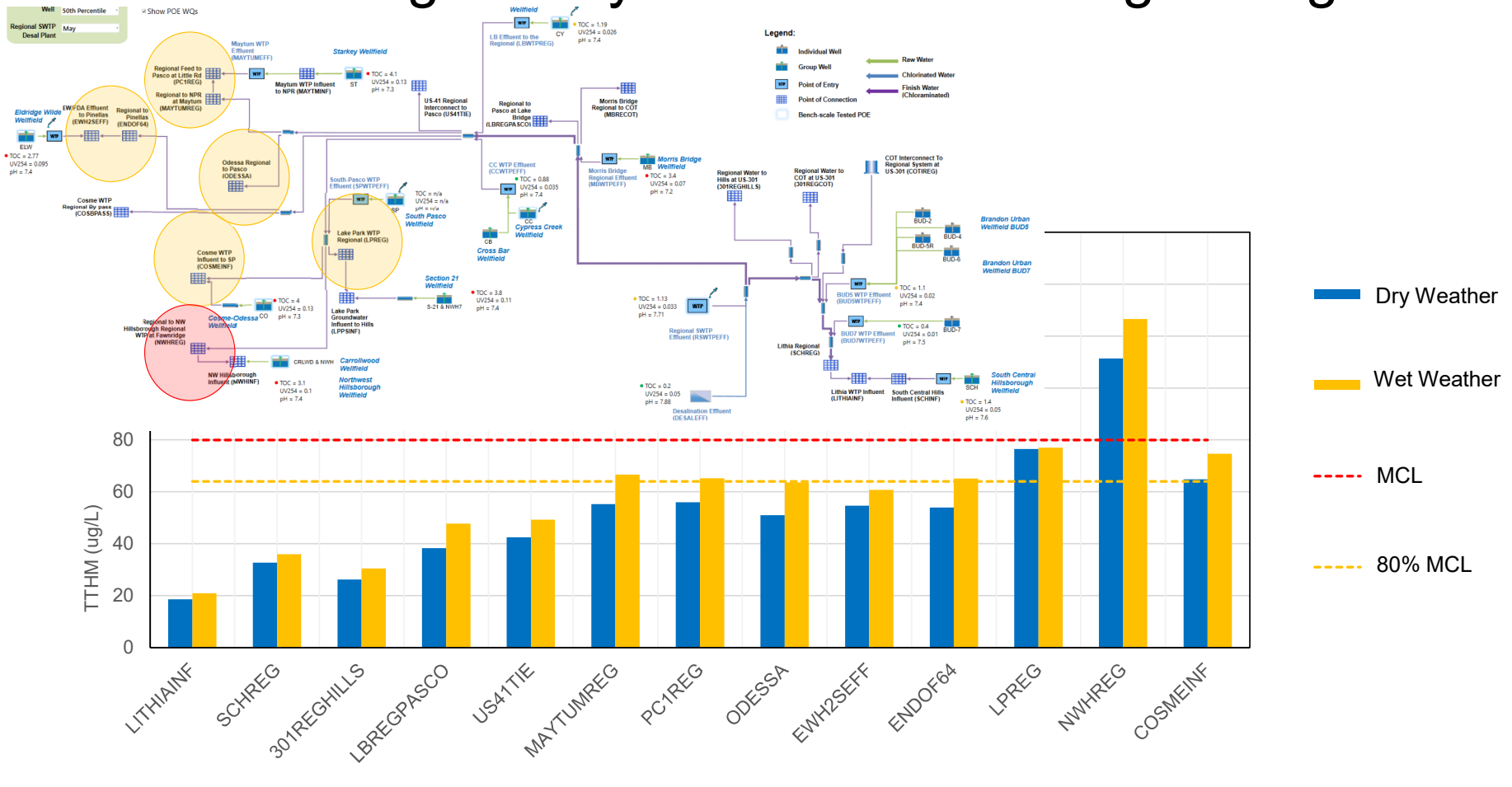


# When 1.5 mg/L TOC is the goal....



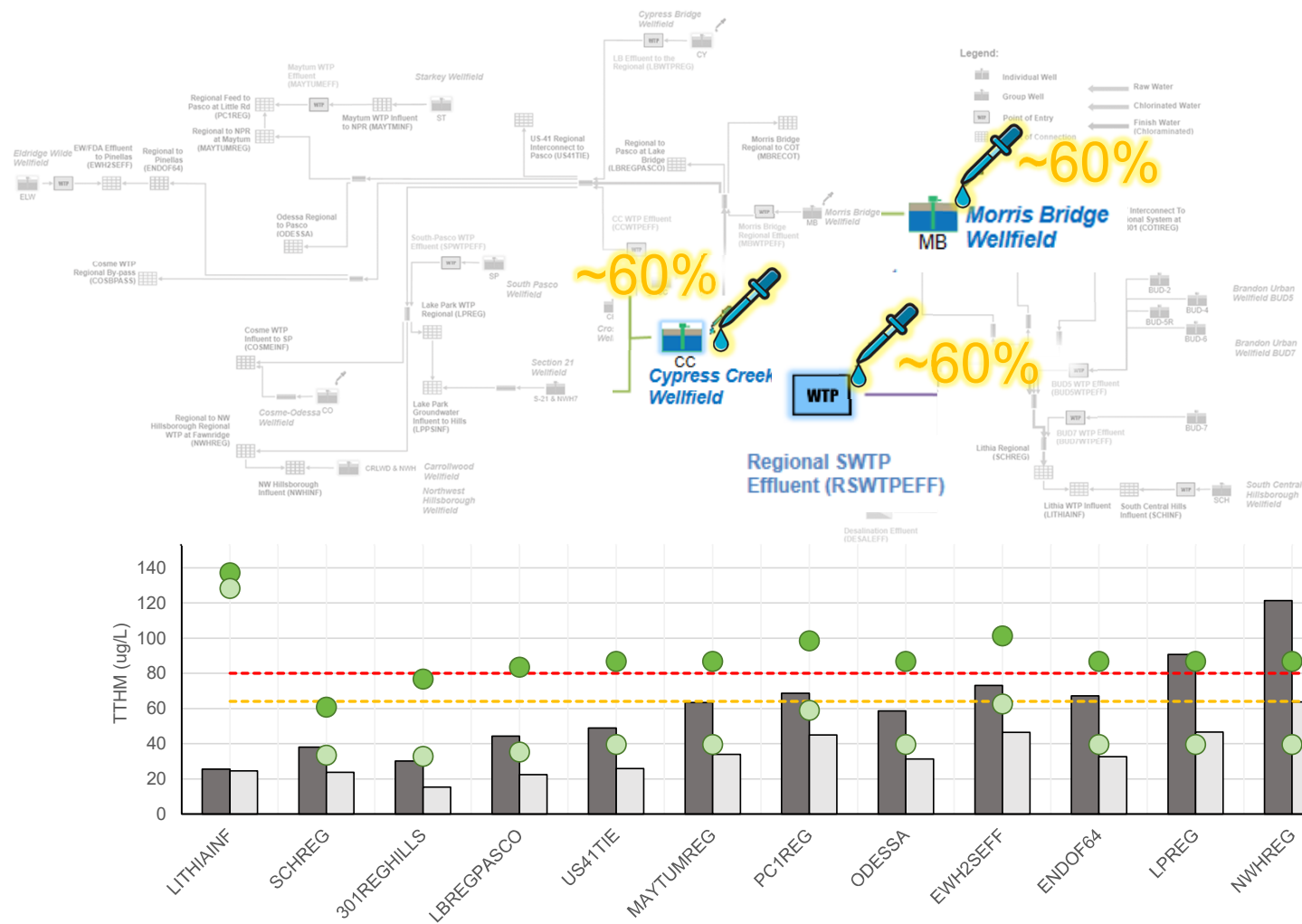


# Potential change to chlorine disinfection will impact THM level in the regional system when water age is high





# When THM is the goal...





# Next Steps



## Next Steps

- Bench-Scale Testing
  - Finalize technical memorandum
- Water Quality Blending Model
  - Complete THM validation using the distribution system DBP data, water age, and source tracking results
  - Complete treatment scenario evaluation for various TOC goals
  - Create report for blending model results
  - Present THM and corrosion modeling results using built-in GIS or GIS Web App



## Next Steps

- Work with you to review goals and scenarios to select pilot site and technology
  - Performance and cost results
  - Chloramines vs free chlorine disinfection
  - Additional operational/demand scenarios in water quality blending model
- Conduct pilot test
- Develop conceptual designs
- Identify implementation approach and recommended treatment projects



# Proposed PFAS Monitoring Plan and Analytical Method Considerations



# Sampling Plan

- **Weston & Sampson will collect 45 source water samples**
  - BUD Wells (3)
  - Cosme-Odessa Wellfield (3)
  - Cross Bar Wellfield (4)
  - Cypress Bridge Wellfield (4)
  - Cypress Creek Wellfield (4)
  - Eldridge-Wilde Wellfield (5)
  - Morris Bridge Wellfield (5)
  - Northwest Hillsborough Wellfield and Carrollwood Wells (4)
  - Section 21 Wellfield (3)
  - South Central Wellfield (3)
  - South Pasco Wellfield (3)
  - Starkey Wellfield (2)
  - RSWTP Influent (1)
  - Desal Plant Influent (1)



# Analytical Methods (Background)

- **EPA Method 537 for finished drinking water**
  - 6 PFAS compounds - 10 to 90 ppt (ng/L)
  - PFAS Hazard Advisory Level – PFOA + PFOS = 70 ppt (ng/L)
  - UCMR3 (Jan 2013 to Dec 2015)
- **EPA Method 537.1 for finished drinking water**
  - 18 PFAS compounds – 2 to 5 ppt (ng/L)
  - approved in 2018
- **EPA Method 533 for finished drinking water**
  - 11 short-chain PFAS compounds – 2 to 5 ppt (ng/L)
  - approved in Dec 2019
  - can also be used for 14 of 18 PFAS compounds in EPA Method 537.1
  - uses isotope dilution analysis to minimize matrix interferences
- **UCMR5 (Jan 2023 to Dec 2025) includes 29 PFAS compounds**



# Analytical Methods (Part 1)

- **Which method should be used for source water monitoring?**
  - Using a finished drinking water method would not be “EPA approved”
  - Using an “unapproved” method can be questioned
  - Technical concern is matrix interference and potential positive bias
  - Need to be certain the results are accurate and precise
  
- **Eurofins Lancaster Laboratories recommends Method 537 IDA**
  - 29 PFAS compounds – 2 to 5 ppt (ng/L)
  - Isotope dilution analysis
    - ❖ 19 isotopes of PFAS compounds being analyzed
    - ❖ Used throughout analytical procedure



# Analytical Methods (Part 2)

- **Why use Method 537 IDA?**
  - Eurofins is a leading authority on PFAS analysis
  - Eurofins is certified by their principal laboratory accrediting body, PADEP
  - This accreditation is accepted in other states that require it (e.g., NJDEP, NHDES)
  - These states follow NELAC Institute (TNI) Standards as does the state of Florida



# Analytical Methods (Part 3)

- **Why use Method 537 IDA?**
  - Eurofins is required to perform method proficiency tests to maintain certification
    - ❖ Samples sent by independent suppliers
    - ❖ PFAS concentrations known by the supplier, unknown to the laboratory
    - ❖ Results reported by the supplier directly to PADEP and other states
    - ❖ Performed twice per year since PFAS proficiency tests were first created in January 2017
  - Eurofins also maintains Method 537 IDA certification with the Departments of Defense and Energy
    - ❖ Quality Systems Manual (QSM) for Environmental Laboratories
    - ❖ Based on the NELAC Institute (TNI) Standards



# Analytical Methods (Part 4)

- Why use Method 537 IDA?

- Florida does not currently have a laboratory certification for PFAS compounds
- FDEP document, PFAS Dynamic Plan (February 2021) provides related guidance
  - ❖ FDEP laboratory uses its internally developed method DEP LC-001-3
  - ❖ This method incorporates **isotope dilution** mass spectroscopy to ensure accuracy
  - ❖ "It is important to note that laboratory methodologies for analysis of PFAS are evolving."
  - ❖ "EPA is currently validating methods to measure PFAS in groundwater, surface water, wastewater and solids, but these methods are still in draft form."



# Recommendation

- Use Method 537 IDA for PFAS analysis...
- *Pending review and discussion with Weston and Sampson and Eurofins on SW-846 Methods 3512 and 8327 that were validated together for 24 PFAS compounds in surface water, groundwater, and wastewater.*
- *Final versions were published in SW-846 Compendium on **July 30, 2021**.*  
<https://www.epa.gov/hw-sw846/sw-846-update-vii-announcements>



**Table 1. Regional Total Coliform Rule Compliance (Percent Positive Samples)**

<b>2018</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>St. Pete</b>	0	0	0	0.6	0	0	0.6	ND	ND	0.4	ND	ND
<b>Pinellas</b>	0.5	1.9	1.0	0.5	0	0.5	3.4	0	2.6	0.5	0	0
<b>Tampa</b>	0	1.2	2.0	1.6	0.0	0.4	1.6	1.9	0.4	0	0	0
<b>Pasco</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>NWHC</b>	0.8	2.3	ND	ND	ND	ND	ND	0	1.6	3.0	1.6	0.8
<b>SCHC</b>	2.5	2.1	ND	ND	ND	ND	ND	2.6	3.0	3.5	1.1	0
<b>NPR</b>	0	0	0	0	0	0	0	0	0	0	0	0

<b>2019</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>St. Pete</b>	0.5	0	0	0	1.1	0.5	1.6	0	0	1.06	0	0
<b>Pinellas</b>	0	0	0	0	1.4	0.5	0.5	0.5	0	0	0	0.47
<b>Tampa</b>	0	1.2	0.8	0	0.4	0.8	0	0.8	0	0.4	0.8	0
<b>Pasco</b>	0	0	0	0	0	0	0	0	0.7	0	0	0
<b>NWHC</b>	0.8	0.8	0	0	0	0.79	1.59	3.0	1.55	0.75	0.81	2.33
<b>SCHC</b>	0.5	0.6	1.1	0.99	5.97	2.08	4.35	6.10	2.09	0.55	1.08	0
<b>NPR</b>	0	0	0	0	0	0	0	0	0	0	0	0

<b>2020</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>St. Pete</b>	0	0	0.5	0.5	0	0	0.5	0.5	0	0	1.08	0
<b>Pinellas</b>	0	0.9	0.5	0	0.5	0.5	0	0	0.5	0	0	0.5
<b>Tampa</b>	0.4	0	0.4	0	0	0.4	0.4	0.4	0.4	0	0	0
<b>Pasco</b>	0	0	0	0	0	0	0	0	0	0	0	2.4
<b>NWHC</b>	0	0	0	1.59	0.8	0.8	0	6.12	3.70	2.33	3.10	0.55
<b>SCHC</b>	0.55	1.59	0.55	2.08	1.08	1.08	0	1.59	1.59	1.08	0.81	0
<b>NPR</b>	0	0	0	0	0	0	4.3	0	0	0	0	0

<b>2021</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>St. Pete</b>	0	0.55	0	0	0	0	0.55					
<b>Pinellas</b>	0.47	0.47	0	0	0	0	1.8					
<b>Tampa</b>	0	0	0	0	0	0	0					
<b>Pasco</b>	0	0	0	0	0	0	1.3					
<b>NWHC</b>	0	0	0	1.5	1.47	0.75	2.16					
<b>SCHC</b>	0	0	0	1.73	1.75	0.45	0.89					
<b>NPR</b>	0	0	0	0	0	0	0					



**Table 2. Customer Water Quality Complaints by Member Government  
(Data NOT normalized for population served)**

<b>2018</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>St. Pete</b>	13	22	27	26	37	32	32	36	16	28	20	27
<b>Pinellas</b>	18	17	ND	20	34	31	9	22	27	35	29	18
<b>Tampa</b>	76	23	27	45	39	24	26	38	27	56	42	33
<b>Pasco</b>	22	13	8	8	8	9	9	9	10	18	21	9
<b>NWHC</b>	23	34	32	19	29	25	23	19	27	21	27	25
<b>SCHC</b>	71	50	76	50	46	72	23	97	54	91	62	49
<b>NPR</b>	2	0	0	4	1	4	1	1	2	4	2	4

<b>2019</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>St. Pete</b>	35	30	33	32	30	26	36	31	22	42	29	30
<b>Pinellas</b>	23	26	22	32	33	32	27	30	32	55	40	34
<b>Tampa</b>	46	59	47	28	36	36	26	51	30	30	73	17
<b>Pasco</b>	17	8	8	5	8	16	7	5	16	22	7	14
<b>NWHC</b>	27	21	21	24	13	21	18	18	19	16	17	16
<b>SCHC</b>	37	57	67	71	70	122	101	45	62	67	50	49
<b>NPR</b>	4	1	0	6	2	2	1	4	0	3	3	1

<b>2020</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>St. Pete</b>	47	42	42	27	32	49	45	51	50	62	55	42
<b>Pinellas</b>	58	45	45	43	50	58	42	37	64	63	62	46
<b>Tampa</b>	27	22	25	22	21	15	30	44	33	35	25	33
<b>Pasco</b>	3	11	18	8	7	4	16	12	13	13	8	1
<b>NWHC</b>	17	13	17	77	52	37	29	29	19	25	14	75
<b>SCHC</b>	46	68	57	51	70	71	63	70	64	49	21	52
<b>NPR</b>	3	0	4	2	1	0	0	4	0	3	3	5

<b>2021</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>St. Pete</b>	54	43	47	37	49	52	48					
<b>Pinellas</b>	29	54	36	65	59	51	69					
<b>Tampa</b>	34	39	45	54	63	44	26					
<b>Pasco</b>	19	13	16	12	21	16	17					
<b>NWHC</b>	20	17	28	31	20	27	28					
<b>SCHC</b>	47	80	90	54	196	84	51					
<b>NPR</b>	1	4	4	1	0	0	2					



**Table 3. Distribution System Flushed Water (Reported in MG per Month)  
(Data NOT normalized for production)**

<b>2018</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>St. Pete</b>	25.8	20.3	27.8	22.5	37.8	38.1	41.1	30.9	16.7	6.8	6.1	7.4
<b>Pinellas</b>	8.8	7.8	8.6	12.2	15	15.9	9.8	12.2	13	15.5	6	7.4
<b>Tampa</b>	4.4	4.7	3.9	6.7	2.9	5.2	16.9	4.8	1.9	3.2	5.5	15.9
<b>Pasco</b>	59.6	44.9	44.8	54.9	47.9	55.2	45.8	47	45.7	65.7	44.4	46.3
<b>NWHC</b>	13.7	12.4	ND	9.5	9.6	9.4	10.5	12.1	13.1	13.8	3.7	6.8
<b>SCHC</b>	9.8	10.6	ND	12.3	11.5	12.1	17.8	15.7	18.4	18.8	9.1	15.1
<b>NPR</b>	0.78	0.78	0.78	0.78	0.78	0.78	0.79	0.79	0.79	0.79	0.79	0.79

<b>2019</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>St. Pete</b>	10.3	9.7	11.7	7.2	9.7	10.3	13.7	9.4	2.7	2.1	3.5	5.7
<b>Pinellas</b>	7.0	7.1	8.7	9.8	12.9	9.5	12.5	7.1	16.2	18	8.1	9.0
<b>Tampa</b>	8.2	111	1.3	2.3	2.2	0.95	98.2	115	5	4.6	5.5	11
<b>Pasco</b>	43.4	32.3	39.1	31	36.1	47.1	67.7	77.8	70.9	73.6	60.3	60.6
<b>NWHC</b>	8.9	8.6	6.6	8.2	7.7	8.9	13.7	9.8	19.6	12.5	7.8	9.1
<b>SCHC</b>	10.1	9.6	11.5	18.1	10.2	10.4	17.5	18.6	14.7	17.9	21.5	16.3
<b>NPR</b>	ND	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	1.06	1.57	0.12

<b>2020</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>St. Pete</b>	9.43	4.84	7.4	5.81	7.65	10.7	6.25	5.21	4.49	5.78	7.7	6.89
<b>Pinellas</b>	10.7	13.9	14	19.3	23.6	12.6	15.6	19.3	23.9	17.3	10.4	10.7
<b>Tampa</b>	16.9	15	11.1	7.47	7.96	11.3	24.5	19.5	8.0	7.1	4.24	4.18
<b>Pasco</b>	69.4	38.1	32.7	30.7	39.1	38.6	39.2	48.5	52.4	62.0	46.5	46.5
<b>NWHC</b>	8.44	6.85	9.36	12.44	10.3	6.29	9.09	12.5	16.8	12.6	8.76	11.3
<b>SCHC</b>	11.6	16.2	39.9	20.2	18.3	18.3	20.5	7.44	14.1	31.7	8.65	9.89
<b>NPR</b>	0.78	0.78	0.92	0.85	0.91	0.98	0.92	1.2	0.85	0.92	0.85	0.92

<b>2021</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>St. Pete</b>	7.8	4.58	6.21	12.2	11.67	9.8	7.0					
<b>Pinellas</b>	10.7	9.32	11.9	11.9	11.9	10.4	11.1					
<b>Tampa</b>	3.1	3.15	3.4	3.15	3.5	3.2	4.7					
<b>Pasco</b>	42.8	32.8	33.0	26.9	26.7	31.3	32.2					
<b>NWHC</b>	10.7	13.1	12.8	11.2	10.6	10.2	8.1					
<b>SCHC</b>	15.9	22.3	16.9	14.5	7.49	14.1	22.7					
<b>NPR</b>	0.84	0.84	0.78	0.78	0.83	0.78	1.11					



**DATE:** September 3, 2021  
**TO:** Board of Directors  
**THRU:** Charles H. Carden, Interim General Manager  
**FROM:** Jonathan M. Kennedy, Engineering Senior Manager  
**SUBJECT:** Energy Management Program - *Receive Report*

**SUMMARY**

The attached report details the on-going activities being implemented within the agency's Energy Management Program.

**SUGGESTED ACTION**

Receive Status Report

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

A programmatic approach to improve energy efficiency through implementation of emerging technology and other opportunities is a top priority for the Agency. The attached Status Report provides a summary of the two critical projects and other current activities and projects related to the Agency's Energy Management Program.

**BACKGROUND**

Significant energy is consumed by Tampa Bay Water in providing water to its customers over its 2,000-



square-mile service area. Water provided by the Agency is on-demand; that is, Tampa Bay Water does not control demand, but rather responds to its Member Governments' demand for water. Commercial power is purchased from three commercial entities under multiple rates. The vast majority of Tampa Bay Water's energy costs are related to pumping, treating, and distributing drinking water from three different types of water sources.

Attachments (1)

[Energy Management Program Status Report September 2021](#)





# Energy Management Program Status Report

September 1, 2021

## Energy Management Program Roadmap

Staff has developed a Roadmap to implement the Agency's Energy Management Program. The Roadmap was received by the Board October 17, 2011. The Roadmap:

- Aligns with the Agency's Strategic Plan;
- Identifies elements of technology and energy infrastructure to enhance financial stability and sustainability of Tampa Bay Water's operations; and
- Identifies gap/key projects necessary to bridge or connect on-going and planned capital projects with the steps and goals of the Energy Management Program Roadmap prepared in September 2011.

## Activities and Accomplishments

### Overall Program:

- An ISO 50001 Energy Management Systems (EnMS) Policy was approved by the Board in October 2016.
- An in-house Energy team has been established to evaluate and implement energy savings projects. The team meets every two months and considers, evaluates and recommends new energy savings ideas.
- As-needed Energy Program consultant contracts are in place to assist staff to evaluate energy-related projects.

### Energy Audits:

- Audits Completed at the following facilities:
  - ✓ Cypress Creek Water Treatment Plant and Pump Station,
  - ✓ Morris Bridge Pumping Station, and
  - ✓ Tampa Bay Desalination Facility
- On-Going Audit:
  - ✓ Staff authorized an as-needed energy program consultant (Black and Veatch) to conduct an energy audit at the High Service Pump Station, the Surface Water Treatment Plant, and the Hillsborough Alkalinity Adjustment Facility. Expecting completion by the Fall of 2021.

### Technology Tools:

- Completed the implementation of the EnergyCap energy billing software. The software serves as a repository of energy billing data, energy consumption reporting engine, and performs billing audits to identify potential billing errors.

### Renewable Energy:

- Completed evaluation of Hydropower technologies at the South Pasco Water Treatment Plant January 2017. Recommendation to add a hydropower energy recovery unit was added to Capital Improvements Program Project 07055-South Paco Wellfield and Treatment Improvements.
- C.W. Bill Young Regional Reservoir Solar Project (52004)  
This project includes the installation of ground mounted solar photovoltaic system at the C.W. Bill Young Regional Reservoir. The Environmental Resource Permit Minor Modification was approved by Tampa Bay Water's Board of Directors at the June 2021 Board Meeting. TECO's Tier 3 Renewable System Agreement



was approved at the July 2021 Board meeting. Construction is tentatively scheduled to start in September or October 2021. This project is scheduled for completion in April 2022.

## Rebates & Incentive Programs

### TECO's Commercial Demand Response Program

In December 2007, the Board authorized Tampa Bay Water to enter into an agreement with Tampa Electric's (TECO) Commercial Demand Response Program provider Enel X. The Program helps manage peak demand to reduce summer and winter electricity demand peaks. Tampa Bay Water earns revenue on a quarterly basis by agreeing to reduce TECO-based electricity consumption when TECO calls for a demand response event, i.e., the reduction of energy usage to lower peak demand. Revenues thus earned, are deposited into a new Energy Fund. The means used to accomplish energy reductions in this program are through emergency backup generation by Tampa Bay Water. The general program rules for emergency backup generation are:

- 100 kw or more of demand reduction available
- Thirty-minute notification prior to reduction
- Reduction events may occur on non-holiday business days between 7:00 AM and 7:00 PM
- Reduction events may last from one to eight hours
- Reduction events are limited to 88 hours per site during a calendar year
- Enel X assumes all risk for non-performance
- Capacity payments are \$5.35/kw-month

**Table 1** Provides a summary of revenue generated and received through the TECO program by Calendar Year and the total funds received to date.

<b>Table 1: Commercial Demand Response Program</b>	
<b>Calendar Year</b>	<b>Revenue (\$)</b>
2008 - 2012	\$728,896
2013 - 2017	\$720,995
2018	\$156,908
2019	\$155,072
2020	\$127,838
2021	\$202,765
<b>TOTAL (To Date)</b>	<b>\$2,092,474</b>

Notes:

- Funds collected from TECO's program are used to fund energy projects within the Capital Improvements Program.



## Energy Audit Program

Energy audits are one of the first activities in an energy program to identify energy saving measures. Typical audit activities last 6 to 8 months and usually include:

- Step 1- Baseline Energy Data Collection
- Step 2- Field Testing and Analysis of Energy Data
- Step 3- Identify Energy Savings Measures
- Step 4- Economic Analyses and Report

Tampa Bay Water is conducting energy audits and pump testing on high energy consuming facilities that may provide the greatest payback for the costs of the audits, **Table 2** lists these facilities, the expected audit costs, and the energy audit fiscal year.

Table 2: Energy Audits Facilities			
Facility	Audit Costs (\$)	Audit Fiscal Year	Status
Cypress Creek Water Treatment Plant/Pump Station	\$50,000 (actual)	2012	Completed
Morris Bridge Booster Station	\$50,000 (actual)	2016	Completed
Tampa Bay Desalination Facility	\$217,944 (actual)	2017-2018	Completed
<u>Group 1 Drinking Water System:</u> <ul style="list-style-type: none"><li>• Regional High Service Pump Station</li><li>• Regional Alkalinity Adjustment Facility</li><li>• Surface Water Treatment Plant</li></ul>	\$187,547 (Estimated)	2020-2021	On-Going
<u>Group 2 Raw Surface Water system:</u> <ul style="list-style-type: none"><li>• Regional Repump Station</li><li>• Tampa Bypass Canal (Structure-162) Pump Station</li><li>• South-Central Hillsborough Booster Station</li><li>• Alafia River Pump Station</li></ul>	\$175,000-\$250,000	2022	Not Started Yet
Reservoir Off-stream Pump Station	\$ 50,000-\$60,000	2023	Not Started Yet



## **Capital Improvements Program and Operational Optimization Projects**

### **Operational Optimization Projects**

Energy audits and pump testing provide opportunities for efficiency improvements through operational changes and pump maintenance activities as well as capital expenditures. Changes are identified in the investment grade energy audits conducted by third party experts. These audits identify both capital projects and operational optimization projects.

### **Cypress Creek Pump Station**

An audit for the Cypress Creek Water Treatment Plant was completed in FY 2012, and energy savings of approximately 18% were realized in FY's 2013 - 2014 compared to the FY 2012 baseline year achieving a payback on the investment in 6 months. In FY 2015 Tampa Bay Water continued to save 6% compared to the baseline year. In FY 2016 even though effluent pressure at the Cypress Creek Pump Station increased from 55 psi to a new operating range of 65- 75 psi to meet Exhibit C of the Master Water Supply contract requirements. This increase in pumping pressures has resulted in additional energy consumption at the facility with a decrease in energy savings compared to the baseline FY 2012. However, the increased cost would have been greater had the optimization not been completed. To better project future cost savings, FY 2016 will serve as the new baseline year to reflect the new operating conditions. FY 2018 and FY 2019 had a 21 % and 13 % energy savings compared to the new FY 2016 Baseline. FY's 2020 and 2021 updates will be reported in the next quarterly report.

### **Capital Projects**

Staff continues planning, design, and construction of energy savings-related capital projects. Staff has identified baseline energy use and costs for some of the Tampa Bay Water's facilities and is collecting data in others.

### **Clearwater Administration Building**

At the Clearwater Administration Building, an energy savings project in the air conditioning system was completed in 2011. Energy savings of 25% - 40% were realized in FY's 2012 – 2020 compared to the FY 2009 baseline year. This averages to a yearly savings of about \$44,300. Payback for this project was achieved in five and half years. To date Tampa Bay Water has saved about **\$477,013** in energy costs at the Clearwater Administration building. In addition, the existing fluorescent light fixtures in the Clearwater Administration building were recently (March 2021-April 2021) replaced with LEDs. An update on the final costs and anticipated energy savings will be included in the next quarterly report.

### **South-Central Hillsborough Wellfield**

The pumps at the South-Central Hillsborough Regional Wellfield were replaced in 2012. Energy savings between 7% to 24% were realized in FY's 2013 - 2021 compared to the FY 2009 baseline year. This averages a yearly savings of about \$160,000 at this rate the expected payback will be achieved in about eight years. To date Tampa Bay Water has saved about **\$1,479,059** in energy costs at the South-Central Hillsborough Wellfield.

### **Cross Bar Wellfield**

The pumps and motors at the Cross-Bar Wellfield were replaced in 2015. Energy savings between 12% to 34% were realized in FY's 2016 - 2021 compared to the FY's 2009 baseline year. This averages a yearly savings of about \$240,000 at this rate the expected payback will be achieved in about 15.5 years. To date Tampa Bay Water has saved about **\$1,439,202** in energy costs at the Cross-Bar Wellfield.



### US 41 Pump Station

The pumps and motors at the US 41 Pump Station were replaced in 2016. Energy savings between 20% and of 38 % were realized in FY's 2017 - 2021 compared to the FY's 2009 baseline year. Total energy cost savings to date is **\$169,035** at the US 41 Pump Station.

**Table 3** Identifies on-going and future projects listed in the Capital Improvement Program.

#### On-going & Future Energy Saving Capital Projects

Table 3: Capital Improvement Program Projects	
Project	Status
Complete	
Cross Bar Ranch Well Field Pumps & Motors Replacement	on-going collection of energy consumption data
Regional High Service Pump Station Pumps & Motors Repairs	
US-41 Pump Station Pumps and Motors Replacement	
Odessa Water Treatment Plant Pumps and Motors Replacement	
Alafia River Pump Station Pumps Replacement & Motors Repairs	
Cypress Creek Water Treatment Plant/Pump Station Pumps & Motors Repairs	
Future/Planning	
Eldridge-Wilde Well Field Pumps and Motors Replacement	Construction
Starkey Wellfield Improvements	Design Start FY 2023
C.W. Bill Young Regional Reservoir Solar Project	Design-Build on-going
Morris Bridge Well Field Improvements	Design on-going
Cypress Bridge Wellfield Improvements	Bidding on-going
South Pasco Well Field and Treatments Improvements	Design Starts FY 2023



**DATE:** September 3, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Jonathan M. Kennedy, Engineering Senior Manager

**SUBJECT:** Capital Improvements Program - Task Order Authorization - *Approve*

**SUMMARY**

The Tampa Bay Water Board of Directors (Board) accepted the Fiscal Years 2022-2031 Capital Improvements Program (CIP) in June 2021. Subsequent Board approval of individual project activity is required during the project's life cycle. The attached table lists upcoming task authorizations that staff is recommending be assigned to the vendors identified and their funding sources.

**SUGGESTED ACTION**

Approve Task Order

**COST/FUNDING SOURCE**

\$59,380/Renewal and Replacement Funds

**DISCUSSION**

As identified to the Board on May 4, 2017 memorandum, Board acceptance of the annual Capital Improvements Program document is an acceptance of the capital projects roadmap. Subsequent Board approvals of individual capital project activity is sought for planning, design and/or construction contracts and/or task authorizations under existing contracts for project fees and assigned funding source. Tampa Bay Water Staff recommends the Board approve the tasks and assigned funding sources in the attached table for the period of September through October 2021.



## **BACKGROUND**

Tampa Bay Water's CIP Plan is a comprehensive ten-year plan of approved and proposed capital projects. The CIP is updated annually and is subject to changes as the needs for specific projects become more defined and as final approval of individual projects is provided by the Board.

Attachment (1)

[Tasks Requests Board Items September 2021](#)





CIP Projects Tasks Authorizations

Project Number	Project Name	Task Description	Vendor Name	Contract Number	Task Cost	Funding Source
50077	Repump Station Raw Water Line Valve Repair	Construction Inspection Services	Metzger & Willard Inc	2017029	\$59,380	Renewal and Replacement Fund



**DATE:** September 3, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Kenneth R. Herd, Chief Science & Technical Officer

**SUBJECT:** South Hillsborough Wellfield (via SHARP credits) Feasibility, Project No. 01611:  
Property Acquisition - *Receive Report*

**SUMMARY**

The South Hillsborough Wellfield (via SHARP credits) is one of three water supply projects being further investigated for development as part of the Board-approved 2018 Long-term Master Water Plan. Tampa Bay Water staff continues to evaluate potential property sites for the development of the South Hillsborough Wellfield and continues discussions regarding reclaimed water credit pricing required for project development. In June 2021, staff discussed this project with the Board, primarily focusing on the disposition of wellfield development rights associated with the Cone Ranch/Lower Green Swamp Preserve parcel. This agenda item provides an update of the ongoing property acquisition activities in South Hillsborough County.

**SUGGESTED ACTION**

Receive Status Report.

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

The 2018 Long-term Master Water Plan update included the South Hillsborough Wellfield (via SHARP



credits) project as a potential water supply project that could be built to help meet the drinking water needs of the region. If selected, this project is estimated to initially yield up to 7.5 million gallons per day (mgd) of potable supply via a new wellfield located in south Hillsborough County. The wellfield would be permitted using groundwater credits acquired through the injection of reclaimed water into the non-potable aquifer along the coast as a part of Hillsborough County's South Hillsborough Aquifer Recharge Project (SHARP).

*Environmental Lands Acquisition and Protection Program (ELAPP) Parcel Negotiation Status:*

As reported at the December 2020, April and June 2021 Board meetings, Tampa Bay Water and Hillsborough County have been negotiating for future production well sites in southern Hillsborough County on lands being acquired by the County as part of a Settlement Agreement with Ag-mart Produce, Inc. Tampa Bay Water approached the County's Conservation and Environmental Lands Department requesting to be included as a user in the allocation of lands since the Ag-mart property is located within Tampa Bay Water's optimum search area for siting the proposed South County Wellfield. In response, the County offered to set aside four production well sites and associated pipeline easements at no cost to Tampa Bay Water on the western parcel of the Ag-Mart settlement lands that will be acquired under the Jan K. Platt Environmental Lands Acquisition and Protection Program (ELAPP). The County made this offer based on Tampa Bay Water relinquishing its rights for future water supply development on the Cone Ranch property, which is now known as the Lower Green Swamp Preserve and managed for conservation by ELAPP (see attached location map for property locations). On December 16, 2020, the Hillsborough County Board of County Commissioners agreed to fund the set-aside 5 acres for Tampa Bay Water's use (future well sites and easements) from ad valorem funds. The remaining ELAPP Parcel will be funded from Community Trust Fund allocations that will restrict the property and not allow for future siting of well sites or associated easements.

At the June 2021 meeting, the Tampa Bay Water Board of Directors instructed staff to move forward with developing the terms of an Agreement for the acquisition of the set-aside lands on the ELAPP parcel. Although this project has not yet been selected for implementation, it is prudent to pursue this property acquisition given the significant land development occurring in this area and the limited area that is suitable for withdrawal well sites. The siting of withdrawal wells is limited due to the location of the injection wells to the west and environmental/regulatory restrictions to the east.

Hillsborough County ELAPP staff are working on the draft agreement and have advised that no specific action is required to secure the 5 set-aside acres prior to the September 2021 closing on the Ag-mart property by Hillsborough County. Tampa Bay Water is in regular communication with County staff and according to ELAPP staff as of August 27, 2021, the draft agreements will be refined at the staff level this fall and are expected to be brought to both the Hillsborough County Board of County Commissioners and the Tampa Bay Water Board for approval before the end of 2021.

In addition to the set aside property on the ELAPP portion of the Ag-Mart property, Tampa Bay Water is also in discussions with Hillsborough County's Water Resources Department for acquisition of approximately 15 acres on the eastern portion of the Ag-mart property, as described below and shown on the attached overall location map.



### Water Resources Parcel:

Tampa Bay Water staff have requested the allocation of lands for three, one-acre production well sites, pipeline easements, and a fifteen acre water treatment facility on the Water Resource Division's (WRD) parcel of the Ag-Mart property for future acquisition and use by Tampa Bay Water. Tampa Bay Water staff met with Water Resources staff to discuss the proposed wellfield timeframe and overall site concept layout. Tampa Bay Water staff submitted a concept plan for review by WRD that includes the proposed locations based on the initial hydrological and technical analysis. It was discussed at a meeting between Tampa Bay Water, the Water Resources Department, and ELAPP staff, that Tampa Bay Water and Water Resources will enter into a Joint Development Agreement at a future date separate from the ELAPP agreement. In addition, Tampa Bay Water and Hillsborough County Water Resources staff will coordinate activities that may impact adjoining State lands if necessary. Discussions on land acquisition on the Water Resource parcel are ongoing and preliminary.

### Test well site update:

The wellfield feasibility study necessitated the acquisition of a test well site. A four-acre site was acquired from ELAPP in May 2020 for use as the test well site for the wellfield feasibility study. If the South Hillsborough Wellfield is selected by the Board, the test well site will become a production well along with the well sites on the ELAPP and Water Resource parcels on the Ag-mart property. Easements are being secured as part of the Agreement with ELAPP, but additional easements will need to be acquired to extend the collection main from the existing test well to the overall system. The draft conceptual wellfield layout including the test well site, is attached. The aquifer performance test was completed in early August 2021; the property is currently in the post-test clean up. The results of the aquifer performance test are being used to update the hydrologic model to confirm that the proposed water treatment technologies are appropriate and to identify the best location for the well sites. This information will be included in the final feasibility study report that will be completed by Spring 2022.

### Wellfield Public Engagement Activities:

Tampa Bay Water notified local residents prior to the aquifer performance test via mailed letters. In addition, the agency posted an automated presentation and public input survey regarding the project on its website and promoted the presentation, survey and a virtual public meeting via social and traditional media. Postcard invitations to the virtual public meeting were sent to more than 4,000 Hillsborough County residents located near the proposed wellfield property. Tampa Bay Water and Hillsborough County staff participated in a virtual public meeting on August 24, with 31 members of the public in attendance.

No action is required of the Board at this time; Hillsborough County is scheduled to close on the purchase of the Ag-Mart Property on September 30, 2021. Staff anticipates bringing an Agreement with Hillsborough County to the Board late Fall 2021 for the relinquishment of the water development rights from the Lower Green Swamp Preserve (former Cone Ranch) and acquisition of four well sites and infrastructure easements on the the Ag-Mart parcels for the future potential development of the South



Hillsborough Wellfield. An agreement for acquisition of property rights on the Water Resources Parcel will also be under development.

## **BACKGROUND**

In December 2018, the Tampa Bay Water Board of Directors approved the 2018 Long-term Master Water Plan which included recommendations to further study the three top-ranked water supply projects to meet the region's future water supply needs. The South Hillsborough Wellfield (via SHARP credits) Feasibility project is one of the three board-approved projects selected for further evaluation. The feasibility study is scheduled to be completed by early 2022 and will support the Board's project selection process in 2022 and be included in the 2023 Long-term Master Water Plan update.

### *Cone Ranch:*

The Cone Ranch and Dispersed Wells (Cone Ranch) project was considered as a potential water supply option during previous Long-term Master Water Plan update cycles. The Cone Ranch property was originally purchased by Tampa Bay Water's predecessor agency, the West Coast Regional Water Supply Authority, for the purpose of developing a new water supply to serve Hillsborough County. In 1988, the Authority transferred ownership of the Cone Ranch property to Hillsborough County, while retaining the water supply development rights. The 2008 Long-term Master Water Plan recommended that further analysis be conducted on the project to determine regulatory and permitting requirements should the project move forward. The Board approved the 2008 Long-term Master Water Plan, with Cone Ranch not recommended for further study due to the project cost, regulatory requirements, and difficulty of permitting. No further work was done on the project aside from continued routine hydrological monitoring.

Tampa Bay Water staff recently completed a hydrologic modeling assessment of the potential groundwater yield of this property given updated regulatory and environmental constraints. The results of this updated water supply yield assessment was presented to the Board at the June 21, 2021 meeting; a copy of the presentation is attached to this agenda item. The evaluation concluded that the current annual average water supply yield from the former Cone Ranch property is less than 0.1 million gallons per day given the current regulatory and environmental constraints and the modeling analysis and technical report were subject to an independent peer review. Given the lack of sustainable water supply from the former Cone Ranch property with the multiple regulatory and environmental constraints, the feasibility of developing this wellfield is not viable. The June 21, 2021 Board presentation also detailed the proposed release of Tampa Bay Water's water supply development rights on the Lower Green Swamp Preserve and the acquisition of production wellsites on the Ag-Mart parcel that is being acquired by ELAPP. Hillsborough County staff have stated that they will include language in the future property access agreements that the County will not develop water supply facilities on the Lower Green Swamp Preserve. These agreements will be brought to both the Tampa Bay Water and Hillsborough County Board of County Commissioners for future approval.

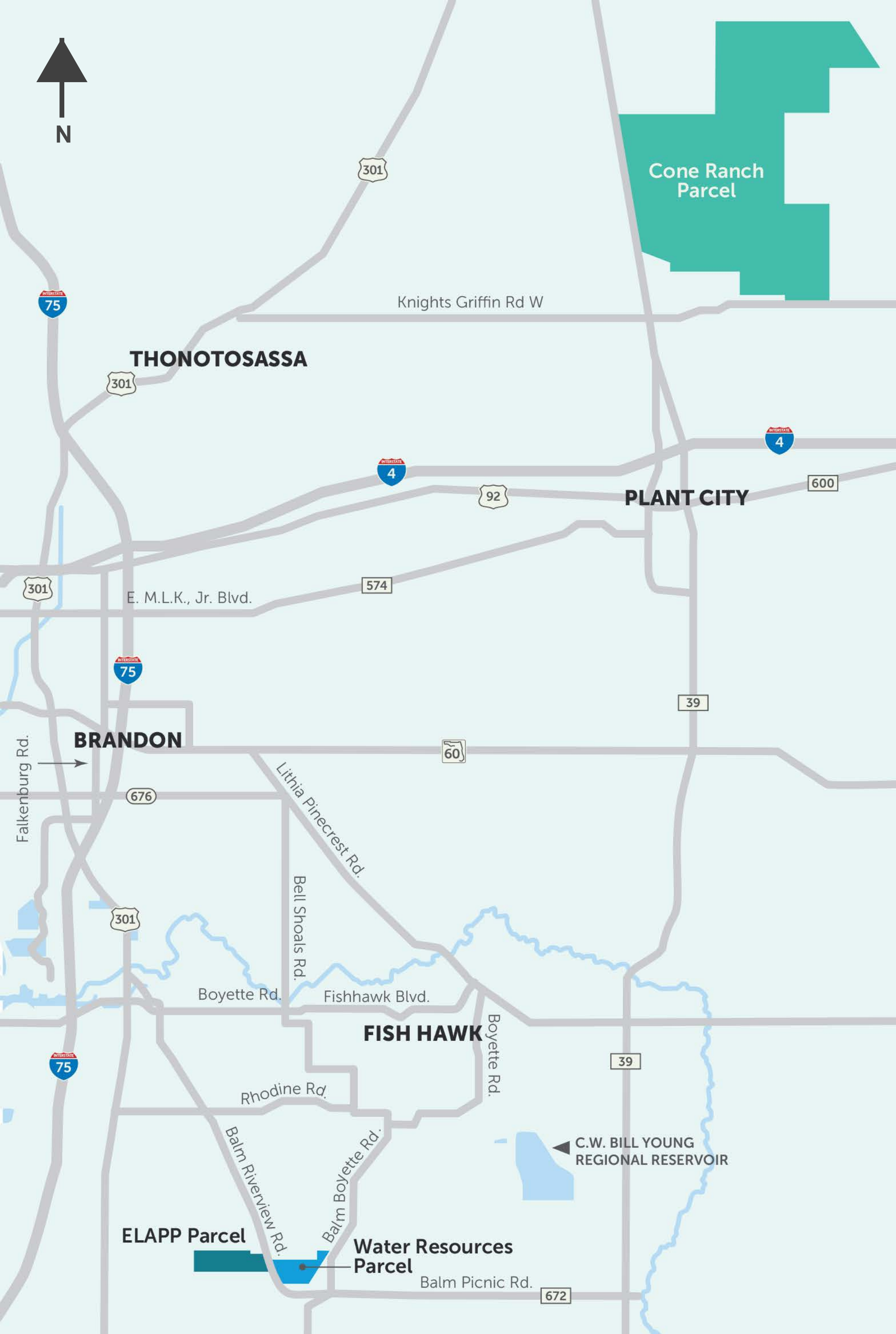


## Attachments (3)

[Overall Location Map](#)

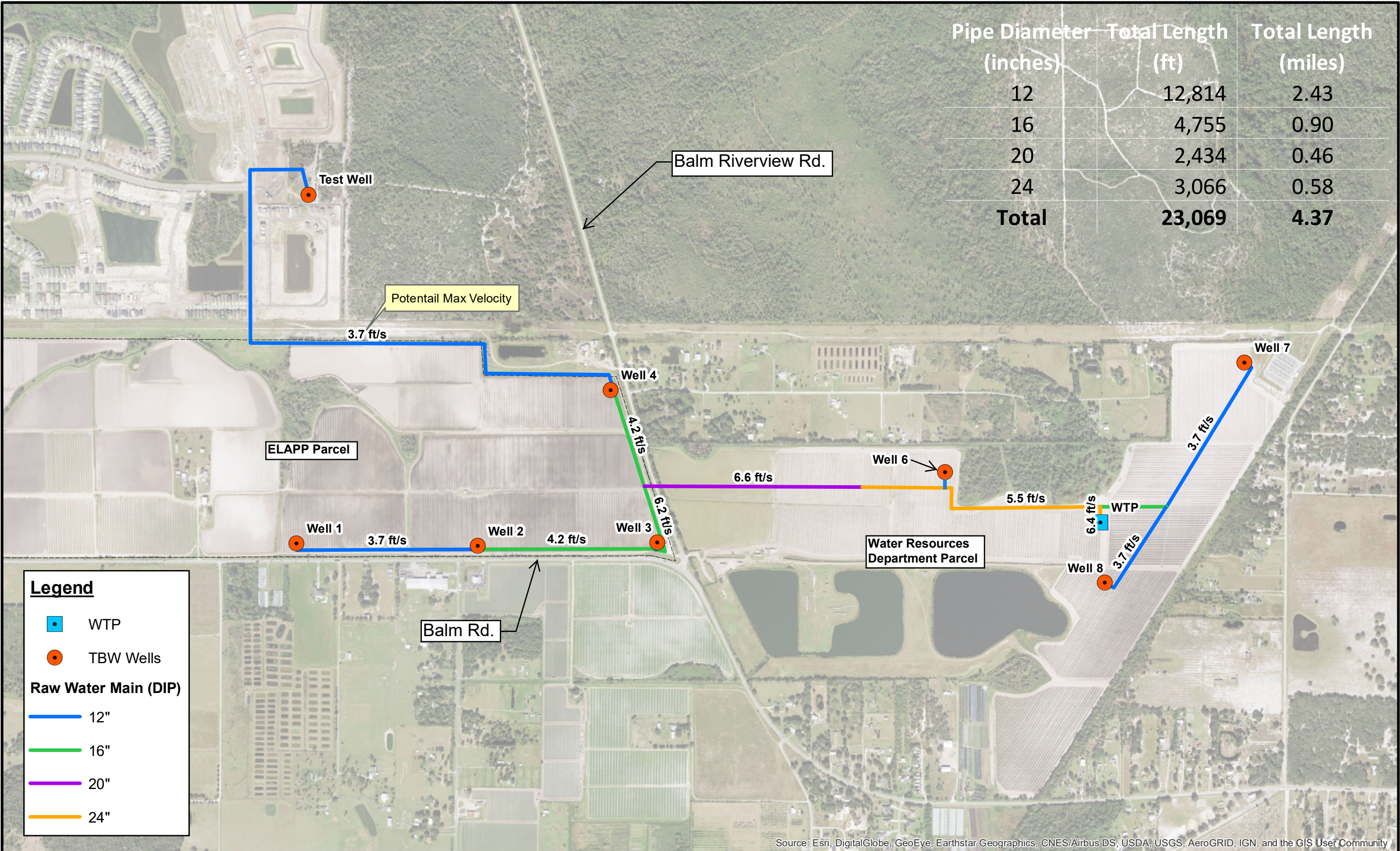
[South Hillsborough Wellfield Conceptual Site Layout](#)







Pipe Diameter (inches)	Total Length (ft)	Total Length (miles)
12	12,814	2.43
16	4,755	0.90
20	2,434	0.46
24	3,066	0.58
<b>Total</b>	<b>23,069</b>	<b>4.37</b>



**Legend**

•

WTP

•

TBW Wells

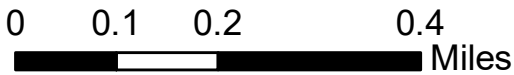
**Raw Water Main (DIP)**

12"

16"

20"

24"



Raw Water Mains  
- Size, Length and Velocity

TAMPA BAY WATER



**DATE:** August 25, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Jonathan M. Kennedy, Engineering Senior Manager

**SUBJECT:** Cypress Creek Purchasing Warehouse Building Replacement, Project No. 06320, Wharton-Smith, Inc., Contract No. 2019-011 - Closeout - *Approve*

**SUMMARY**

Construction activities on the Cypress Creek Purchasing Warehouse Replacement project have been completed. In accordance with department policy, a final Board item is written to officially closeout the project. The project was completed within budget and has no outstanding issues.

**SUGGESTED ACTION**

Approve project closeout.

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

In April 2019, the Board approved Contract No. 2019-011 with Wharton-Smith, Inc. for the design and construction to replace the Purchasing Warehouse at the Cypress Creek Pump Station to better meet the Agency's needs and current building codes.



In June 2020, the Board approved Change Order #1 for Environmental Resource Permitting efforts.

A Notice to Proceed was issued on May 30, 2019 to begin the design phase of the contract with construction to follow. Substantial Completion was reached on February 3, 2021 and Final Completion on March 3, 2021. Change Order #1 added 179 days to the contract time. A second change order was executed to provide an additional 82 days of contract time.

The total design-build budget was \$1,849,356.00 and the final cost was \$1,811,070.92. The budget under-run of \$38,285.08 resulted from unused Owner's Allowance.

CDM Smith, Inc. served as the owner's engineer during design under Purchase Order No. 20171080, Contract No. 2014-006. The purchase order was issued for \$129,820.00 and final cost was \$111,838.75.

Staff recommends approval of the closeout of Contract No. 2019-011 with Wharton-Smith, Inc. and Purchase Order 20171080 with CDM Smith, Inc.

## **BACKGROUND**

The design of the existing warehouse, originally built in 1988, did not provide sufficient enclosed storage space to meet the operational needs of Tampa Bay Water. In addition, the existing building was not designed under current code requirements related to wind loading.

The new warehouse increases floor plan space by approximately 1,800 square feet and includes storage, offices, restrooms and support spaces for mechanical and electrical systems.



**DATE:** August 25, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Jonathan M. Kennedy, Engineering Senior Manager

**SUBJECT:** Eldridge-Wilde Wellfield Powerline Project (50040), Purchase Order No. 20210318 - Construction Services Change Order #1 with Tampa Electric Company - *Approve*

**SUMMARY**

The purchase of construction services with Tampa Electric Company was approved at the December 14, 2020, Board meeting to replace the overhead powerlines to the seven production wells on the Hillsborough County portion of the Eldridge-Wilde Wellfield. This change order is to cover the cost of additional directional boring needed to install underground power lines through a the 15-foot wide utility easement. The Hillsborough portion of the wellfield is also known as the Lake Dan Preserve, and it is important to stay within the easement to minimize impacts to the Preserve lands.

**SUGGESTED ACTION**

Approve Change Order #1 to Tampa Electric Company for additional directional boring needed to install underground powerlines in the Eldridge-Wilde Wellfield.

**COST/FUNDING SOURCE**

\$114,771.48 / Renewal and Replacement Funds.

**DISCUSSION**



At the December 14, 2020 Board meeting, the replacement of overhead powerlines by Tampa Electric Company (TECO) on the Hillsborough County portion of the Eldridge-Wilde Wellfield (EWWF) was approved. New underground powerlines will be installed including new transformers, switchgears, pull boxes and power meters.

This Change Order #1 is to install underground primary conduit and cable lines within a narrow 15-ft. wide, 1000-ft. long utility easement. The installation requires directional boring to stay within the easement in the Lake Dan Preserve and to avoid having to replace the access road. This directional boring was not anticipated by TECO, nor included in TECO's original cost proposal. The additional cost is \$114,771.48.

The updated TECO proposal is attached (Attachment A). The revised total cost is \$531,527.54 which is \$114,771.48 above the previously approved cost of \$441,756.06. The proposal has been reviewed by the project engineer, Black and Veatch, who deems the cost to be reasonable as indicated in the attached letter (Attachment B).

Staff recommends approval of Change Order #1 in the amount of \$114,771.48.

## **BACKGROUND**

The Eldridge-Wilde Wellfield (EWWF) located in northeastern Pinellas and northwestern Hillsborough Counties was constructed between 1954 and 1970 and currently includes thirty-four (34) active production wells. An average of 12 MGD of water withdrawn from the EWWF is treated at the Tampa Bay Water Eldridge-Wilde Hydrogen Sulfide Removal Facility before delivery to the adjacent Pinellas County Keller Water Treatment Plant (WTP) where it is further treated and pumped into the Pinellas County distribution system. The existing 4kV overhead powerlines and associated appurtenances within the Eldridge-Wilde Wellfield are owned and maintained by Tampa Bay Water and have reached the end of their useful life and require replacement.

The EWWF Powerline project consists of installing new overhead and underground power distribution systems to provide three phase 480 VAC power to twenty-four (24) water production well sites. The existing power source for the Eldridge Wilde Wellfield is an existing Duke Energy utility owned sub-station located at the Keller WTP. The new distribution systems will be serviced by the two local electric utility companies, Duke and TECO, which increases the resiliency and reliability of the wellfield.

The underground and overhead power will be installed, owned, and operated by; TECO for the portion of the wellfield located within Hillsborough County, also known as the Lake Dan Preserve, and Duke for the portion within Pinellas County.

In addition, TECO's power distribution will be underground, which also improves the reliability and resiliency of the wellfield system. Per the Agreement to Modify Rights Held by Tampa Bay Water for Property Owned by Hillsborough County, dated 2018, Tampa Bay Water is required to remove the



existing overhead power within the Eldridge Wilde Wellfield and replace it with underground power service by the year 2023.

Tampa Bay Water evaluated providing underground power service via Duke to the Pinellas County side of the EWWF, however, it was not feasible or within the project budget.

Attachments (2)

[Attachment A - TECO Proposal](#)

[Attachment B - Eldridge-Wilde TECO Cost Opinion Letter 8-13-21](#)





August 02, 2021

Danielle Keirse, Project Manager  
Tampa Bay Water  
2575 Enterprise Rd.  
Clearwater, FL 33763-1102

**RE: EWWF and Cypress Trails Horse Farm**

Dear Ms. Keirse,

This letter is to inform you of TECO's scope of work to provide new underground electric service to Tampa Bay Water's Eldridge Wilde Wellfield (EWWF) from Huckavalle Road through Cypress Trails Lot 2 located in Hillsborough County. TECO will furnish all material, labor, and equipment, (excluding meter cans and underground services), necessary to install all the below listed equipment required to supply three phase 480 VAC power to seven (7) wells in the EWWF located in Hillsborough County. This scope consists of the following:

**Distribution Scope**

- Installation by trenching underground primary conduit and cable lines, and directional bore under ditches, concrete shock pads, and waterlines as shown on the EWWF Improvements Plans dated September 2020, total of over 30,000'.
- Installation of 27 pull boxes in total
- Installation of 7 pad mounted transformers
- Installation of 7 electric meters
- Installation of 3 switchgears
- Removal of existing poles, overhead power lines & conversion to underground primary on the northern side of the Cypress Trails Property Lot 2.

**Cost Breakdown**

- Labor: \$265,763.77
- Vehicle: \$53,152.75
- Material & Handling: \$212,611.02
- Total: \$531,527.54**

TECO will coordinate this work, including shutdowns and testing with Tampa Bay Water's EWWF Improvements and Cypress Trails Property Improvements contractor and Tampa Bay Water staff. TECO will **not** be responsible for any gopher tortoise



relocations. Should you have any questions, please do not hesitate to contact me at (813) 309-1524.

Sincerely,

*Stephen Miccio*

Stephen Miccio  
Project Manager  
New Construction  
702 N. Franklin St.  
Tampa, FL 33602  
[sxmiccio@tecoenergy.com](mailto:sxmiccio@tecoenergy.com)

cc: Steve Szymakowski, Julian Jazxhi





August 13, 2021

Tampa Bay Water  
2575 Enterprise Road  
Clearwater, Florida 33763

Eldridge-Wilde Wellfield Improvements Project  
B&V Project No: 193561  
B&V File No: 14.2100

Attention: Ryan Morriss, Construction Project Manager

Subject: Updated Design and Cost Proposal from TECO for the Underground Electric Service System at the Eldridge-Wilde Wellfield

Black & Veatch reviewed the updated Tampa Electric Company (TECO) design documents for providing a new underground electric service system for the Tampa Bay Water Eldridge-Wilde Wellfield in Hillsborough County. The updated design documents appear consistent with the requirements for providing a reliable power feed system for the well houses and account for numerous coordination requirements with the existing wellfield infrastructure, property and easement boundaries, and protection of endangered species.

Black & Veatch also reviewed the TECO cost proposal (received 8/2/21) of \$531,527.54 for providing the new underground electric service system for the Eldridge-Wilde Wellfield in Hillsborough County. The proposed TECO cost for installing the new underground electric service system identified in the design documents is consistent with the amount that Black & Veatch would anticipate for this work.

If Tampa Bay Water has any questions or requires additional information regarding Black & Veatch's review of the updated TECO design documents and cost proposal, please let us know.

Very truly yours,

BLACK & VEATCH CORPORATION

Robert Burchett, P.E.  
Project Director

cc: Rick Menzies, Danielle Keirse, Tampa Bay Water  
Deanna Hamilton, Steve King, Black & Veatch



**DATE:** September 15, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Jonathan M. Kennedy, Engineering Senior Manager

**SUBJECT:** Third Amendment to As-Needed Engineering Services Contract No. 2017-020 with Arcadis US, Inc. to increase the contract limit in the amount of \$95,000 for continuation of Utility Conflict Resolution Services - *Approve*

**SUMMARY**

Professional Engineering Services are required to assist Tampa Bay Water with continuing Utility Conflict Resolution Services. This agenda item requests approval to increase the As-Needed Professional Engineering Services contract amount to continue providing technical support and agency representation with other utility owners and roadway departments.

**SUGGESTED ACTION**

Approve Third Amendment to Contract No. 2017-020 with Arcadis US, Inc., to increase the contract limit by \$95,000, to \$1,084,400.

**COST/FUNDING SOURCE**

\$95,000/Uniform Water Rate - approved FY 2021 Budget

**DISCUSSION**

Tampa Bay Water staff has requested Arcadis US, Inc. (Arcadis) to provide Professional Engineering Services to support Tampa Bay Water's responses to potential utility conflicts with the Tampa Bay Water transmission main system.



Staff requests Board approval of an amendment to increase Arcadis' As-Needed contract limit on Contract No. 2017-020 in the amount of \$95,000.

In accordance with Section 10.0 regarding Public Records and Audit Rights and Section 287.135 and Chapter 119 Florida Statutes, respectively, the First Amendment modified contraction Section 11.3 to update language regarding Scrutinized Vendors and Public Records.

The Third Amendment was approved as to form by Tampa Bay Water's General Council's Office. A copy of the Amendment is available by request.

## **BACKGROUND**

Tampa Bay Water has utilized as-needed engineering services since the late 1980's. Typical as-needed assignments vary widely and are for smaller or specialty projects for which staff does not have a regular need. Tampa Bay Water receives approximately ten thousand notices annually via the State Sunshine 811 dig notification system of potential utility conflicts per year; of those, between 75 and 150 require professional engineering review of plans, issuance of conflict notice letters and technical support to evaluate and resolve utility conflicts with other utility providers, developers and local, state and federal transportation agencies.



**DATE:** August 26, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Jack Thornburgh, Acting Chief Operating Officer

**SUBJECT:** Professional Services for the Utility Locate Services, Contract No: 2021-043 - *Approve*

**SUMMARY**

Tampa Bay Water contracts out utility locate services to respond to dig tickets forwarded to us through the State Sunshine 811 dig notification system. Tampa Bay Water historically receives between 600-800 tickets per month (average 700) with 5-10 % (average 49 a month) of these tickets being in conflict with Tampa Bay Water assets and requiring marking.

**SUGGESTED ACTION**

Approve Professional Services Contract No. 2021-043 to GeoPoint Surveying, Inc. in the amount of \$598,281.60.

**COST/FUNDING SOURCE**

\$149,570.40 per fiscal year/Uniform Rate over a four year contract term

**DISCUSSION**

On May 24, 2021 Tampa Bay Water posted the Request For Proposals on Demandstar.com for the Utility Locate Services, Contract No. 2021-043. Over 180 firms were notified through advertisement on DemandStar and Tampa Bay Water's website and twenty firms downloaded the Request for Proposal. A pre-proposal conference was held on June 16, 2021 with four participating firms. On July



22, 2021 Tampa Bay Water received timely, responsive proposals from the following companies:

GeoPoint Surveying, Inc.

High Tech Engineering Incorporated

Digital Concrete Imaging dba Breakpoint Surveying and Underground

USIC, LLC

The selection committee, comprised of Tampa Bay Water technical staff rated all respondents in several categories including firm experience, contractor team qualifications and experience, location, certified minority business, volume of work previously awarded, and proposed fees using the advertised technical scoring criteria. The committee ranked the respondents compiling written scores. Staff has ranked GeoPoint Surveying, Inc. to be the most qualified.

Staff recommends Board approval of the contract to GeoPoint Surveying, Inc. The scope, and fee schedule for this contract is attached to this Agenda Item.

The proposed contract is available upon request, has been reviewed and approved as to form by Tampa Bay Water's General Counsel.

## **BACKGROUND**

Tampa Bay Water owns over 290 miles of pipe with approximately 10,300 appurtenances within the Tri-County area (Pinellas, Hillsborough and Pasco Counties). Reference the regional map in Exhibit A and pipeline list in Exhibit B. Many of Tampa Bay Water's asset locations may require a 4-wheel drive vehicle to access. Appurtenances include valves, blow-offs, vacuum breakers, surge valves, and corrosion testing and monitoring stations. Most of the request for locates will be in the Hillsborough and southern Pasco County areas, with a few in northern Pinellas County.

Tampa Bay Water is a member of the Sunshine 811 dig notification system and through this system we are forwarded notifications (tickets) when another Utility or Company is preparing to dig near our infrastructure. We are required to mark our infrastructure and respond to Sunshine 811 within their specified time frame per ticket type. We historically receive between 600-800 tickets per month (average 700) with 5-10 % (average 49 a month) of these tickets being in conflict with Tampa Bay Water assets and requiring marking. We do not have the staff nor specialty equipment to perform these markings in house and therefore contract these services to a professional locate company.

Attachment (1)

[2021-043 Utility Locate Services-Scope & Fee](#)



## SCHEDULE "A"

### SCOPE OF SERVICES

#### **GENERAL**

Tampa Bay Water owns over 290 miles of pipe with approximately 10,300 appurtenances within the Tri-County area (Pinellas, Hillsborough and Pasco Counties). Reference the regional map in Exhibit A and pipeline list in Exhibit B. Many of Tampa Bay Water's asset locations may require a 4-wheel drive vehicle to access. Appurtenances include valves, blow-offs, vacuum breakers, surge valves, and corrosion testing and monitoring stations. Most of the request for locates will be in the Hillsborough and southern Pasco County areas, with a few in northern Pinellas County.

1. The Tampa Bay Water contact for this contract is as follows:

Primary Contact: Jennifer Lawrence-Jones  
Email: [jlawrencejones@tampabaywater.org](mailto:jlawrencejones@tampabaywater.org)  
Office Phone: 813-929-4532  
Mobile Phone: 813-480-4778

Alternative Contact: Tampa Bay Water Operations  
Phone: 813-929-4500

2. Contractor shall receive all utility locate requests on behalf of Tampa Bay Water via electronic media (Tickets) from Sunshine State One Call of Florida via their online IRTNet system (<http://www3.callsunshine.com/IRTHNet/Logon.aspx>).
3. Tampa Bay Water will provide the awarded Contractor with access to location drawings for all of Tampa Bay Water's assets covered under this contract via a GIS program, electronic files, and/or paper copies as appropriate. Less than 5% of our drawings are not electronic.
4. The Contractor is responsible for ensuring its computer equipment can successfully access the Sunshine State 811 website and can execute required functions to respond to tickets. Test equipment on award and prior to start date.
5. The Contractor is responsible for ensuring its computer equipment can successfully access Tampa Bay Water's ArcGIS online system and can navigate through it. Test equipment on award and prior to start date.
6. Tampa Bay Water will provide Contractor with overview training of our ArcGIS online system and layers upon award and any time new staff are assigned to the contract.
7. Contractor must notify Tampa Bay Water contact within 1 business day if new staff are assigned to the Tampa Bay Water contract.
8. If the Contractor has an issue accessing Sunshine 811's IRTNet system or Tampa Bay Water's ArcGIS online system, they are required to immediately notify the Tampa Bay Water contact.
9. Tampa Bay Water will work with Sunshine State 811 to ensure that Contractor has the necessary login and password information once the contract is awarded.
10. Tampa Bay Water will configure mobile phone text or email notifications of tickets received which will be sent directly from the IRTNet system if Contractor requests such notifications. These notifications can be tailored to only send for specific ticket types, such as Emergency and Short Notice tickets, or they can be sent for all tickets.



11. Contractor shall review all Tickets in the Sunshine State One Call of Florida queue for Tampa Bay Water on a daily basis (including weekends and holidays).
  - a. Emergency and Short notice tickets will be processed within 2 hours or receipt.
  - b. Regular tickets will be handled within the regular business day required timeframe on the ticket.
12. Contractor shall determine whether tickets are in conflict with Tampa Bay Water assets and whether they are within a fenced boundary of a Tampa Bay Water facility on the day they are received.
13. Contractor shall respond electronically to all Tickets (excluding design tickets and locate ticket within the fenced boundary of a Tampa Bay Water facility) with the appropriate Sunshine One Call response code.
14. Contractor shall comply with all of the Sunshine State One Call of Florida policies and procedures. Their website is <http://www.sunshine811.com>.

**Table 1 Tampa Bay Water's historical ticket quantities per month:**

Ticket Type	Monthly Quantity Range	Monthly Average
Normal	586-777	672
Short Notice	3-9	5
Emergency	4-18	9
Total	617-804	700

**Table 2 Tampa Bay Water's historical ticket responses per month:**

Ticket Response	Monthly Quantity Range	Monthly Average
1 – Marked*	30-62*	49*
5 – No Conflict	533-746	644

\* Typically 1-5 a month are within the bounds of a Tampa Bay Water facility and are forwarded to Tampa Bay Water personnel to locate.

### **PRICING, BILLING AND REPORTING**

1. Price entered on the Proposal Fee Form shall be in unit cost for electronic ticket management (i.e., screening all tickets received) and unit cost for physically locating tickets outside the fenced boundary of Tampa Bay Water Facilities. All fuel, vehicle, tools, administrative costs, etc. shall be included in the unit cost.
2. Quantities on the Proposal Fee Form are estimated annual quantities and not guaranteed.
3. Contractor shall bill per calendar month and shall be paid monthly. Tampa Bay Water's payment terms are Net 30 after approval of invoices. Invoices shall be emailed to [accountspayable@tampabaywater.org](mailto:accountspayable@tampabaywater.org).
4. The Contractor shall provide a monthly report of all Locate Tickets/Requests in an electronic format that is acceptable to Tampa Bay Water. Ticket Summary reports can be generated from the Sunshine 811 IRTNet system reports menu.
5. Invoices will not be approved for payment until the monthly report is received.



**CONTRACT SERVICE REQUIREMENTS****1. ELECTRONIC TICKET MANAGEMENT**

Billed as the total number of tickets received and screened (whether located or not) for Tampa Bay Water in the Sunshine 811 IRTNet system in the billing cycle.

- a. Upon receipt of a locate ticket through the Sunshine State One Call of Florida network, Contractor shall screen it, utilizing electronic (ArcGIS online) and hard copy prints as necessary to accurately determine Tampa Bay Water facility locations, to determine if the ticket location is in conflict with Tampa Bay Water assets and whether it is within a fenced boundary of a Tampa Bay Water facility.
- b. Tickets within a fenced boundary of a facility shall be forwarded to the Tampa Bay Water contact the same business day they are received.
- c. Regular tickets should be handled by Contractor within the regular business day required timeframe on the ticket.
- d. Emergency and Short Notice tickets typically require same day response and Contractor must respond to them immediately within 2 hours (including weekends and holidays). This includes immediately (within 30 minutes) notifying the Tampa Bay Water contact by email and phone call if the emergency locate ticket is within a fenced boundary of a Tampa Bay Water facility.
- e. Contractor shall respond to tickets by entering the appropriate marking/response status into the Sunshine 811 Positive Response System by the ticket due date.

**2. SCREENED AND CONFLICT TICKETS OUTSIDE THE FENCED BOUNDARY OF TAMPA BAY WATER FACILITIES**

- a. Billed as the total number of tickets for Tampa Bay Water (outside the fenced boundaries) marked "1 – located" or "2A-Marked with Exceptions", "2C-Marked with Exceptions", "2D-Marked with Exceptions", "2E-Marked with Exceptions", or any additional "2#-Marked with Exceptions" code that Sunshine 811 authorizes, in the Sunshine 811 IRTNet system during the billing cycle.
- b. This is the marking fee which is in addition to the ticket management fee for the ticket. All fuel, vehicle, tools, labor and administrative costs shall be included in the unit cost. If determined that a ticket resides within a Tampa Bay Water asset area and outside the fenced boundary of Tampa Bay Water facilities, Contractor shall locate and mark Tampa Bay Water assets with flagging and/or paint as appropriate for the location in accordance with American Public Works Association (APWA) color coding standards. Contractor supplies all paint, flags, etc. Flags may be blank or have the Contractor's name and/or contact info printed on them. They should not have "Tampa Bay Water" printed on them. Contractor shall physically visit sites of all Tickets that are in conflict which are outside the fenced boundaries of Tampa Bay Water facilities, and utilize electronic prints, hard copy prints, conductive techniques, inductive techniques, electronic locating machines, ground penetrating radar, vacuum truck extractions, and any other means as necessary to accurately determine Tampa Bay Water infrastructure locations.
- c. Contractor shall immediately notify Tampa Bay Water contact of all directional drilling or excavations expected by the ticket. If the locate Contractor observes machinery on site for directional drilling or excavations or visually sees such equipment in use near Tampa Bay



- Water utilities, they must notify the Tampa Bay Water contact. Contractor shall code these tickets “2A-Marked with Exceptions”.
- d. Contractor shall mark ALL of Tampa Bay Water’s assets within the location detailed in the ticket. It is a common occurrence for two or more pipelines to be in the locate area of a dig Ticket.
  - e. When multiple tickets exist for the same geographical location, each ticket must be evaluated independently. Different tickets for the same location may have different dig depths, different digging techniques and require different markings or notifications to Tampa Bay Water contact.
  - f. Contractor shall monitor marked sites and remark as needed for up to thirty (30) calendar days or until excavation begins, whichever is first.
  - g. Contractor shall take pictures of ground markings and flags placed. These shall be submitted electronically to Tampa Bay Water on a monthly basis with the monthly report.
  - h. If Contractor responds to a ticket with a code other than “1-marked”, any of the “2#-Marked with Exceptions”, or “5-no conflict” they must immediately notify the Tampa Bay Water contact of the reason for the response.
3. EMERGENCY AND SHORT NOTICE SCREENED AND CONFLICT TICKETS OUTSIDE THE FENCED BOUNDARY OF TAMPA BAY WATER FACILITIES
    - a. Emergency and short notice tickets will be responded to within 2 hours including after-hours, on weekends, and holidays.
    - b. Responding to Emergency and short notice tickets shall comply with all points in Item 2 above.
  4. SCREENED AND CONFLICT TICKETS WITHIN THE FENCED BOUNDARY OF TAMPA BAY WATER FACILITIES
 

Not billed separately – these are included in Electronic Ticket Management.

    - a. If determined that a ticket resides within a Tampa Bay Water asset area and within a fenced boundary of a Tampa Bay Water facility, Contractor shall forward this ticket to Tampa Bay Water contact for marking and response the same business day they are received.
    - b. Tampa Bay Water staff will mark Tickets within the fenced boundaries of a Tampa Bay Water location.
  5. DESIGN TICKETS
 

Not billable.

Design ticket are automatically filtered by the Sunshine 811 IRTNet system and forwarded to internal staff at Tampa Bay Water. Contractor should not respond to these types of tickets. If a design ticket is not filtered properly by the Sunshine 811 IRTNet system Contractor should notify the Tampa Bay Water contact upon receipt.
  6. OWNERS ALLOWANCE
 

Additional services such as vacuum excavation and/or surveying, should they be required, are covered under the Owner’s Allowance. To be eligible for billing, any additional services must be



authorized and approved by Tampa Bay Water **in writing, in advance** of these additional services occurring.

7. NON-RESPONSE NOTIFICATIONS

In the event, Tampa Bay Water is contacted by Contractor performing dig work in the field that Tampa Bay Water's utilities are not located appropriately, Contractor shall respond within 1 hour of Tampa Bay Water's inquiry with pictures of markings and/or physically responding to site to place markings and/or contacting dig Contractor to arrange a time to locate prior to digging occurring.

8. MEETINGS FOR CONTRACT REVIEW AND PERFORMANCE

Contractor will be required to attend a monthly contract/performance review meeting at Tampa Bay Water for the first year of the contract. Tampa Bay Water will answer any questions that have come up and previous month's volume, type of tickets and responses will be reviewed so any issues can be addressed by both parties in a timely manner. After the first year the parties can agree on the necessity and frequency of ongoing contract review meetings



**PROPOSAL FEE FORM - (Complete and Submit with Proposal per instructions)**

Item	Description	Unit	Est. Annual Qty.		Unit Price		Extended Price (Est. Annual Qty X Unit Price)
A	Electronic Ticket Management of all non-design tickets, both in conflict and not in conflict (In accordance with Technical Specification item 1)	Each	10,000*	x	\$ 11.92	=	\$ 119,200
B	Respond to Tickets in conflict outside of fenced boundary with flagging or paint and follow up for a 30 day period to ensure marks remain. (In accordance with Technical Specification item 2)	Each	750*	x	\$ 11.92	=	\$ 8,940
C	Respond to Emergency or Short Notice Tickets in conflict outside of fenced boundary with flagging or paint and follow up for a 30 day period to ensure marks remain. (In accordance with Technical Specification item 3)	Each	120*	x	\$ 11.92	=	\$ 1,430.40
D	Owners Allowance (usage must be pre-approved in writing and in accordance with Technical Specification item 5)	Lump Sum	1	x	\$20,000.00	=	\$20,000.00
<b>Total Annual Contract Proposal Price E=(A+B+C+D)</b>							<b>\$ 149,570.40</b>

\* Estimated Annual Quantities of tickets are an estimate only and Tampa Bay Water shall not be bound by these quantities in its agreement with the Contractor. Actual quantities of tickets will be what is received through the Sunshine 811 IRTNet system.

**Note:** Refer to Part II Additional Conditions Section 7 Price Escalation/De-Escalation section in this RFP.



**DATE:** August 30, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Jack Thornburgh, Acting Chief Operating Officer

**SUBJECT:** Water Treatment Chemical Supply Services, Contract Nos. 2022-013, 2022-014 & 2022-016 to the lowest responsive responsible Bidders - *Approve*

**SUMMARY**

Tampa Bay Water uses Ferric Chloride, Sulfuric Acid and Sodium Hypochlorite in the treatment process at various water treatment facilities throughout the Agency. The current contract for the supply of these chemicals is set to expire on September 30, 2021. Staff initiated a bid procurement process and seeks new contracts for the supply of these chemicals.

**SUGGESTED ACTION**

Approve Contract Nos. 2022-013, 2022-014 & 2022-016 to the lowest responsive responsible bidders, PVS Technologies, Inc., Sulphuric Acid Trading Co., Inc. and Odyssey Manufacturing Company.

**COST/FUNDING SOURCE**

Uniform Rate: Ferric Chloride: \$822.00/Dry Ton; Sulfuric Acid: \$0.1095/Lb.; and Sodium Hypochlorite: \$ \$0.70/Gal

**DISCUSSION**

On June 15, 2021 Tampa Bay Water posted an Invitation for Sealed Bids (ITB) for Water Treatment Chemical Supply Services and included Ferric Chloride, Sulfuric Acid and Sodium Hypochlorite. Over



195 contractors were notified through advertisement on DemandStar and Tampa Bay Water's website. Tampa Bay Water added three known contractors as supplemental contractors and eighteen (18) contractors downloaded the bid plans. A non-mandatory pre-bid conference was conducted on June 30, 2021 at which there were no contractors in attendance.

On June 28, 2021 sealed bids were received and publicly opened as follows:

<b>Bidder</b>	<b>Ferric Chloride</b>	<b>Sulfuric Acid</b>	<b>Sodium Hypochlorite</b>
PVS Technologies, Inc.	\$442,800.00	-	-
Shrieve Chemical Company, LLC	-	\$2,955,789.10	-
Sulphuric Acid Trading Co., Inc.	-	\$2,610,154.56	-
Allied Universal Corporation	-	-	-
Odyssey Manufacturing Company	-	-	\$3,282,787.20
Kemira Water Solutions, Inc.	-	-	-
Univar Solutions USA, Inc.	-	-	-
Airgas USA, LLC	-	-	-
Linde	-	-	-

Staff recommends that the following contracts be approved for award to the lowest, responsive, responsible bidders. Funds for this work will be included in each fiscal year's budget.

<b>Contract #</b>	<b>Bidder</b>	<b>Amount</b>
2022-013	PVS Technologies, Inc.	\$442,800.00
2022-014	Sulphuric Acid Trading Co., Inc.	\$2,610,154.56
2022-016	Odyssey Manufacturing Company	\$3,282,787.20

The proposed contracts are available upon request and will be reviewed and approved as to form by Tampa Bay Water's General Counsel. A copy of the Bid Pricing Form is attached.

## **BACKGROUND**

The current contract, vendor and pricing for the supply of these water treatment chemicals can be found in the table below.

<b>Chemical Supply</b>	<b>Contract No.</b>	<b>Vendor</b>	<b>Price</b>
Ferric Chloride	2018-007	PVS Technologies, Inc.	\$816.80/Dry Ton
Sulfuric Acid	2018-006	Sulphuric Acid Trading Co., Inc.	\$0.0637/Lb.
Sodium Hypochlorite	2019-005	Odyssey Manufacturing Company	\$0.48/Gal.

Attachment (1)

[2022-013, 014 & 016 Bid Price Forms](#)



**BID PRICE FORM – FERRIC CHLORIDE**

Line Item	Description	Unit	Est. Annual Qty		Base Unit Price		Total Annual Price
A	Furnish & Deliver Ferric Chloride, per Specifications	Dry Tons	450	x	\$ 822.00	=	\$ 369,000.00
<b>PROPOSED TOTAL ANNUAL BID PRICE</b>							<b>= \$ 369,000.00</b>
B	Owner's Allowance – 20% of <i>PROPOSED TOTAL ANNUAL BID PRICE</i>	Lump Sum	1	x	\$ 73,800.00	=	\$ 73,800.00
<b>PROPOSED TOTAL ANNUAL CONTRACT BID PRICE (A + B)</b>							<b>= \$ 442,800.00</b>

**PROPOSED TOTAL CONTRACT BID PRICE (A+B)**PVS Technologies Augusta, GA

Primary Distribution Facility (Location Address)

Four Hundred Forty Two Thousand Eight Hundred Dollars and Zero Cents

(Amount Written in Words)

PVS Technologies, Inc.

Firm Name

10900 Harper Avenue Detroit, MI 48213

Firm Address



Authorized Signature

Craig Mikkelsen

Printed Name

313-571-1100 ext. 411

Phone Number

bids@pvschemicals.com

Email Address



**ADDENDUM FOUR – ATTACHMENT A  
BID PRICE FORM – SULFURIC ACID**

Line Item	Description	Unit	Est. Annual Qty		Base Unit Price		Total Annual Price
A	Furnish & Deliver Liquid Sulfuric Acid, per Specifications	Pounds	19,863,368	x	\$ 0.1095	=	\$ 2,175,038.80
B	Split Delivery Charge	Each	1	x	\$ 90.00	=	\$ 90.00
<b>PROPOSED TOTAL ANNUAL BID PRICE</b>							<b>= \$2,175,128.80</b>
C	Owner's Allowance – 20% of <i>PROPOSED TOTAL ANNUAL BID PRICE</i>	Lump Sum	1	x	\$ 435,025.76	=	\$ 435,025.76
<b>PROPOSED TOTAL ANNUAL CONTRACT BID PRICE (A + B + C)</b>							<b>= \$ 2,610,154.56</b>

**PROPOSED TOTAL CONTRACT BID PRICE (A + B + C)**

SATCO Terminal, 4041 Maritime Blvd., Tampa, FL 33619

Primary Distribution Facility (Location Address)

Two million, six hundred and ten thousand one hundred and fifty-four dollars and fifty six cents

(Amount Written in Words)

Sulphuric Acid Trading Company, Inc.

Firm Name

3710 Corporex Park Drive, Suite 205, Tampa FL 33619

Firm Address

  
Authorized Signature

Brent Shonka

Printed Name

(813)225-2000

Phone Number

satco@satcoinc.net

Email Address



**ADDENDUM THREE – ATTACHMENT B  
SODIUM HYPOCHLORITE BID PRICE FORM**

Line Item	Description	Unit	Est. Annual Qty		Base Unit Price	Total Annual Price
A	Furnish & Deliver Liquid Sodium Hypochlorite, per Specifications	Gallons	3,908,080	x	\$ .70	= \$ 2,735,656.00
B	Split Delivery Charge	Each	1	x	\$ 0	= \$ 0
<b>PROPOSED TOTAL ANNUAL BID PRICE</b>						<b>= \$ 2,735,656.00</b>
C	Owner's Allowance – 20% of <i>PROPOSED TOTAL ANNUAL BID PRICE</i>	Lump Sum	1	x	\$ 547,131.20	= \$ 547,131.20
<b>PROPOSED TOTAL ANNUAL CONTRACT BID PRICE (A + B + C)</b>						<b>= \$ 3,282,787.20</b>

**PROPOSED TOTAL CONTRACT BID PRICE (A + B + C)**


1484 Massaro Blvd., Tampa, FL. 33619

Primary Distribution Facility (Location Address)

Three million two hundred eighty-two thousand seven hundred eighty-seven dollars and twenty cents.  
(Amount Written in Words)

Odyssey Manufacturing Company  
Firm Name

1484 Massaro Blvd., Tampa, FL. 33619  
Firm Address

  
Authorized Signature

Patrick Allman  
Printed Name

813/635-0339  
Phone Number

pallman@odysseymanufacturing.com  
Email Address



**DATE:** September 6, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Kenneth R. Herd, Chief Science & Technical Officer

**SUBJECT:** As-Needed Source Water Quality Assessment and Protection Services Contracts 2020-013 thru 016 - First Amendments - *Approve*

**SUMMARY**

As-Needed Source Water Quality Assessment and Protection Consultant Services Contracts are used to efficiently complete projects for Tampa Bay Water's Source Water Assessment and Protection Program to help ensure safe, high quality drinking water for the region. Approval of First Amendments will increase contract limits by \$100,000 for four (4) As-Needed Source Water Quality Assessment and Protection Services and will allow completion of anticipated task order assignments in a timely manner. These amendments apply to Contracts 2020-013 thru 016 with the following firms: Hazen and Sawyer, P.C., CDM Smith, Inc., Environmental Science Associates, Inc. (ESA), HSW Consulting, LLC., formerly known as HSW Engineering, Inc.

**SUGGESTED ACTION**

Approve First Amendments with increase of \$100,000 to existing As-Needed Source Water Quality Assessment and Protection Services Contracts 2020-013 thru 016.

**COST/FUNDING SOURCE**

\$400,000 / Uniform Rate - Fiscal Year 2022 Budget

**DISCUSSION**



As-Needed Source Water Quality Assessment and Protection Services Contracts 2020-013 thru 016 are used to perform required source water quality activities for Tampa Bay Water's Regional System supply sources. These contracts were originally approved by the Board of Directors for a three-year period with total expenditures not to exceed \$300,000 for each contract (10/21/19, Item D.6). This First Amendment will increase total contract limits by \$100,000 to allow performance of required Fiscal Year 2022 activities with no change to the contract expiration dates (10/21/2022).

The proposed First Amendments have been approved as to form by Tampa Bay Water's General Counsel's Office. Copies of the approved Amendments can be requested through the Records Department.

## **BACKGROUND**

As-Needed Source Water Quality Assessment and Protection Consultant Services Contracts are used to efficiently complete projects for Tampa Bay Water's Source Water Assessment and Protection Program to help ensure safe, high quality drinking water for the region. This work requires specialized experience and expertise to evaluate drinking water hazards, treatment barriers, source water quality monitoring, watershed conditions, and other activities.

Tampa Bay Water has traditionally utilized outside consultants with particular experience and expertise rather than acquiring additional staff. Use of as-needed services contracts also helps manage work-load variations (both within each year and from year to year) and is a cost-effective means of accomplishing required work activities.

The original three-year terms of these as-needed contracts do not expire until October 21, 2022; however, the balances of these contracts have largely been depleted by multiple task order assignments and are not sufficient to cover projected work assignments for the upcoming fiscal year. The proposed contract amendments increase these contract limits by \$100,000 each and will allow completion of anticipated task order assignments in a timely manner.



**DATE:** August 25, 2021  
**TO:** Board of Directors  
**THRU:** Charles H. Carden, Interim General Manager  
**FROM:** Christina Sackett, Chief Financial Officer  
**SUBJECT:** Agency Contract Renewals - *Approve*

**SUMMARY**

Renew agency contracts in accordance with renewal option years listed in terms and conditions of original contract.

**SUGGESTED ACTION**

Approve contract renewals as summarized in the attached document.

**COST/FUNDING SOURCE**

Various - See Attachment

**DISCUSSION**

Tampa Bay Water has a number of contracts each year that are available to renew for additional option years. Purchasing and agency staff have reviewed the contracts summarized in the attached document and have determined that they continue to be of value and are necessary to the operation of Tampa Bay Water. The vendors/consultants have agreed, in writing to renew the available option year(s) as prescribed in the original contract terms and conditions.

The original terms and conditions of these contracts remain unchanged. All original contracts were approved by the Board and therefore renewals must be provided to the Board for review and approval of



each renewal option year.

The contract renewals have been reviewed and approved by Tampa Bay Water General Counsel's Office.

Attachments (1)

[Contract Amendment Consent](#)



**CONTRACT AMENDMENTS EXECUTED FOR CONSENT APPROVAL SEPTEMBER 2021**

CONTRACT NAME / DESCRIPTION OF SERVICES	CONTRACT NUMBER	CONTRACTOR	ANNUAL AMOUNT	APPROVAL DATE	RENEWAL/ AMENDMENT #	ORIGINAL EXPIRATION	EXTENDED THROUGH	FUNDING SOURCE
ROOFING SERVICES	2019003	RYMAN ROOFING, INC.	\$150,000.00	10/25/2018	3 of 3	10/31/2019	10/31/2022	UNIFORM RATE
LIQUID CARBON DIOXIDE SUPPLY SERVICES	2018-004	AIRGAS USA, LLC	\$780,880.80	10/16/2017	90 DAY EXTENSION	9/30/2018	12/31/2021	UNIFORM RATE



**DATE:** September 1, 2021

**TO:** Board of Directors

**FROM:** Barrie Buenaventura, General Counsel

**SUBJECT:** Special Counsel Current Assignments and Purchase Orders - *Approve*

**SUMMARY**

It is necessary to issue purchase orders to continue special counsel assignments beyond October 1, 2021, which is the start of FY 2022.

**SUGGESTED ACTION**

Approve initial purchase orders for FY 2022 to continue special counsel assignments and authorize adjustments to these purchase orders within the approved legal services budget to accommodate changes in assignment activities and workload.

**COST/FUNDING SOURCE**

Uniform Rate

**DISCUSSION**

This item deals solely with the continuation of legal assignments to special counsel law firms previously selected and approved by the Board.

The General Counsel recommends that the law firms indicated on the attached list continue to represent Tampa Bay Water in current and new assignments. Assignments being handled by special counsel and payments to each law firm are reported to the Board in the legal services activity report and legal services budget reports included with agenda materials for each Board meeting.



Further, it is recommended that initial purchase orders for each of these firms be established, as shown on Exhibit A. If the Board approves this recommendation, special counsel assignments and purchase orders will be continued under the terms of current legal services contracts, with adjustments based on changes in assignment activities and workload. Any such adjustments will be made within the Board-approved budget for legal services, and will not result in the transfer of any additional funding to the legal services budget without Board approval.

### EXHIBIT

LAW FIRM	INITIAL PURCHASE ORDER AMOUNT TO BE PAID FROM UNIFORM RATE
<b><i>Busack Law Firm</i></b> <b>Assignments:</b> Real Property and Eminent Domain	\$20,000
<b><i>Conn &amp; Buenaventura, P.A.</i></b> <b>Assignments:</b> Special Assignments Outside the Scope of General Counsel Services Contract #2021-049	\$20,000
<b><i>Dean Mead Egerton Bloodworth Capouano &amp; Bozarth, P.A.</i></b> <b>Assignments:</b> Legislative Representation and Governmental Affairs; Administrative Law; Environmental Law	\$120,000
<b><i>Gray Robinson, P.A.</i></b> <b>Assignments:</b> Administrative Law; Construction Law, Contracts; Defense of Civil Claims; Eminent Domain; Real Property; Bankruptcy; Labor and Employment Law; Water Law	\$30,000
<b><i>Nabors, Giblin &amp; Nickerson, P.A.</i></b> <b>Assignments:</b> Administrative Law; Construction Law; Contracts; Defense of Civil Claims; Eminent Domain; Real Property; Labor and Employment Law; Water Law	\$30,000



<b><i>Stearns Weaver</i></b> <b>Assignments:</b> Administrative Law; Construction Law; Defense of Civil Claims; Eminent Domain; Real Property; Bankruptcy; Labor and Employment Law; Water Law	\$20,000
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In addition to the above firms, Tampa Bay Water utilizes **Nabors, Giblin & Nickerson** as bond counsel, and **Gray Robinson** as disclosure counsel. Payment for these services is made from bond proceeds and, therefore, purchase orders for these services are not established since they are not paid from funds in the legal services budget.

\*Tampa Bay Water utilizes Conn & Buenaventura, P.A. for General Counsel services under Contract 2021-049. Expenditures pursuant to that contract, and the related purchase order established for FY 2022, will be paid for out of the FY 2022 General Counsel budget and will be reported to the Board in the Legal Budget Agenda Item and Monthly Budget Reports.



**DATE:** September 6, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Christina Sackett, Chief Financial Officer

**SUBJECT:** Procurement Exceptions Vendor Limits - *Approve*

**SUMMARY**

Tampa Bay Water's Purchasing Policy, Resolution 2014-002, provides procurement exceptions to the utilization of the sealed competitive bid procedure or request for competitive sealed proposals and delegates authority to the General Manager for acquiring equipment, supplies and services less than or equal to \$100,000. Throughout the past 22 years, the Agency has procured equipment, supplies and services from the attached list of vendors through these procurement exceptions. The total amount per vendor spent since the Agency began has reached or will reach the \$100,000 maximum approval amount of the General Manager and requires Board approval.

**SUGGESTED ACTION**

Approve, continuing procurement through the various procurement exceptions, with each listed vendor, and exceeding \$100,000 in total spend, limited to the Board-approved fiscal year 2022 budget amounts.

**COST/FUNDING SOURCE**

Fiscal Year 2022 Approved Budget

**DISCUSSION**

Tampa Bay Water's Purchasing Policy, Resolution 2014-002, provides procurement exceptions to the



utilization of the sealed competitive bid procedure or request for competitive sealed proposals and delegates authority to the General Manager for acquiring equipment, supplies and services less than or equal to \$100,000. General Counsel's interpretation of this delegated amount, is the total amount spent with a vendor, from the beginning of Tampa Bay Water to date, and not per procurement or fiscal year.

Throughout the past 22 years, the Agency has used the attached list of vendors to provide equipment, supplies and services procured through the various procurement exceptions approved in the purchasing policy. The total amount per vendor spent since the Agency began has reached or will reach the \$100,000 maximum approval amount of the General Manager and requires Board approval.

Staff recommends continuing procurement through the various procurement exceptions, with each listed vendor on the attachment, and Board approval to exceed \$100,000 in total spend, limited to the Board approved fiscal year 2022 budget amounts.

## **BACKGROUND**

Tampa Bay Water's preferred method for acquiring equipment, supplies and services costing more than the existing bid limit, \$35,000, is by sealed competitive bidding or by request for competitive sealed proposals.

Exceptions to the utilization of the sealed competitive bid procedure or request for competitive sealed proposals for those purchases above the existing bid limit are:

1. Emergency Purchases
2. Sole Source Purchases
3. Cooperative Purchases
4. Direct Purchase of Construction Material
5. Interlocal/Intergovernmental Agreements
6. Grants
7. Labor and Employment Agreements
8. Insurance Agreements and Policies
9. Public Art
10. Judgements, settlements and opposing party's legal fees and reimbursed costs
11. Software support agreements
12. Mitigation reimbursement to complainants
13. Florida Retirement System
14. Payroll Taxes
15. Real Estate
16. Real Estate Appraisers
17. Outside Legal Services
18. Expert Witness Services
19. Securities, Financing and Bond Agreements



20. Principal and Interest Payments on debt instruments and all associated issuance costs (all issuance of debt are approved by the Board of Directors)
21. Banking Services
22. Postage
23. Telephone Services
24. Advertising
25. Dues and Memberships
26. Books and Subscriptions
27. Transportation and Travel
28. Employee Attendance at Education and Training Seminars
29. Disbursements from Petty Cash
30. Mandatory fees to government agencies (vehicle registrations, permit fees, professional and occupational licenses, trash and sewer assessments, etc.)
31. Utility Services
32. Negotiated Procurements after Rejection of All Bids/Proposals
33. Contracts for professional services pursuant to Section 287.055 FS (CCNA)
34. Other instances where exceptions are provided State or local law

Purchases more than \$100,000 require the approval of the Board.

Attachment (1)

[FY22 Vendor List over \\$100K](#)



<b>Vendor Name</b>	<b>Vndr #</b>
Acacia Consulting Inc.	3996
Air Centers Of Florida, Inc.	4070
Ajax Paving Industries Inc.	27
All American Tree Service	4235
Alliance For Water Efficiency	4634
Allied Electronics Inc.	40
American Government Services Corp.	3986
American Society Of Civil Engineers	1547
American Water Works Association	100
Anixter, Inc.	891
Aquatic Informatics, Inc.	4516
Archimedes Systems Inc.	4293
Asphalt Paving Systems, Inc.	6162
Association Of Metropolitan Water Agencies	1383
Audio Visual Innovations Inc.	98
Aurigo Software Technologies, Inc.	5770
Automation Direct.com Inc.	636
Ayres Associates Inc.	101
Beamex Inc.	4025
Beaux Arts Group	5804
Blue Planet Environmental	3903
Brown & Caldwell	4985
C & G Containers and Supply	156
Cablexpress Corporation	5690
Campbell Scientific	3374
Carahsoft Technology Corp.	6531
CDW Government Inc.	177
Ced/Raybro Electric	1769
Certified Records Management	3141
Certified Slings Inc.	1120
Chalmers & Kubeck	3172
Chandler Asset Management, Inc.	6042
Cintas Corporation	189
City Electric Supply Company	1348
Classic Controls Inc.	1837
Clutch Solutions, LLC	6627
Cohesive Solutions, Inc.	5857
Computers At Work Inc.	6006
Core & Main LP	3508

<b>Vendor Name</b>	<b>Vndr #</b>
Corona Environmental Consulting, LLC	5870
Dave Dorsey Enterprises, Inc.	1525
Dell Marketing LP	1244
Digital Intelligence Systems LLC	5741
DLT Solutions, LLC	2153
Duo Security, Inc.	5550
Duval Ford	281
Electro Battery, Inc.	295
Electro Mechanical South, Inc.	3167
EMA, Inc.	296
Environmental Science Associates Corp.	6007
Epic Engineering & Consulting Group	5585
ESRI	899
F.H. Black And Company, Inc.	6236
Fedex Office And Print Services	503
Ferman Motor Car Company	4782
Fisher Scientific Company, LLC	336
Florida Dept. Of Management Services	1392
Florida Jetclean	4474
Florida Level & Transit Co. Inc.	356
Fluid Control Specialties, Inc.	3738
FPA, Inc	6172
Garber Chevrolet, Inc.	4007
Garber Ford, Inc.	5066
Genuine Auto Parts/NAPA	989
Geographic Information Services, Inc.	6210
Graybar Electric Company, Inc.	401
Gurobi Optimization, Inc.	5106
Hach Company	405
Harcros Chemical, Inc.	408
Harris, Mackessy & Brennan, Inc.	6171
Home Depot	442
Hydrologic Data Collection, Inc.	3030
Hydrological Services America	5237
IBM	5088
Icon Technologies	3973
Idexx Laboratories, Inc.	1057
Information First	6139
Innovyze, Inc.	5351



<b>Vendor Name</b>	<b>Vndr #</b>
Insight Public Sector	3674
Iron Mountain	152
J&J Equipment, Inc.	485
Jacobs Air Water Systems	2541
Joseph Pennington Construction	2186
Konecranes, Inc.	233
Locher Environmental Technology, LLC	3322
Lowe's Companies, Inc.	3420
Luke Brothers, Inc.	5925
Mac Papers, Inc.	3956
Mako Group LLC	5827
Manley Solutions	6057
Maxpoint Interactive	6166
McMaster-Carr	543
Measurement Specialties, Inc.	5270
Merediths Tire & Auto Care Center	548
Metropolitan Water	5168
Mettler-Toledo Int. Inc.	6168
Mitsubishi Electric Power Products, Inc.	5295
Newark Corporation	590
Northside Tire, Inc.	592
Office Depot	600
Perkin Elmer Health Sciences Inc.	629
Peterson & Associates, Inc.	1526
PFM Asset Management LLC	4370
PFM Financial Advisors LLC	6206
Phenova, Inc.	4577
Presidio Networked Solutions, Inc.	5137
Princeton Information Ltd.	5545
Proc Step Inc	6048
Promium LLC	5868
Randstad North America, L.P.	5578
Randy Boyette Tractor & Trucking, Inc.	134
Ring Power Corp.	3774
Ryan Herco Products Corp.	5469
Sanders Company Inc	2644
Securance LLC	6250
SHI International Co	2151
Siemens Industry, Inc.	2817
Siemens Industry, Inc.	4172
Skillsoft Corporation	6180

<b>Vendor Name</b>	<b>Vndr #</b>
Southern Computer Supplies, Inc.	1687
Spivey Utility Construction Co. Inc.	736
Standard Sand and Silica Co.	1781
Sunbelt Rentals Inc	1228
Sunshine State One Call of Florida, Inc.	761
Survalent Technology	3616
Survalent Technology, Inc.	6194
Swan Analytical USA, Inc.	5729
Sylint Group Inc	6121
Synapse Networks Inc	5807
Tampa Bay Estuary Program	2544
Tampa Bay System Sales	934
Team Technical Services	1576
Technology Integration Group	4429
Teledyne Tekmar	784
Testamerica Laboratories, Inc.	2575
The Avanti Company Inc.	1641
The Greentree Group, Inc.	5911
The Mathworks, Inc.	3227
The Tire Choice	5208
Thermo Electron North America LLC	3638
Trinova Inc.	5644
Tyler Technologies, Inc.	213
Universal Protection Service LP	6116
University Of Florida	866
Valco Instruments Co. Inc.	4549
Veredus/Hays Holding	5877
Verizon	427
W W Grainger Inc	398
Water Research Foundation	1468
Water Treatment & Controls Co.	836
Watereuse Foundation	4042
Waterford Technologies, Inc.	5100
WFTS-TV	1423
World Wide Technology, LLC	6512
Wright Express Corp	5294
Xylem Water Solutions	6176



**DATE:** September 7, 2021

**TO:** Board of Directors

**THRU:** Chuck H. Carden, Interim General Manager

**FROM:** Christina Sackett, Chief Financial Officer

**SUBJECT:** Fiscal Year 2021 Carry Forward and Transfers of Encumbered and Unencumbered Funds - *Approve*

**SUMMARY**

Transfers of estimated unexpended funds from the current fiscal year's Gross Revenues, both encumbered and unencumbered, are being requested to either be moved forward to the next fiscal year or transferred into other Agency funds. The requested fiscal year 2021 transfers are detailed below and include their stated purpose and amount. Some of the requested transfer amounts are estimates based upon the agency's activity through end of July 2021 and final calculations will be done upon completion of the annual financial audit. Final amounts for all estimated transfer requests will be reported to the Board together with the Comprehensive Annual Financial Report and the Independent Auditor's report.

**SUGGESTED ACTION**

Approve fiscal year 2021 requested carry forward funds and fund transfers

**COST/FUNDING SOURCE**

Fiscal Year 2021 Operating Budget

**DISCUSSION**

Transfers of estimated unexpended funds from the current fiscal year's Gross Revenues, both



encumbered and unencumbered, are being requested to either be moved forward to the next fiscal year or transferred into other Agency funds. Transfers being requested to move forward to the next fiscal year must be recorded through the Rate Stabilization Account and then moved to the appropriate budget category at the beginning of the next fiscal year. The Agency is contractually required to complete the transfers within 90 days of the agency's fiscal year-end. To facilitate a timely year-end close, staff is recommending board-approval of the requested year-end transfers and have provided estimates for transfers where final calculation cannot be done until completion of the annual financial audit. The estimated amounts presented reflect our best estimates of what the final numbers will be based upon the agency's activity through the end of July 2021. This advance approval by the Board allows staff to make the required journal entries when the final numbers are calculated and insures the 90-day contractual requirement is met.

**ENCUMBERED FUNDS:** To provide funding for purchase orders that carryover to fiscal year 2022, an amount of funds equal to the open purchase orders, estimated at \$14,844,733, will be placed into the Rate Stabilization Account at 9/30/21 and then will be moved back to the Operating Fund as of 10/1/21 to pay the actual costs incurred in fiscal year 2022. The purchase orders being carried forward represent board-approved activities that were budgeted in fiscal year 2021 but could not be completed prior to the fiscal year-end.

**UNENCUMBERED FUNDS:** The estimated unencumbered funds of \$14.2 million, results from higher water sales and cost savings realized on various fixed and variable costs. The recommended use of the unencumbered funds is as follows:

**Operating Fund –** Transfer funds in the amount of \$4,312,953 into the Rate Stabilization Account as of 9/30/21 and moved back to the Operating Fund in fiscal year 2022, to meet the costs of the Fiscal Year 2022 Operating Budget, as approved by the Board in June 2021.

**Rate Stabilization Account/Materials & Operating Supplies –** Carry forward funds into the fiscal year 2022 budget in the amount of \$60,000 to cover the procurement of Data Loggers.

**Rate Stabilization Account/Engineering Services –** Carry forward funds into the fiscal year 2022 budget in the amount of \$1,109,959 to cover the Long-term Master Water Plan feasibility projects' expenses.

**Rate Stabilization Account/Engineering Services –** Carry forward funds into the fiscal year 2022 budget in the amount of \$308,153 to cover the rehabilitation costs for environmental resource permitting compliance.

**Rate Stabilization/Other Professional Services –** Carry forward funds into the fiscal year 2022 budget in the amount of \$88,620 to cover utility conflict costs.

**Rate Stabilization/Other Professional Services –** Carry forward funds into the fiscal year 2022 budget in the amount of \$60,000 to cover information technology support costs.

**Rate Stabilization/Other Professional Services –** Carry forward funds into the fiscal year 2022 budget in the amount of \$50,000 to cover utility locate costs.



Rate Stabilization/Other Contractual Services – Carry forward funds into the fiscal year 2022 budget in the amount of \$100,000 to cover increased software licensing costs.

Rate Stabilization/Repair & Maintenance – Carry forward funds into the fiscal year 2022 budget in the amount of \$667,384 to cover contractor costs.

Rate Stabilization/Machine & Equipment – Carry forward funds into the fiscal year 2022 budget in the amount of \$221,377 to cover the procurement of network infrastructure.

Rate Stabilization/Machine & Equipment – Carry forward funds into the fiscal year 2022 budget in the amount of \$98,000 to cover capital equipment procurements requiring increase lead times.

Rate Stabilization/Machine & Equipment – Carry forward funds into the fiscal year 2022 budget in the amount of \$97,030 to cover the procurement of water quality monitoring equipment.

Capital Improvement Fund – Transfer funds up to \$6,750,000, plus retention of interest earned by the fund, into the Capital Improvement Fund to be used for funding of board approved projects, if excess funds are available as estimated. This will potentially push back issuance of new bond debt. The Retention of the interest in the fund is consistent with bond covenants and contractual requirements.

Renewal and Replacement Fund – Retain interest earned by the fund. The Agency is currently devoting significant resources on our comprehensive Renewal and Replacement Program to enhance system reliability in the future. Adequate funding will be key to successful program implementation. As Agency assets age, the cost associated with the Renewal and Replacement Program will increase. In April 2014, Staff recommended maintaining a minimum balance of \$20 million in the account to more adequately cover future needs, currently this account exceeds the recommended minimum amount.

Utility Reserve – Transfer funds up to \$300,00, plus retention of interest earned by the fund into the Utility Reserve to improve meeting the bond covenant requirements.

Rate Stabilization - After moving forward funds and funding the preceding accounts and reserves any unencumbered funds available will be transferred into the Rate Stabilization Account to be available for use in 2022 or thereafter, as subsequently approved by the Board. Rate Stabilization Account funds may be used by the Board for future rate leveling in subsequent budget years or for such other purposes as the Board may deem appropriate. In addition to the application of new funds collected in fiscal year 2021, Rate Stabilization funds approved by the Board in prior years remain in place to be used in subsequent years.

The attached table reflects the requested estimated transfer amounts to close fiscal year 2021. The actual finalized transfer amounts, as determined at year-end close, will be reported to the Board with the Comprehensive Annual Financial Report and the Independent Auditors' report.

## **BACKGROUND**



As part of the year-end closing process, Tampa Bay Water is required to account for unexpended funds in accordance with its contractual requirements. The Agency's Bond Covenants require all Gross Revenues, other than Capital Improvement charges and Renewal and Replacement charges, be deposited promptly into the Revenue Account. Monies in the Revenue Account shall first be used to fund the Operations and Maintenance Reserve, the Sinking Funds and the Renewal and Replacement Fund as needed to meet governance balance requirements. The balance of any Gross Revenues remaining in the Revenue Account are to be transferred into the Utility Reserve Fund. The Bond Covenants further permit the creation of a Rate Stabilization Account and the funding as it deems appropriate. The Master Water Supply Contract requires any unencumbered moneys remaining at the end of the fiscal year be budgeted for the succeeding fiscal year and be used for the same purposes for which rates are charged to the members.

Under the Board's Utility Reserve Fund policy and Rate Stabilization Account policy, unencumbered funds flow first to the Utility Reserve Fund, which has priority on the funds to meet bond covenant requirements. After meeting bond covenant requirements, any remaining funds are transferred to the Rate Stabilization Account for use in a subsequent year. The policy requires that transfers of encumbered amounts over 3% of budgeted revenues and transfers of unencumbered amounts be brought to the Board for approval.

Attachment (1)

[Transfer table](#)



## Fiscal Year 2021 Transfers to Fiscal Year 2022

### Estimated Encumbered Funds - \$14.8 million

Fund Destination	Transfer Description	Amount
FY21-Rate Stabilization/FY22-Operating Fund	Open/ Available Purchase Orders at year-end	\$ 14,844,733 <sup>1</sup>

### Estimated Unencumbered Funds - \$14.2 million

Fund Destination	Transfer Description	Amount
FY21-Rate Stabilization/FY22-Operating Fund	Approved FY22 budgeted unencumbered funds from FY21	\$ 4,312,953
FY21-Rate Stabilization/FY22-Operating Fund	Materials & Supplies - Data Loggers	\$ 60,000
FY21-Rate Stabilization/FY22-Operating Fund	Engineering Services - LTMWP Feasibility Projects	\$ 1,109,959
FY21-Rate Stabilization/FY22-Operating Fund	Engineering Services - ERP Compliance	\$ 308,153
FY21-Rate Stabilization/FY22-Operating Fund	Other Professional Services - Utility Conflicts	\$ 88,620
FY21-Rate Stabilization/FY22-Operating Fund	Other Professional Services - IT Support	\$ 60,000
FY21-Rate Stabilization/FY22-Operating Fund	Other Professional Services - Utility Locate	\$ 50,000
FY21-Rate Stabilization/FY22-Operating Fund	Other Contractual Services - Software Licensing	\$ 100,000
FY21-Rate Stabilization/FY22-Operating Fund	Repairs & Maintenance - Contractors	\$ 667,384
FY21-Rate Stabilization/FY22-Operating Fund	Machine & Equipment - Network Infrastructure	\$ 221,377
FY21-Rate Stabilization/FY22-Operating Fund	Machine & Equipment - Capital Equipment	\$ 98,000
FY21-Rate Stabilization/FY22-Operating Fund	Machine & Equipment - Water Quality Equipment	\$ 97,030
Capital Improvement Fund	Retain 2021 interest earnings within fund and increase fund up to \$6,750,000	Interest Earned <sup>2</sup> Plus, up to \$6,750,000
Renewal & Replacement Fund	Retain 2021 interest earnings within fund	Interest Earned <sup>3</sup>
Utility Reserve Fund	Retain 2021 interest earnings within fund and increase fund up to \$300,000	Interest Earned <sup>2</sup> Plus, up to \$300,000
Rate Stabilization	Any remaining amount available after preceding transfers	Remaining amount <sup>4</sup> available

1 - Estimated amount, final amount to be determined when closing fiscal year 2021 and will be reported to the Board.

2 - Interest earned and fund increase amount to be calculated upon completion of annual financial audit and will be reported to the Board.

3 - Interest earned to be calculated upon completion of annual financial audit and will be reported to the Board.

4 - Remaining amount available calculated upon completion of annual financial audit and final amounts calculated for preceding transfers and will be reported to the Board.



**DATE:** September 3, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Christina Sackett, Chief Financial Officer

**SUBJECT:** Fiscal Year 2022 Insurance Program for Liability, Auto, Property, Workers' Compensation and Other Coverage - *Approve*

**SUMMARY**

Tampa Bay Water's insurance policies will expire on September 30, 2021, with the exception of Cyber Security and Fuel Storage Tank coverage.

**SUGGESTED ACTION**

Approve binding coverage and rates for the Fiscal Year 2022 Tampa Bay Water Insurance Program with the exceptions of Cyber Security and Fuel Storage Tank coverage, and delegate authority to the General Manager to bind Cyber Security and Storage Tank coverage if they are within the approved budgeted amounts once they are received in October.

**COST/FUNDING SOURCE**

Uniform Rate

**DISCUSSION**

The Fiscal Year 2021 insurance actuals were \$1,683,228 and the premiums and quotes received for Fiscal Year 2022 were received at \$1,823,738 as shown below. The Fiscal Year 2022 budget is \$1,937,511. Staff recommends approving the coverage and rates for the Fiscal Year 2022 Tampa Bay Water Insurance Program with the exceptions of Cyber Security and Fuel Storage Tank coverage, and



delegate authority to the General Manager to bind Cyber Security and Storage Tank coverage once those quotes are received in October and are within budgeted amounts.

<b>FY 2021 Costs</b>	<b>FY 2022 Costs</b>	<b>Type of Insurance</b>
\$1,280,242	\$1,406,124	Property, Inland Marine and Boiler & Machinery
\$151,293	\$162,384	Workers' Compensation and Vehicle Liability
\$207,711	\$198,930	Commercial Liability, Public Official Liability, Employment Practice Liability, Government Crimes, Hull & Watercraft
\$8,531	\$9,300 - Estimate	Fuel Storage Tanks*
\$35,451	\$47,000 - Extension & Estimate	Cyber Liability **
\$1,683,228	\$1,823,738	<b>TOTALS</b>

\* This policy does not expire until November. The estimate includes a 10% premium increase.

\*\* A 30 day extension was granted to complete multi-factor authentication work necessary to meet provider requirements for insurance. The estimate includes the premium for the 30 day extension, plus an estimated 25% premium increase.

If there are additional costs for workers' compensation when the annual audit is performed, there will be a year-end adjustment. This adjustment is not anticipated to be beyond the approved annual budget amount. If any future billing should exceed the approved budget, staff will present the proposed cost for Board consideration.

## **BACKGROUND**

The Board approved a piggyback contract with PRIA in April 2020, to select a single insurance broker/consultant. The change to a single broker/consultant allowed for more flexibility in going to the markets to acquire the various types of coverage for the agency.



**DATE:** September 1, 2021

**TO:** Board of Directors

**FROM:** Charles H. Carden, Interim General Manager

**SUBJECT:** General Manager's Report - *Status Report*

**SUMMARY**

The Interim General Manager will provide an update on agency programs and activities.

**SUGGESTED ACTION**

Status Update

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

**Agency COVID-19 update**

The agency continues to monitor community COVID-19 cases. A workplace guidance document is in place and follows the latest CDC guidance. Currently, employees who can perform their jobs remotely are given the opportunity to telework 50% of the time and agency management is working on a permanent flexible work schedule policy for some positions.



## **Liquid Oxygen Shortage Update**

The shortage of liquid oxygen around the state continues as supplies are diverted to hospitals to respond to COVID cases. Liquid oxygen is used at our Regional Surface Water Treatment Plant and at the City of Tampa's David L. Tippin Surface Water Treatment Plant as part of the ozone treatment process, a primary disinfectant. We also use this chemical for ozone treatment of hydrogen sulfide removal at our Lithia Hydrogen Sulfide Removal Facility in South Hillsborough County.

The agency has successfully converted the Lithia Facility to sodium hypochlorite instead of ozone and the process is performing well. The agency has also reduced flows from the Regional Surface Water Treatment Plant to 30 million gallons per day due to the decreased supplies and the remaining demands are being provided by our groundwater sources. The City of Tampa temporarily changed its water disinfection process to sodium hypochlorite at their Surface Water Treatment Plant.

The system continues to operate as designed we are continuing to work with our vendors, the Environmental Protection Agency, and the Florida Department of Environmental Protection. The City of Tampa and Tampa Bay Water submitted Safe Drinking Water Act (SDWA), Section 1441 applications which provides a mechanism by which the Department of Commerce can assist in getting the necessary amount of the chemicals to a Public Water System. In addition, the city and Tampa Bay Water has established a weekly call with our vendor to coordinate deliveries.

## **City of Tampa's Purify Usable Resources for the Environment (PURE)**

The City of Tampa and Tampa Bay Water staff met on July 8, July 30, and September 7 to discuss several alternatives of the City's PURE project including the sale and purchase of reclaimed water, as well as the potential availability of water for Tampa Bay Water through the Harney Canal permit. Discussions are centered around potential partnering opportunities using reclaimed water as a future water supply for Tampa Bay Water and three project concepts have been identified. City and Tampa Bay Water technical staff and consultants will begin evaluating these three project concepts in the coming months. Tampa Bay Water is also performing probabilistic modeling to determine the quantity of water that may be available for regional use from the Hillsborough River and Tampa Bypass Canal if the City implements their PURE project. City and Tampa Bay Water staff will discuss the proposed PURE project configurations in the coming months and identify any potential implications to Tampa Bay Water's Amended and Restated Interlocal Agreement.

## **Groundwater Credits (Reclaimed Water) Pricing**

Staff continues corresponding with Hillsborough County regarding pricing methodology. The main discussion items include methodology/formula components including capital and operating and maintenance costs of the Hillsborough County SHARP project and the cost for Hillsborough County to prioritize or reserve reclaimed water to generate credits for the proposed South Hillsborough Wellfield in the long-term. Staff will be coordinating briefing meetings with the Board this fall to discuss the methodology and specific components.



## **South Hillsborough Wellfield Property Acquisition Update**

Tampa Bay Water and Hillsborough County staff continue to negotiate the terms of agreement for the acquisition of production well sites and infrastructure easements in southern Hillsborough County. These parcels would be used if the Board selects the proposed South Hillsborough Wellfield (via SHARP credits) as one of the next water supply projects to be developed through our Long-term Master Water Plan. Agreements will be negotiated with the Hillsborough County Environmental Lands Acquisition and Protection Program and Water Resources Departments for well sites and easements on the Ag-Mart property being acquired by the County. The County will close on this property on September 15, 2021, and the acquisition agreements with Tampa Bay Water will be finalized and brought to the Tampa Bay Water Board for consideration later this year. Additional information is found in a separate agenda item on the Consent Agenda.

## **Looking Ahead**

*Website Redevelopment:* In an effort to migrate Tampa Bay Water's website to a more secure content management system and web hosting environment, Tampa Bay Water has been working with Sparxoo to redevelop the website. This effort is nearly complete and the new website is set to launch by the end of this month.

*Public Opinion Survey:* Every three years, the agency conducts a public opinion survey to collect information on public sentiment on water supply issues, water costs, sources of water, etc. The survey collection is complete and compilation of the data is on-going. Survey results will be reported to the board at the October or November board meeting.



**DATE:** September 1, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Kenneth R. Herd, Chief Science & Technical Officer

**SUBJECT:** Professional Services Contracts - As-Needed Hydrogeological Services Contract Nos. 2022-005 through 2022-009 - *Approve*

**SUMMARY**

As-Needed Hydrogeological Services Contracts are needed to efficiently complete projects related to permit compliance and infrastructure maintenance. The current as-needed hydrogeological services contracts will expire on September 30, 2021. Approval of the recommended contracts will secure firms for the next three-year period with an option for two, one-year renewals without a gap in services.

**SUGGESTED ACTION**

Approve Professional Services Contract Nos. 2022-005, 2022-006, 2022-007, 2022-008 and 2022-009 with the five top-ranked consultants to perform hydrogeological services on a task order basis up to a maximum amount of \$450,000 per contract, recognizing that approval does not encumber any funds at this time. Each contract will be for a three-year term at \$250,000 with two, one-year renewal options at an additional \$100,000 for each additional year. Staff also recommends that the Board waive the expenditure limit of the General Manager for tasks issued pursuant to these contracts. This waiver extends the General Manager's signature authority for task orders up to the contract limit.

**COST/FUNDING SOURCE**

\$1,250,000 (5 contracts over 3 years) Approved FY 2022 Budget /Uniform Water Rate. Funding for subsequent years through the contract period requires Board approval of future budgets.



## DISCUSSION

Tampa Bay Water uses as-needed professional services contracts to extend the technical expertise and expand staff functions of the Agency. In order to manage workload variations (both within each year and from year to year), Tampa Bay Water has traditionally used outside consultants with particular experience and expertise for short-term activities rather than acquiring additional staff and specialized equipment. This has proven to be a cost-effective means of accomplishing the required work in a timely manner.

Staff have evaluated the potential workload for the next three years and have determined that five contracts for as-needed hydrogeological services are needed, each with an initial contract limit of \$250,000 (\$450,000 maximum including two year extension). The list of five recommended firms provides the agency with a variety of expertise that will be needed over the next three years to meet permit compliance and infrastructure maintenance requirements. The major tasks for the next three years are the maintenance and rehabilitation of production and monitor wells, implementation of new studies that may be required by the renewed Consolidated Water Use Permit, assistance with the regulatory reporting requirements for multiple permits, and the evaluation of hydrologic data and conditions at the C.W. Bill Young Regional Reservoir.

On May 12, 2021, Tampa Bay Water posted a Request for Proposals on DemandStar.com for As-Needed Hydrogeological Services Contract Nos. 2022-005, 2022-006, 2022-007, 2022-008 and 2022-009. Over 140 firms were notified through advertisement on DemandStar.com and Tampa Bay Water's website. Tampa Bay Water also notified six known qualified firms as Supplemental Suppliers. A total of 42 firms downloaded the Request for Proposal documents. A pre-proposal conference was held on June 1, 2021 with eight participating firms and Tampa Bay Water received timely, responsive proposals from eight firms on June 30, 2021.

The selection committee, comprised of Tampa Bay Water technical staff, rated all respondents in several categories including project management experience, previous relevant project experience, groundwater and surface water modeling, well testing, construction and rehabilitation, environmental permitting and monitoring, water resource evaluation and impact assessment, water quality monitoring and assessment, geotechnical/geophysical testing and analysis, certified minority business, and volume of work previously awarded using the advertised technical scoring criteria. The committee ranked the respondents by compiling written scores based on the submitted information. The selection committee's ranking for the As-Needed Hydrogeological Services contracts is presented below (highest to lowest).

1. WSP USA Inc.
2. HSW Consulting, LLC
3. GHD Services, Inc.
4. Montrose Environmental Solutions, LLC
5. Cardno, Inc.

Staff recommends Board approval of the five negotiated contracts for the above-listed firms. Contracts



shall have a term of three years at \$250,000.00 per contract, with an option for two renewal years, one year at a time at \$100,000.00 per contract. The approval of these contracts does not encumber any funds at this time. Funds for the task orders to be issued under these contracts will be from the current and future Tampa Bay Water budgets as approved by the Board of Directors. In addition, staff recommends that the Board waive the expenditure limit of the General Manager's signature authority for task orders up to the contract limit. This will allow time-sensitive projects to begin and work to progress, avoiding the potential delay that may occur given the Board meeting schedule.

The proposed contracts and associated fee schedules are available upon request from the Tampa Bay Water Records Department and have been reviewed and approved as to form by Tampa Bay Water's General Counsel.

## **BACKGROUND**

In any given year, a variety of short-term needs arise that require Tampa Bay Water to timely respond to issues concerning hydrological/hydrogeological investigations and regulatory compliance. Assignments under these task-based contracts are expected to include but are not limited to:

- permitting assistance
- statistical analysis
- groundwater flow and transport modeling
- geotechnical and hydrological investigations
- groundwater monitoring, well design and installation
- production well inspection and testing services
- monitor well repair, replacement, or abandonment
- assistance with the Agency's well mitigation program
- development and implementation of restoration projects for stressed lakes and wetlands

Many of these assignments arise from our implementation of Water Use Permit Special Conditions. In order to manage workload variations (both within each year and from year to year), Tampa Bay Water has traditionally utilized outside consultants with particular experience and expertise for short-term assignments rather than acquiring additional staff. This has proven to be a cost-effective means of accomplishing the required work in a timely manner.

### **C.1 As-Needed Hydrogeological Services Contracts Presentation**



# Professional Services Contracts – As-Needed Hydrogeological Services Contract Nos. 2022-005 through 2022-009

Agenda item C.1

September 20, 2021

Warren Hogg, P.G.

Water Use Permitting Manager



- Request for proposals – May 2021
- Proposals reviewed by technical staff
- Five top-ranked firms recommended
- Three-year contracts with two, one-year extension options
- Extend technical expertise and staff function
- Specialized equipment
- Contracts used for permit compliance and infrastructure maintenance



- Approve Contract Nos. 2022-005 through 2022-009 up to a maximum amount of \$250,000 per contract for an initial three-year term with two, one-year renewal options at an additional \$100,000 for each additional year.
  - WSP USA, Inc.
  - HSW Consulting, LLC
  - GHD Services, Inc.
  - Montrose Environmental Solutions, LLC
  - Cardno, Inc.



**DATE:** September 3, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Jonathan M. Kennedy, Engineering Senior Manager

**SUBJECT:** Professional Services Contracts - As-Needed Professional Engineering Contract Nos. 2021-027 through 2021-038 - *Approve*

**SUMMARY**

Tampa Bay Water uses as-needed engineering services to meet a number of agency needs. Awarding multiple contracts provides flexibility to meet a broad range of needs. This authorization will allow staff to proceed on projects in an efficient manner.

**SUGGESTED ACTION**

Approve five-year contracts with the top 12 ranked As-Needed Engineering Services firms at \$2,000,000 per contract, with an additional proviso that the Board delegate to the General Manager authorization to issue individual task orders in the amounts not to exceed \$500,000 or the aggregate contract limit, whichever is smaller. The higher individual task limit is consistent with recent changes in the Florida Statutes for continuing contracts for engineering services.

**COST/FUNDING SOURCE**

\$2,000,000 per contract / Operating and Capital Budgets, as applicable

**DISCUSSION**



Tampa Bay Water uses as-needed engineering services to meet a number of agency needs. Staff recently completed procurement activities to replace the list of thirteen as needed engineers approved in 2017, with a new list. Over the past four years more than 80 individual tasks have been assigned to meet a variety of agency needs, including studies and investigations, preparation of plans and specifications, site assessments and permitting. Based on projections of need for the coming five years, as-needed services are expected to include the following types of assignments:

- Civil/Site/Roadways
- Mechanical
- Electrical/Instrumentation/HVAC
- Structural/Architectural
- Geotechnical
- Permitting- Drinking Water Treatment and Environmental
- Utility Conflict and Construction Observation Support
- Environmental Site Assessments
- Studies and Reports

On April 6, 2021, Tampa Bay Water posted the Request For Proposals on Demandstar.com for the As-Needed Professional Engineering Services, Contract Nos. 2021-027 through 038. Over 794 firms were notified through advertisement on DemandStar and Tampa Bay Water's website. Tampa Bay Water added 6 known firms as supplemental consultants and 124 consultants downloaded the bid plans. A pre-proposal meeting was held on May 11, 2021, with 49 participating firms. On June 9, 2021, Tampa Bay Water received 25 proposals and ranked each firm. All consultants responded by submitting timely Requests for Proposals (RFPs) for As-Needed Engineering Services. The selection committee, comprised of Tampa Bay Water technical staff rated all respondents in several categories including Project Managers Experience, Lead Construction Manager/Supporting Team Members Experience; Team Qualifications in various areas, volume of work previously awarded and certified minority business previously awarded using the advertised technical scoring criteria. The consultants that received the highest ranking based on total scores from the As-Needed Engineering Services criteria by the selection committee are listed in the following table below:

**RANK FIRM**

1	Metzger & Willard
2	Jacobs Engineering Group, Inc.
3	Carollo Engineers, Inc.
4	Ardurra Group, Inc
5	AECOM Technical Services Inc.
6	Hazen and Sawyer, P.C.
7	CDM Smith, Inc.
8	Dewberry Engineers, Inc.
9	Stantec Consulting Services, Inc.



- 10 Wade Trim, Inc.
- 11 McKim & Creed, Inc.
- 12 Watermark Engineering Group, Inc.

All expenditures for As-needed engineering services are approved by the Board of Directors through either the annual rates budgeting process or the Capital Improvement Program project budgets.

The proposed contracts have been approved as to form by Tampa Bay Water's General Counsel's Office and are available upon request.

## **BACKGROUND**

Tampa Bay Water has utilized As-Needed Engineering Services contracts since the late 1980's. As-needed engineering assignments vary widely and are for smaller or specialty projects for which staff does not have a regular need. The current list of 13 engineering firms was approved in by the Board of Directors February 2017, and many of those contracts are at or nearing their contract limits, and several contract amendments have been necessary to keep moving on certain critical efforts. A procurement for new contracts was completed using the Competitive Consultant Negotiation Act process.

### [C.2 As-Needed Engineering Presentation](#)



# As-Needed Engineering Professional Services Contracts

Agenda Item C.2

September 20, 2021

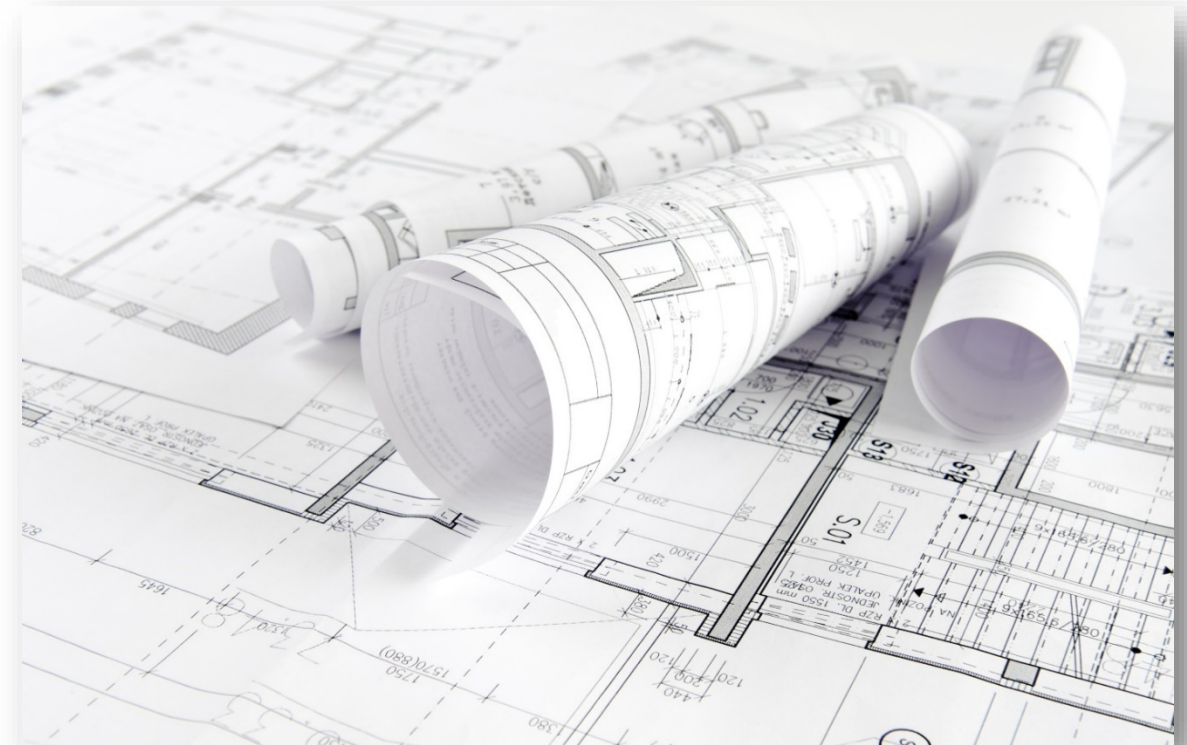
Justin Fox, P.E.  
Engineering Manager  
Tampa Bay Water





# As-Needed Engineering Contracts Background

- Current list of 13 firms approved at February 2017 Board Meeting
- 80+ assignments over four years
- 2017 contracts expiring or reached limits
- Law now allows assignments up to \$500,000 for As-needed Engineering Contracts





# As-Needed Engineering Services

- Projects Types
  - ✓ Studies & reports
  - ✓ Plans & specifications
  - ✓ Water quality analysis
  - ✓ Stormwater permitting compliance
- Specialty Services
  - ✓ Architectural
  - ✓ Heating, ventilation and air conditioning
  - ✓ Hydraulic modeling
  - ✓ Geotechnical
  - ✓ Electrical & control systems
  - ✓ Roadway assessments





# As-Needed Engineering Procurement

- Firms submitted as teams that cover all disciplines
- Individual contract value not to exceed \$2 million
- Individual task orders up to \$500,000 with General Manager approval
- 25 total responses





# As-Needed Engineering

- 12 contracts recommended
- No cost to the Agency at this time – just contracting capacity
- Board approves funds for task assignments through annual rates or individual project budgets





# Top-ranked As-Needed Engineering Firms

	Firm		Firm
1	Metzger & Willard	7	CDM Smith
2	Jacobs Engineering Group	8	Dewberry Engineers
3	Carollo Engineers	9	Stantec Consulting Services
4	Ardurra Group	10	Wade Trim
5	AECOM	11	McKim & Creed
6	Hazen and Sawyer	12	Watermark Engineering Group



# Recommendation

Staff recommends approval of the twelve as-needed engineering firm contract numbers 2021-027 thru 2021-038.





Questions





**DATE:** September 3, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Jonathan M. Kennedy, Engineering Senior Manager

**SUBJECT:** Capital Improvements Program: Integrated Program Manager Consultant Professional Engineering Services Contract No. 2022-001 with Black and Veatch Corporation - *Approve*

**SUMMARY**

Implementation of Tampa Bay Water's Capital Improvements Program (CIP) will require professional engineering consulting services to augment staff to ensure the growing portfolio of capital projects are coordinated in a timely manner and that additions or changes to the regional system integrate with the existing system. Professional Services will be provided on a negotiated task-by-task basis throughout the contract's duration in a variety of technical and administrative areas. The contract will have an initial duration of eight (8) years with up to two (2) potential extensions of two (2) years each.

**SUGGESTED ACTION**

Approve Contract

**COST/FUNDING SOURCE**

On per task basis; aggregate of \$25,000,000/Multiple Funding Sources over eight contract years with up to two (2) potential extensions of two (2) years each

**DISCUSSION**



At the December 2020 and February 2021 Board meetings staff presented the Integrated Program Management Consultant (IPMC) approach. The IPMC will be retained to assist staff with the successful delivery of the Capital Improvements Program (CIP). This approach helps address Recommendation 21 in the 2020 Management and Performance Audit that emphasized the need to improve delivery of the Agency's CIP.

Tampa Bay Water advertised a Request for Proposals for the Integrated Program Management Consultant following the Competitive Consultant Negotiation Act process for Professional Engineering Services for Contract No. 2022-001. The advertisement was posted on DemandStar on May 5, 2021. Over 1100 firms were notified through DemandStar resulting in forty-three (43) firms downloading the Request for Proposal. A mandatory pre-proposal conference was held in person on May 26<sup>th</sup>, 2021, with four firms in attendance. On June 23<sup>rd</sup>, 2021, Tampa Bay Water received three timely and responsive proposals from the following companies:

- Aecom technical Services, Inc.
- Black & Veatch Corporation
- Jacobs Engineering Group, Inc.

In accordance with Florida's Sunshine Law, a selection committee comprised of Tampa Bay Water technical staff rated all respondents in several categories including:

- Program Manager experience
- Planning Project Manager experience
- Key team member qualifications and experience
- Approach to the implementation and execution of the anticipated tasks
- Certification as a minority business
- Previous volume of work

On July 22, 2021, the selection committee ranked the firms and recommended interviews of the two-top-ranked firms: Jacobs Engineering Group, Inc and Black & Veatch Corporation. The committee conducted interviews on August 13, 2021, resulting in a final score, and rankings of the respondents as follows:

1. Black and Veatch Corporation
2. Jacobs Engineering Group, Inc.
3. Aecom technical Services, Inc.

Staff is recommending the selection of the top-ranked firm, Black and Veatch Corporation to serve as the Integrated Program Management Consultant. Staff requests approval of an eight (8)-year contract with up to two (2) potential extensions of two (2) years each in the amount of \$25,000,000 with an additional proviso the Board delegate to the General Manager authorization to issue individual task orders in the amounts not to exceed \$250,000. Approval of this contract does not encumber any funds now. Funds for the task orders to be issued under the contract will be from the current and future Tampa



Bay Water operating budgets and capital projects budgets and applicable funding sources as approved by the Board of Directors, which may include the following: Capital Improvement Funds, Renewal and Replacement Funds, Revenue Bonds, Energy Funds, and Grants.

Tasks will be assigned by staff in accordance with agency priorities and budget. The proposed contract is available upon request and has been reviewed and approved as to form by Tampa Bay Water's General Counsel.

## **BACKGROUND**

Since 2010, Tampa Bay Water has updated the Agency's Capital Improvement Program (CIP) annually through the CIP Process culminating in acceptance by the Board. The CIP is a 10-year plan and includes active and planned capital projects and their planned expenditures and funding sources. The current CIP

(FY's 2022-2031) includes 94 projects with a \$1.2 Billion budget. Most of the larger and costly capital projects are complex and require oversight and careful planning.

A similar approach was key on the success of Tampa Bay Water's Master Water Plan Configurations I and II programs. The IPMC as proposed would be similar to the program teams that supported Configurations I and II and would:

Coordinate multiple capital projects to minimize schedule and cost impacts

- Expedite project scheduling through project packaging and procurement
- Leverage IPMC resources, processes, and experience and transfer knowledge to staff

Additionally, the IPMC will help ensure the integration of existing infrastructure including the South Hillsborough Pipeline Segments A and B and Configuration III that includes the next water supply project(s) that will be selected through the Master Water Supply Planning process and water quality improvements alternative(s) being planned throughout the Tampa Bay Water system that will be considered by the Board during 2022.

The IPMC will also serve as an extension of Tampa Bay Water staff and according to work load, qualifications and needs. This concept is well known and commonly used to execute large capital programs throughout the country and is not intended to replace the existing work Tampa Bay Water staff currently conducts but rather, will help augment agency resources during high peaks of work as was described in August 2020 agenda item K1.

Tasks will be assigned on as-needed basis and in areas such as: Planning, Engineering, Project Delivery, Finance, Procurement, Public Outreach, and Real Estate, among others. Examples of anticipated tasks include:



**Planning:**

- Evaluation and Recommendation of the Next Master Water Supply project(s)/configuration(s)
- Update the Long-Term Master Water Plan Update (2023 and 2028)
- Review scope of works, cost estimates, schedules of planned capital projects
- Update cost estimating tools

**Engineering:**

- Conduct hydraulic, transient surge and water quality reviews and models for the integration of new infrastructure or operational changes
- Update the Agency's System Hydraulic and Emergency Scenario Analysis Report
- Support updates to agency standard drawings and specifications

**Project Delivery:**

- Assist in the development of Scope of Work and Evaluation Criteria for capital projects procurements
- Review capital projects design by other consultants to ensure integration and adherence to Agency standards
- Provide Construction Management and Inspection Services when required
- Perform Value Engineering on designs prepared by others
- Assist in management of the Owner's Direct Purchase Program
- Support claims evaluation, risk mitigation and management
- Assist in the coordination of shutdowns, start-up, and commissioning activities
- Assist with acceptance and witness testing
- Assist with data collection and review of new assets for integration into agency maintenance programming
- Assist with the review of request for additional information, submittals review, Potential Change Orders, and Change Orders

**Finance:**

- Develop the Systems Engineer's report to support issuance of revenue bonds
- As-needed support for identification, application and management of grants or co-funding agreements including Joint Project Agreements

**Procurement:**

- Assist during complex capital projects procurement and contract negotiation for construction and/or operation agreements related to existing or proposed facilities in close coordination with Legal counsel

**Public Outreach:**



- Support public outreach activities related to tasks assigned under this contract (e.g., Long-term Master Water plan updates, selection of the next water supply project(s), etc.)

### C.3 Integrated Program Manager Presentation



# Integrated Program Manager Consultant Contract 2022-001

Agenda Item C.3

September 20, 2021

Maribel Medina, P.E., PMP  
Planning and Projects Manager  
Tampa Bay Water





# Presentation Outline



Capital Improvements Program



Integrated program manager consultant benefits



Solicitation process



Scope and contract details

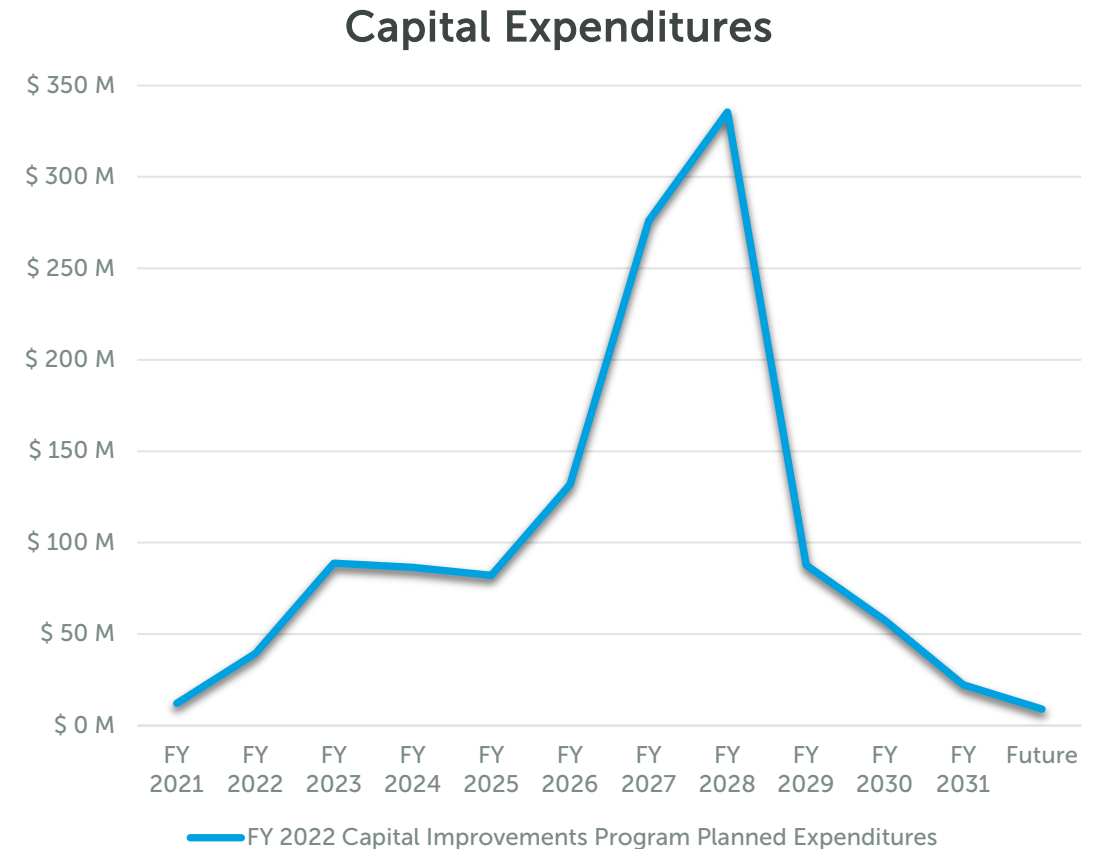


Recommendations and approval request



# Capital Improvements Program

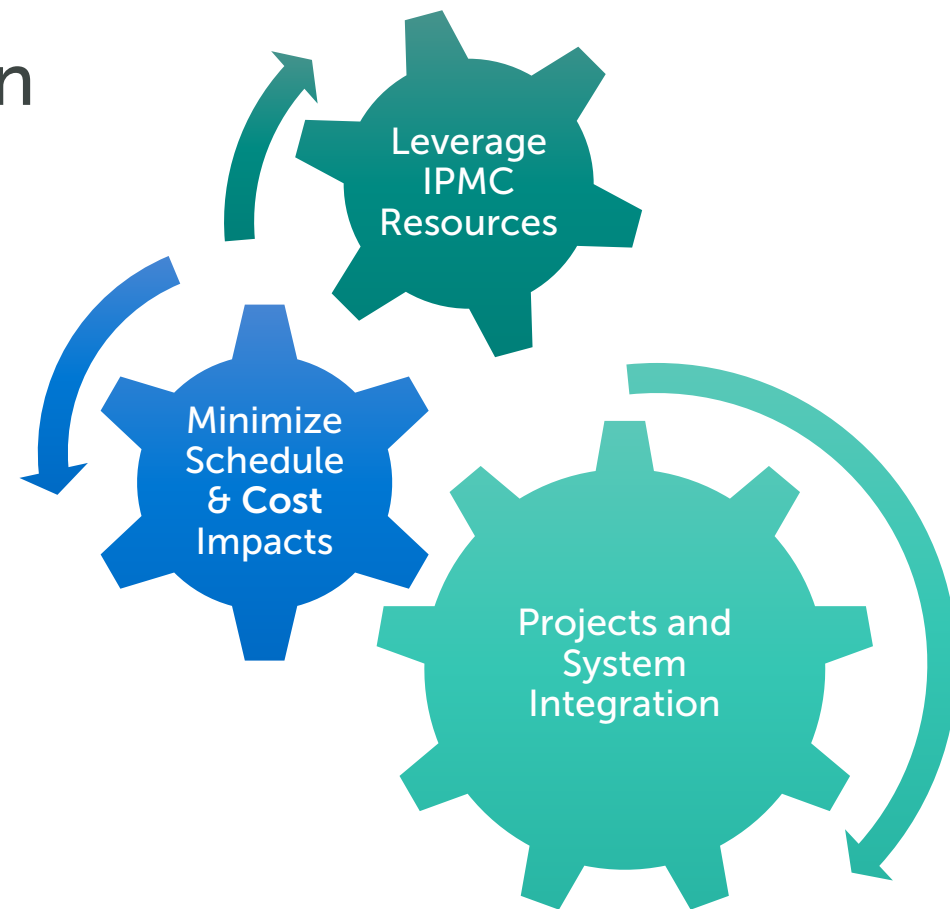
- Complex and multiple projects
- Increased capital spending
- Projects of multi-year duration
- Schedule pressures
- Organization is not staffed for projected peak workload





# Integrated Program Manager Consultant Benefits

- Multiple project coordination
- Expedite and coordinate project scheduling
- Optimize resources
- System integration
- Coordinate project commissioning





# Capital Project Delivery: Then, Now, Future

## Before 2011

- Outsourced/Multiple Consultants
  - Systems Engineering
  - Program Management
  - Master Water Plan
  - Design

## 2011-Today

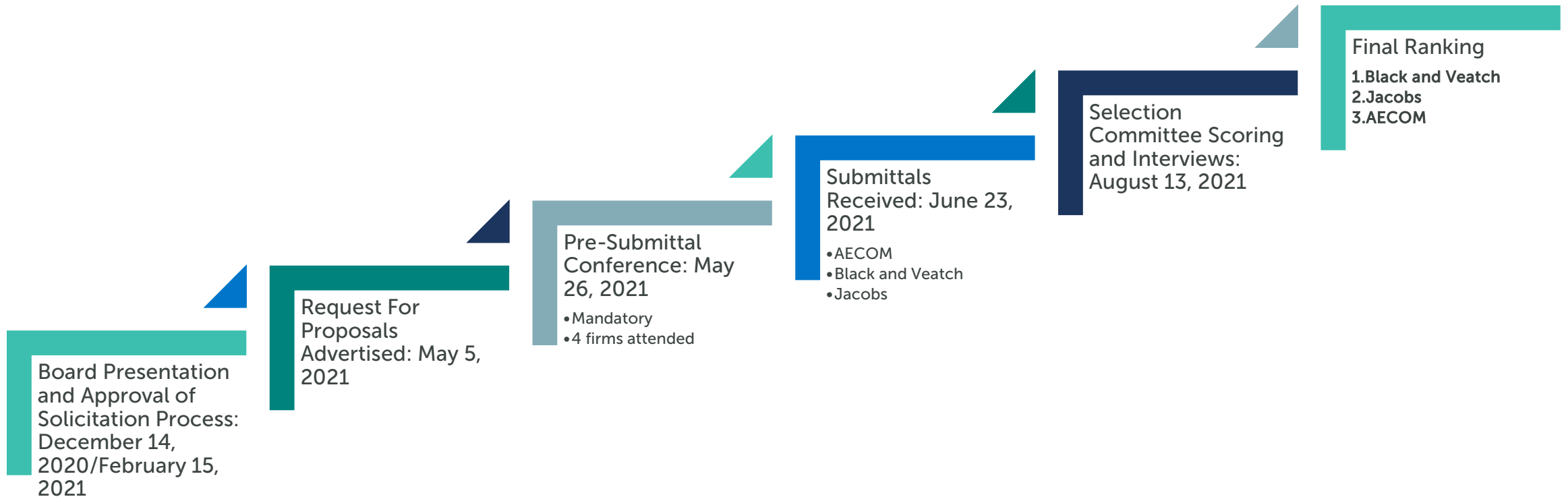
- In-house
  - Systems Engineering
  - Project/Program Management
  - Limited Design
- Outsourced/Multiple Consultants
  - Design
  - Master Water Plan

## 2021-2029

- Outsourced/One consultant
  - Systems Engineering
  - Master Water Plan
  - Program Management
- Outsourced/Multiple Consultants
  - Design
- In-house
  - Project/Program Management



# Solicitation Process





# Contact Details: Scope

Planning



System  
Engineering



Project  
Delivery



Finance



Procurement  
Assistance



Public  
Outreach





# Contract Details: Term and Value

## Term

- Initial 8-year term
- Two potential extensions, 2-years each

## Contract Value

- Average of \$2-\$3 million per year
- Not to exceed \$25 million



# Contract Details: Funding and Tasks

## Funding

- Capital project funding
- Operating budget

## Tasks

- Individually negotiated fees
- Board approval for project tasks



# Contract Details: Exclusion

## Exclusion

- **WILL NOT** be allowed to provide engineering design and professional services for the design of projects in the Capital Improvements Program under a separate contract or solicitation



# Contact Details: Fee Schedule



By labor category



Minimum-maximum range



Review every three years



10% reduction in rates for full-time assignments in construction/field office



Subcontractors' markup no more than 5%



- Approve Contract 2022-001 with Black and Veatch Corporation in the amount not to exceed \$25 million over 8 years with two, two-year extensions.
- Delegate the General Manager authorization to issue individual task orders in amounts not to exceed \$250,000 for non-capital project tasks.





Questions





**DATE:** August 27, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Kenneth R. Herd, Chief Science & Technical Officer

**SUBJECT:** Tampa Bay Water Wise Program Update Report - *Presentation*

**SUMMARY**

The Tampa Bay Water Wise Program consists of 11 rebate programs and is also supported by water conservation grant funding from the Southwest Florida Water Management District (District). The program goal is to save up to 11 million gallons per day (mgd) by 2030. This program is intended to cost-effectively defer the need for new water supplies through improved water use efficiency. This item gives an update of the program and highlights progress to date.

**SUGGESTED ACTION**

Receive Status Report

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

Following is a status report on the various components of the Tampa Bay Water Wise and other demand management activities in the region.

**Rebates and Water Savings:** As of August 24, 2021, the program has issued 544 rebates, 498 of which have been paid for high-efficiency toilets in single family homes, 40 toilets in multi-family



homes, 3 toilets in business locations, 2 irrigation controllers, and 1 shallow well, resulting in an estimated 19,274 gallons per day saved. Of the rebates that have been paid, 179 came from Hillsborough County, 41 from the City of Tampa, 148 from Pinellas County, 86 from St. Petersburg, 76 from Pasco County, and 14 from New Port Richey.

In addition there are currently three multi-family toilet retrofit projects underway, which will result in hundreds of toilet rebates. The regional dashboard is complete and will be available through a weblink, displaying the program's progress toward our water saving goal.

**Marketing:** EGIA continues to provide monthly social media assets for use by the member governments. In addition, they initiated a post-card mailing effort which will reach about 40,000 residents who are most likely to be eligible for the toilet rebate. Lastly, EGIA is developing the marketing plan for FY 2022, in coordination with Tampa Bay Water and the working group.

**Program Developments:** The District and Tampa Bay Water are partnering on customizable rebates available to commercial and multi-family buildings, through the District's WISE program and the Tampa Bay Water Wise Program. The District currently manages its WISE program and agreed to partner with the Tampa Bay Water Wise program such that any entity within the members service area that is eligible for funding from the WISE program will automatically be eligible for a higher rebate through additional funding from Tampa Bay Water Wise. By itself the WISE program offers up to 50% of project costs, or up to \$20,000, whichever is lower. With the Tampa Bay Water Wise partnership, customers will be eligible for funding up to 75% of project costs and up to \$40,000, whichever is lower.

**Smart Controller:** Tampa Bay Water is in the process of hiring a contractor through a competitive bid process. The contractor will perform smart irrigation controller installations, and the Florida Friendly Landscape staff will help residents determine the suitability of their irrigation system to participate. This change was made based on successes of other similar rebate programs.

**District Cooperative Funding Initiative:** The Agency will be seeking co-funding from the District for Tampa Bay Water Wise for Fiscal Year 2023.

**Additional Regional Demand Management Activities:** The collective and coordinated efforts of the Member Governments, the Florida Friendly Landscaping™ programs, and the University of Florida have an impact on regional water demand. These activities have been coordinated by the Agency for years and play a key role in educating residents about the best ways to save water. These efforts are complementary to the Tampa Bay Water Wise rebate program.

- The Community Water-Wise Awards Program is a program that helps to promote drought-tolerant landscapes, and residents with well-designed and maintained landscapes that are consistent with the nine FFL principles. The 2021 Community Water Wise Awards application period has come to a close, and the judging process is underway. The program recognizes



individuals and businesses that are committed to conserving our water resources and protecting the environment by using the best, attractive Florida-Friendly Landscaping™ techniques and minimizing water waste.

- Florida-Friendly Landscaping™ (FFL) agents' agreements have been renewed so that they may continue to provide environmental education in Pinellas, Pasco and Hillsborough Counties through on-line and in-person forums. Public education coordinators develop water savings estimation techniques for the irrigation evaluations they provide to homeowners and homeowner associations. The FFL agents will begin to support the Tampa Bay Water Wise program in a new way starting in October 2021 by providing education and irrigation system evaluations to rebate-eligible customers.
- CCC (Conservation Coordination Consortium) meets once per month so staff from Member Governments, FFL, Agency, District, and other organizations can provide information about upcoming activities, current efforts, and important updates. Speakers from academia, utilities, companies, and other relevant organizations are a regular part of this effort, so that as a group we gain insight into current trends and information about new water conserving programs and technologies.
- Member Governments: Members report their conservation and water restriction enforcement activities, in the attached table. These activities cover a variety of activities, such as device giveaways, education and outreach, media promotion, meter change-outs and water restriction enforcement.

## **BACKGROUND**

Tampa Bay Water Wise is a regional water conservation rebate program, which aims to save up to 11 million gallons per day (mgd) by 2030 through 11 rebate components. This program is intended to cost effectively defer the need for new water supplies through improved water use efficiency which will save the Members and their customers money. The program is managed by the Agency, and guided by Members through a Working Group made up of Member Government and District staff which meets monthly. The program is administered by a third-party contractor, Electric and Gas Industries Association (EGIA).

At its December 2008 meeting, the Tampa Bay Water Board of Directors approved a resolution directing the Agency to prepare a revised Demand Management Plan (DMP). This project provided a comprehensive investigation of the benefits and costs of integrated water demand management as a quantifiable, alternative water supply source and reflects improvements in the state of knowledge that have occurred since 1995. The DMP evaluates the potential of demand management as a beneficial tool for long-term water supply planning and defines how demand management fits within the Agency's long-term water supply planning process, supply reliability, and Member Government demand projections. Consideration of costs and water supply benefits permit a consistent "apples to apples" comparison to other water supply alternatives.



At the February 2013 Board meeting, the Agency passed Board Resolution No. 2013-006, which incorporates water use efficiency evaluation efforts into the Agency's long-term water supply planning process. This resolution directs the Agency to:

- Develop and implement data collection, management and analysis protocols and procedures for the continued assessment of passive water use efficiency within the Agency's service area.
- Integrate passive water-use efficiency into the agency's Long-term Demand Forecast and Future Need Analysis.
- Include the Water Use Efficiency Evaluation as an element of the Long-term Master Water Supply Plan and include an updated evaluation of potential active measures for implementing efficient water-use products as part of future options for the next Long-term Master Water Supply Plan update.

Subsequently, the Board requested that Tampa Bay Water evaluate demand management implementation strategies to determine ways to ensure if active demand management is selected by the Board, it could be implemented and help meet the Agency's unequivocal water supply obligations.

In August 2018, Agency staff developed a list of potential demand management BMPs that could save up to 11 mgd by 2030 at about a fifth of the cost to develop new water supplies. This approach optimizes the use of existing water resources and could defer the need to develop new supplies to a later date, all within a cost-effective strategy. The plan was approved by the Board in December 2018 as part of the Long-term Master Water Plan update.

On August 20, 2018, the Board approved funding demand management through the Agency and applying for matching cooperative funding from the District. The Board also directed staff to work with members to develop implementation strategies that will help to secure identified savings while consistent with the Interlocal Agreement.

The Tampa Bay Water Wise program was officially launched and open to the public via [tampabaywaterwise.org](http://tampabaywaterwise.org) on March 30, 2020. The working group that was established at the outset of this program currently meets on a monthly basis, and is comprised of representatives from each Member Government, the Agency, and the District.

Attachments (2)

[June 2021 Members Conservation](#)

[July 2021 Members Conservation](#)

[D.1 Tampa Bay Water Wise Program Update Presentation](#)



**Tampa Bay Water**  
**Member Government Water Conservation Activities**  
**June 2021**

Conservation Activities	Pinellas County	City of St. Petersburg	Hillsborough County	City of Tampa	Pasco County	City of New Port Richey
<b>Programs &amp; Devices</b>						
Retrofit Kits Distributed	-	0	-	5		7
Hose Nozzles	-	2	89	5	6	
Irrigation Evaluations	-	9	7	8	2	
Rain/Soil Moisture Sensor Rebates	-	0	-	4		
<b>Education &amp; Engagement</b>						
Speaking Engagements - # events, #attendees	-	3 / 77	22 / 7,648	3 / 35		
Expos/Fairs/Events	-	0	-	2 / 300		
Tours	-	0	-			
Paper/E-bill conservation message - #recipients	2 / 53,386	0	-		1 @ 100,000	
Hotline Calls/Email Inquiries	93	98	744	25	1,010	
<b>Media</b>						
Conservation Website Users - # visits	-	2,932	818	199	4,376	
E- Newsletter Opens	-	1,144	-			
Twitter Engagements	143	-	-		56	
Facebook Engagements	636	-	1,092			
LinkedIn Engagements	-	-	-			
NextDoor Engagements	-	-	-			
Television Shows/Radio Interviews	-	-	2			
News Releases	-	1	13		1	
<b>Infrastructure Related</b>						
Meter Tests/Changeouts - proactive measure	194	341	33		2,441	29
Reclaimed Water (net new connections)	47	-	-		179	
<b>Enforcement</b>						
Water Restriction Warnings	138	0	438		9	0
Water Restriction Citations	3	0	61	27		0
Water Restriction Enforcement Hours	121.5	2	-	415		
Water Restriction Enforcement Mileage	1707	18	-	2215		



**Tampa Bay Water**  
**Member Government Water Conservation Activities**  
**July 2021**

Conservation Activities	Pinellas County	City of St. Petersburg	Hillsborough County	City of Tampa	Pasco County	City of New Port Richey
<b>Programs &amp; Devices</b>						
Retrofit Kits Distributed	-	2		8		13
Hose Nozzles	-	2	47	41	6	
Irrigation Evaluations	-	13	5	7	2	
Rain/Soil Moisture Sensor Rebates	-	1		4		
<b>Education &amp; Engagement</b>						
Speaking Engagements - # events, #attendees	-	1/25	14/270	2		
Expos/Fairs/Events	-			1		
Tours	-					
Paper/E-bill conservation message - #recipients	-			160,000	1 @ 100,000	
Hotline Calls/Email Inquiries	30	77	981	15	877	
<b>Media</b>						
Conservation Website Users - # visits	-	1710	750	168	2,145	
E- Newsletter Opens	-	987				
Twitter Engagements	134				1	
Facebook Engagements	435		2514			
LinkedIn Engagements	-					
NextDoor Engagements	-					
Television Shows/Radio Interviews	-					
News Releases	-		5			
<b>Infrastructure Related</b>						
Meter Tests/Changeouts - proactive measure	29	458			842	31
Reclaimed Water (net new connections)	-		34		116	
<b>Enforcement</b>						
Water Restriction Warnings	46	0	178		2	0
Water Restriction Citations	1	0	30	17		0
Water Restriction Enforcement Hours	72.5	1		540		
Water Restriction Enforcement Mileage	1605	8		2293		



# Tampa Bay Water Wise Program Update

Agenda Item D.1

September 20, 2021

Amelia Brown  
Demand Management Program Manager  
Tampa Bay Water







# Tampa Bay Water Wise



Residential Rebates	Non-Residential Rebates
\$100 Toilet (Single-family)	\$75 Valve-type toilet
\$75 Toilet (Multi-family)	\$75 Tank-type toilet
\$250 Smart irrigation controller	\$75 Urinal
\$1,000 Shallow well	\$400 Commercial dishwasher
\$1,000 Florida Water Star certification	\$50 Pre-rinse spray valves
	~\$7,000 Cooling tower rebate

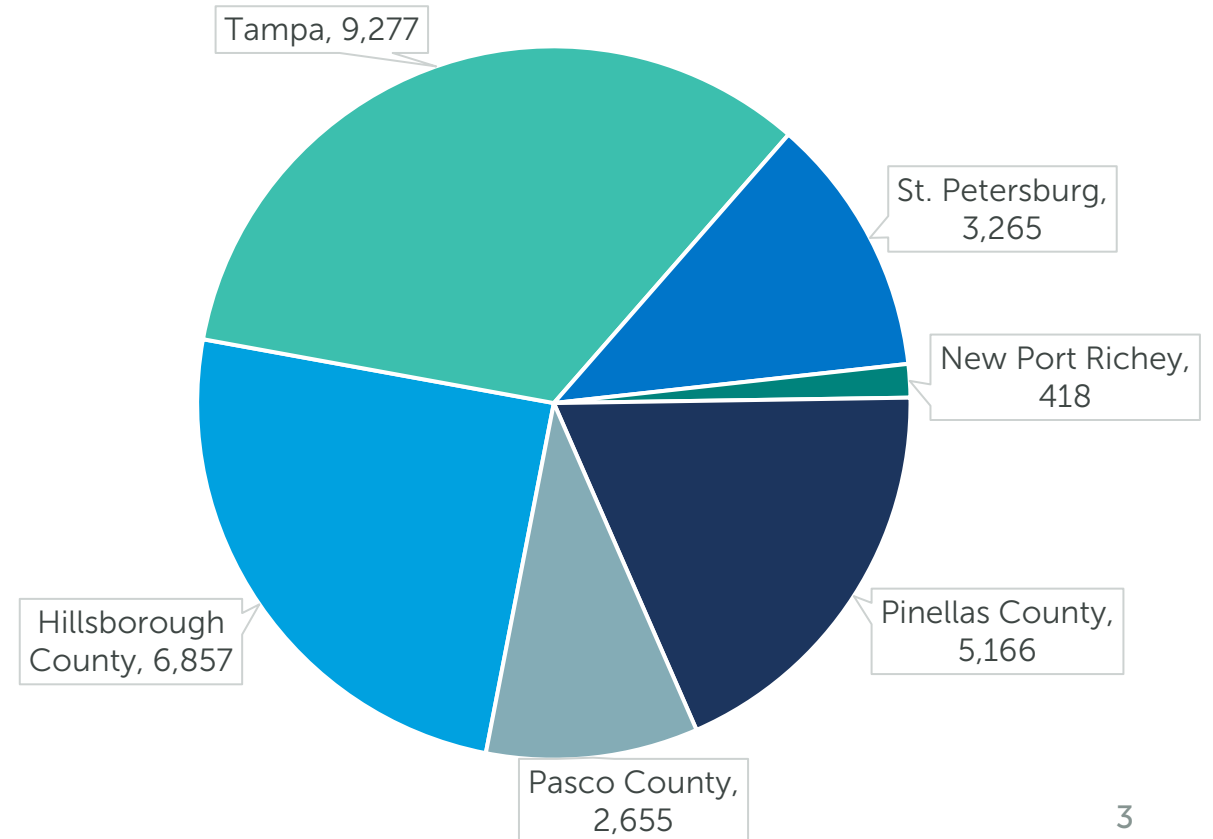


# Tampa Bay Water Wise – Program Progress

Water Savings Since Launch (gallons per day)  
(3/30/20-9/8/21)

Rebate Type	# Rebates Paid
Single-family toilet	510
Multi-family toilet	326
Irrigation controller	4
Commercial toilet	3
Shallow well	1
<b>Total</b>	<b>844</b>

~27,600 gallons per day saved

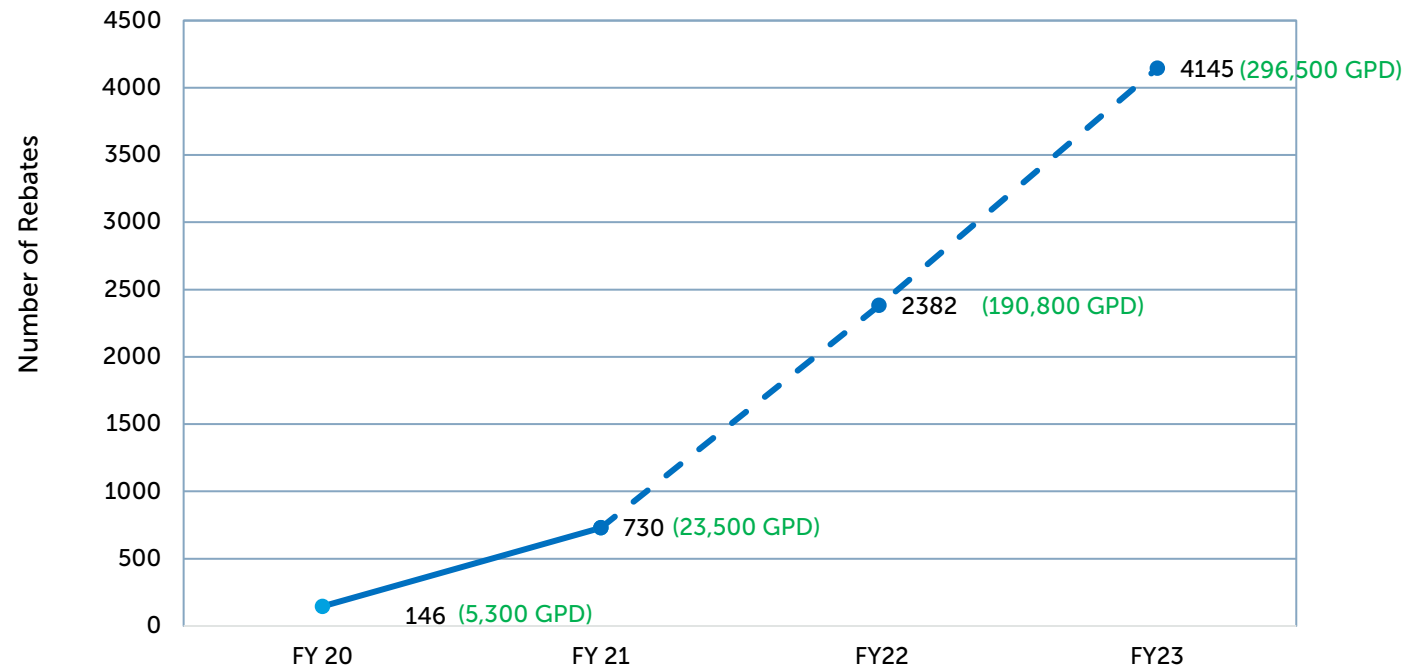




# Tampa Bay Water Wise – Looking Ahead

- Long term goal of saving 11 million gallons per day by 2030
- Developed “high-end yet feasible” projections for fiscal year 2023
- ~300,000 gallons per day water savings projected for fiscal year 2023

Rebate Issuance & Gallons Per Day Saved





# Tampa Bay Water Wise – Looking Ahead

- Applying for District's Cooperative Funding Initiative fiscal year 2023
- Total program costs \$1,608,919
- Requested District share is \$726,891





## New Customizable Rebate

- Commercial & multi-family building projects
- Partnership with District's WISE program
- Provides up to 75% of project costs, with a maximum of \$40,000 per project
- First pilot project nearly complete





- Complementary effort to the supply-side task force
- Participants include County staff, Agency staff, Florida-friendly Landscaping agents, and consultant
- Initiatives we are exploring:
  - Florida-friendly Landscaping engagement with residential high-water users
  - Alternative water supplies for non-residential high-water users
  - Enhancement of watering restriction enforcement
  - Tampa Bay Water Wise





Questions





**DATE:** September 1, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Jonathan M. Kennedy, Engineering Senior Manager

**SUBJECT:** Construction Update - *Presentation*

**SUMMARY**

Tampa Bay Water will provide a presentation of ongoing construction activity.

**SUGGESTED ACTION**

Receive Presentation

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

Tampa Bay Water is constructing a number of Board-approved projects in Hillsborough, Pasco and Pinellas Counties. Staff will present an update on construction progress and activities.

[D.2 Construction Update Presentation](#)



# Construction Update

Agenda Item D.2

September 20, 2021

Rick Menzies, P.E.  
Construction Manager  
Tampa Bay Water





# Projects Closed Out In Fiscal Year 2021

**6 projects closed out  
Total cost of \$6.4 million – 6.2% under budget**

1. Tampa Bypass Canal Pump Station Starters Replacement
2. Surface Water Treatment Plant Entrance Canopy
3. South-Central Hillsborough Wellfield Generators & Pump Motors Replacement
4. South-Central Hillsborough Wellfield Improvements
5. High Service Pump Station Switchgear & Generator Controls Upgrades
6. Purchasing Warehouse Replacement



New Purchasing Warehouse storage area

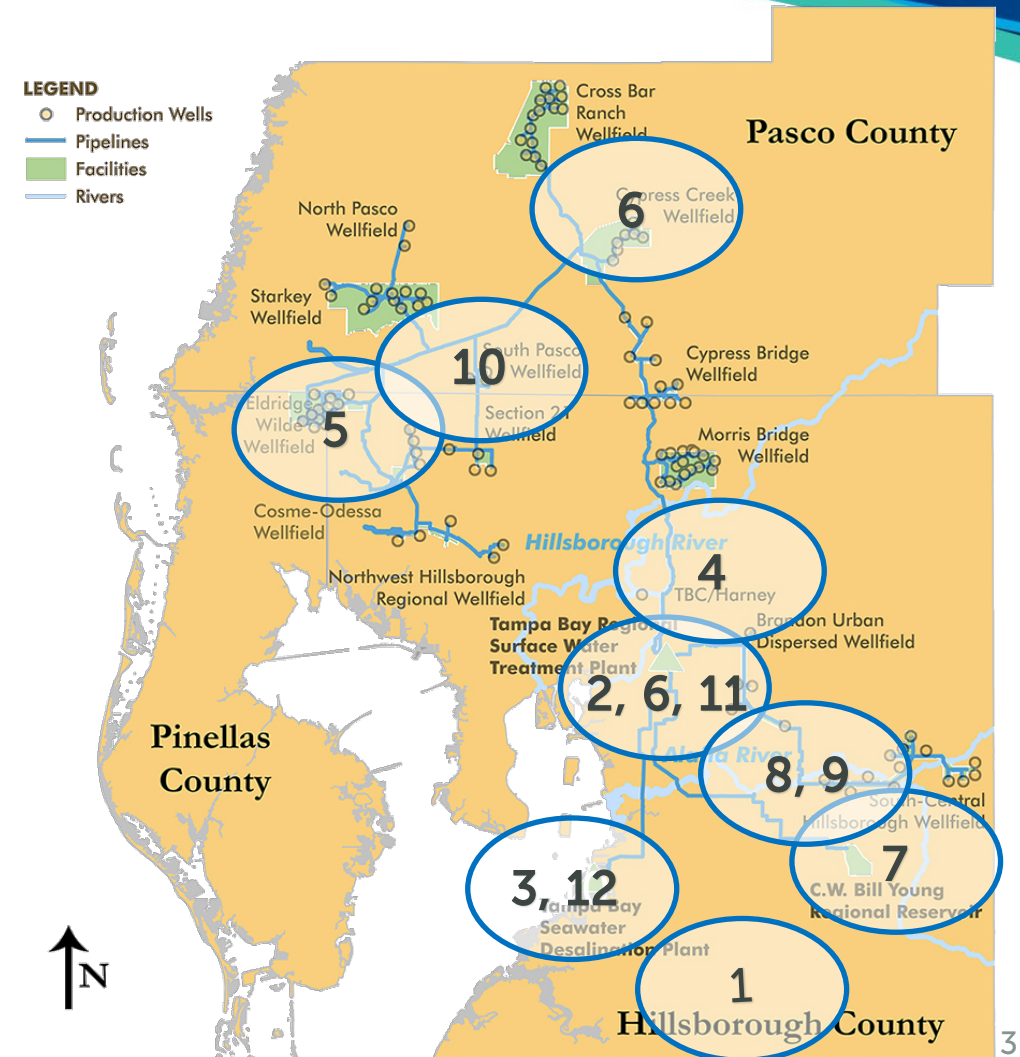


# Current Construction Overview Map

## Current Projects:

1. South Hillsborough test well
2. Regional Facility Pump Station expansion
3. Tampa Bay Desalination Facility intake connection improvements, phase 1
4. Tampa Bypass Canal gates automation
5. Eldridge-Wilde Wellfield improvements
6. Cypress Creek Water Treatment Plant & High Service Pump Station diesel piping improvements
7. C.W. Bill Young Regional Reservoir solar energy system
8. Brandon Booster Station, GMP 1 – Lithia flow control valve
9. Brandon Booster Station, GMP 2 – Early purchase of material
10. South Pasco Water Treatment Plant caustic feed system
11. Repump Station Raw Water Line valve repair
12. Tampa Bay Desalination Facility finished water line repair

Total construction cost: \$25.3 million





# South Hillsborough Wellfield Test Well

- To further assess feasibility of developing new wellfield



Drill rigs set up for the test well and a monitor well



Collecting water samples



Cutting samples

Cost: \$906,290

Completion of construction: September 2021



# Regional Facility Pump Station Expansion

- Increases pumping capacity at the High Service Pump Station



Pump and motor set in place



Variable Frequency Drive and Breaker

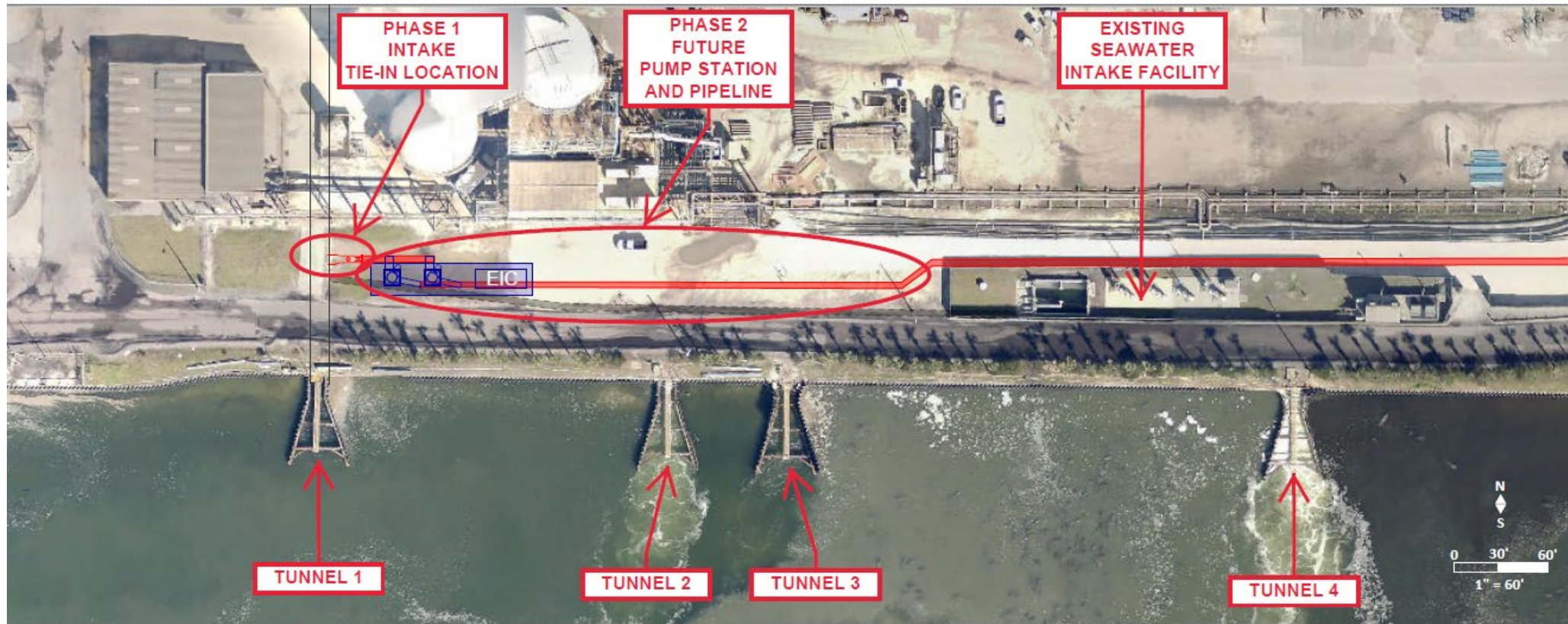
Cost: \$2,168,480 (co-funded by the Southwest Florida Water Management District)

Completion: May 2022



# Tampa Bay Desalination Facility Intake Connection Improvements, Phase 1

- Provides an additional seawater intake location



Aerial photo of Desal intake locations



# Tampa Bay Desalination Facility Intake Connection Improvements, Phase 1



Excavate and expose the side of the tunnel



Cut 6' x 6' opening inside of tunnel



Manhole for valve and 54" stub-out pipe



Cost: \$1,726,000

Completion: December 2021



# Tampa Bypass Canal Gates Automation

- Automates the existing manual slide gates at three flood control structures



Automated actuator



Motorized actuator  
connected to the gate



Setting the open/close limit  
switches

Cost: \$1,028,250 (co-funded by the Southwest Florida Water Management District)  
Completion: December 2021



# Eldridge-Wilde Wellfield Improvements

- Replaces pumps, motors, wellhouses, metering devices and repairs access roads



Wellhouse to be replaced



New gate valves to be installed



New access road installation

Cost: \$13,321,865 (up to \$750,000 in state funding)

Completion: Summer 2023



# Eldridge-Wilde Wellfield Improvements

- Powerline replacement to well sites



Existing powerlines



Clearing of Cypress Trails property



Access road to Lake Dan Preserve

Cost: Tampa Electric \$ 531,528  
Duke Energy \$ 959,879  
Completion: Late 2022



# Cypress Creek Water Treatment Plant & High Service Pump Station Diesel Piping Improvements

- Automates filling and prevents spills



High Service Pump Station diesel fuel tanks



Corrosion in fuel tank to be replaced

Cost: \$373,200  
Completion: Spring 2022



# C.W. Bill Young Regional Reservoir Solar Energy System

- Offsets commercial electric consumption with solar power



Planned location of panels



Site of the new solar array



Example of a solar array

Cost: \$1,495,671

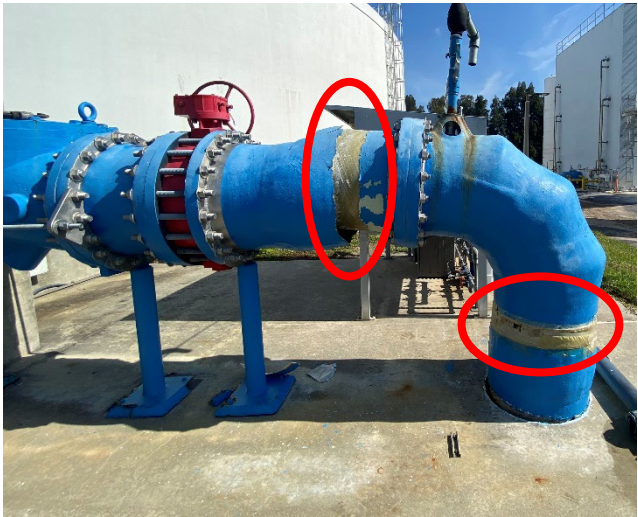
Completion: Summer 2022





# New projects getting started

Project	Contract Amount	Planned Completion
Brandon Booster Station, 1 Lithia point of connection flow control valve	\$ 263,050	Feb 2022
Brandon Booster Station, 2 Early equipment procurement	\$ 3,865,759	Feb 2023
South Pasco Water Treatment Plant caustic feed system	\$ 1,118,050	Sep 2022
Repump station raw water line valve repair	\$ 942,902	Feb 2022
Tampa Bay Desalination Facility finished water line repair	\$ 660,000	Nov 2021







Questions





**DATE:** September 1, 2021  
**TO:** Board of Directors  
**FROM:** Charles H. Carden, Interim General Manager  
**SUBJECT:** Member Government Report - City of St. Petersburg - *Presentation*

**SUMMARY**

The City of St. Petersburg will provide an update on it's water supply system.

**SUGGESTED ACTION**

Presentation

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

As requested by the Board of Directors, each member government utility will be given the opportunity to present on its water supply system and topics of interest at Board meetings. John Palenchar, City of St. Petersburg Water Resources Director and Scott Lewis, Senior Water Resource Manager, will provide a presentation for the City of St. Petersburg at the September 2021 board meeting.

[D.3 Member Government Report St Petersburg Presentation](#)





# ST. PETERSBURG WATER RESOURCES DEPARTMENT

## TAMPA BAY WATER BOARD MEETING

*Challenges and Opportunities Now and in the Future*

September 20, 2021

John E. Palenchar, Director  
R. Scott Lewis, Senior Manager





# OUTLINE

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- Conservation
- Quality
- Infrastructure





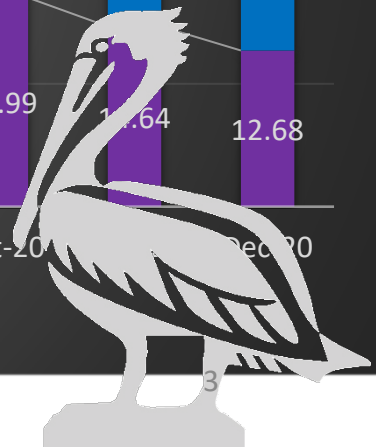
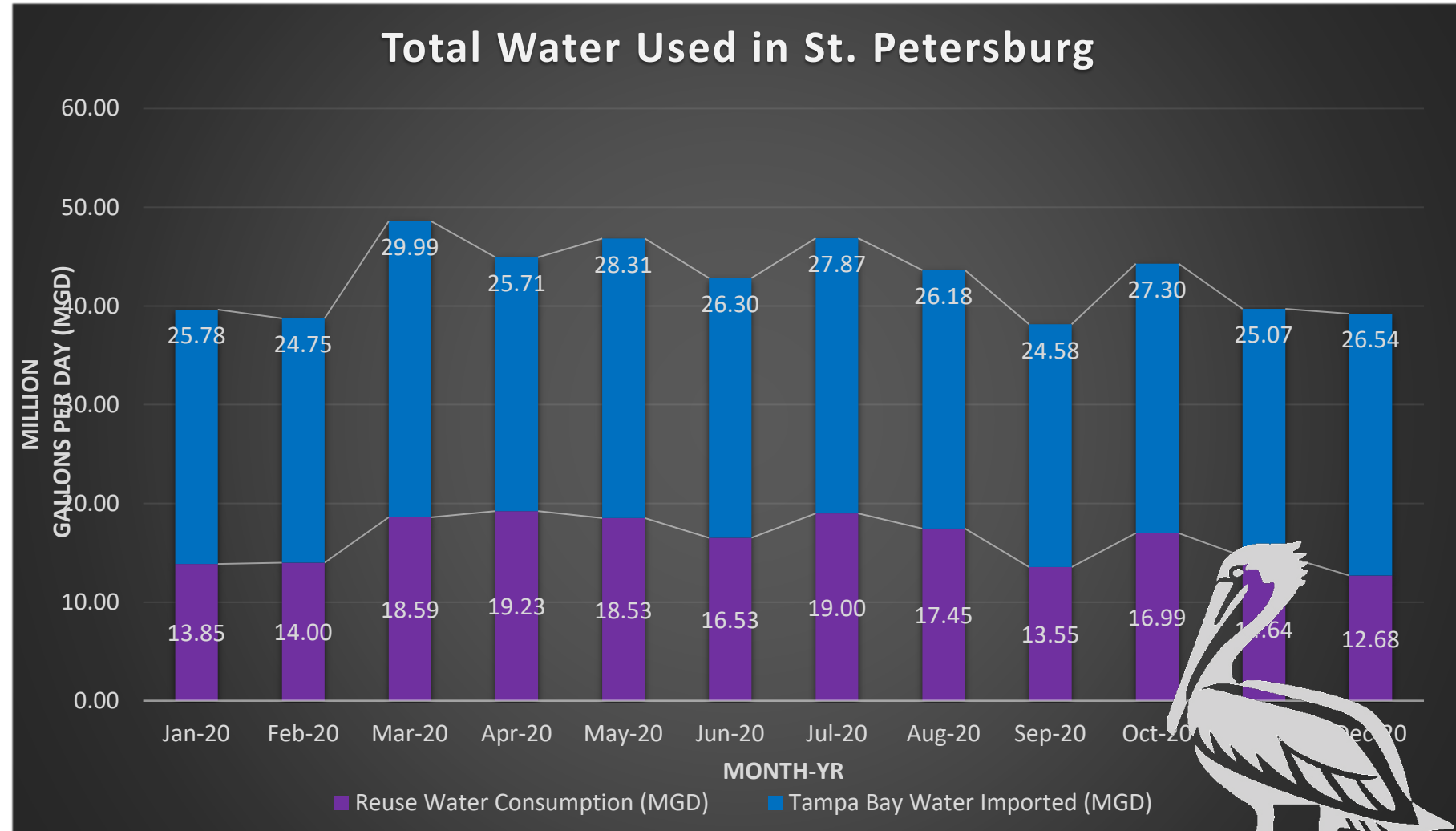
# CONSERVATION

✓ **Conservation**

- Quality
- Infrastructure

## Total Water Consumption

- 43 MGD of water was used in 2020
- 16 MGD or 38% was reclaimed water
- 27 MGD was purchased from TBW





# CONSERVATION

## ✓ Conservation

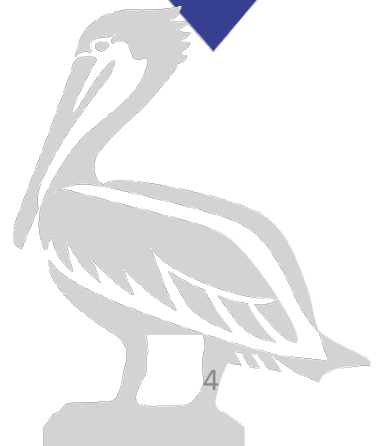
- Quality
- Infrastructure

- The evaluation revealed that reclaimed metering can be done reliably and efficiently with new ultrasonic or electromagnetic metering technology.
- The iPerl Electromagnetic meter has recently begun being used for drinking water and can easily transition to reclaimed metering if desired.
- These meters are Automated Metering Infrastructure (AMI) ready and would not require a physical meter reading be performed.



CITY OF  
ST. PETERSBURG  
FLORIDA

APRIL 2020  
Reclaimed Water Meter  
Evaluation





# CONSERVATION

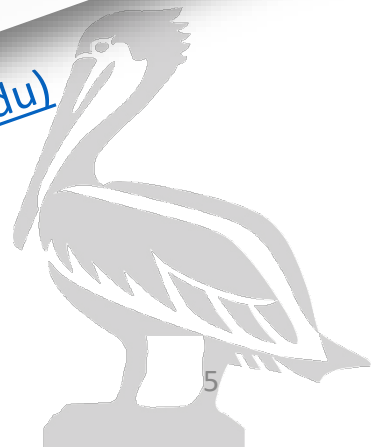
- ✓ Conservation
- Quality
- Infrastructure



## Conservation

These systems allow improved conservation in two main ways. First, notification to both the utility and customer of major and minor leaks and atypical use patterns can help reduce the volume of lost and wasted water. Second, collected data can be offered to customers through web portals, mobile applications, and billing statements providing them with greater access to detailed information of their water use than previously possible. Allowing customers to be more aware of their use, their use as compared to their neighbors' use, and water conservation measures they can apply themselves may cumulatively result in a decrease in demand. Both AMI and AMR systems support leak notification and web portals; however, AMI offers more benefits for conservation than AMR because the data collected is accessible in real time.

*Real-World Example: New York City Department of Environmental Protection has been operating its AMR system since 2009. A large part of its implementation was the customer leak notification system and the "My DEP Account" web portal. Efforts to communicate conservation efforts, usage trends, and leak notification through the web portal and mailed letters have saved customers more than \$26 million dollars since 2011.*





# CONSERVATION

## ✓ Conservation

- Quality
- Infrastructure



## Advanced Metering Infrastructure Roadmap

2022

- AMI Program Conceptual Development

2024

- Earliest Possible AMI Procurement

2026

- Phase II Reclaimed Meter Installations

2028

- Water AMI Planning

2030

- Phase II Water Implementation

2023

- Reclaimed Water AMI Pilot

2025

- Phase I Reclaimed Meter Installations

2027

- Reclaimed Meter AMI Full Activation

2029

- Phase I Water Meter Implementation

2031

- Potable Water AMI Full Activation



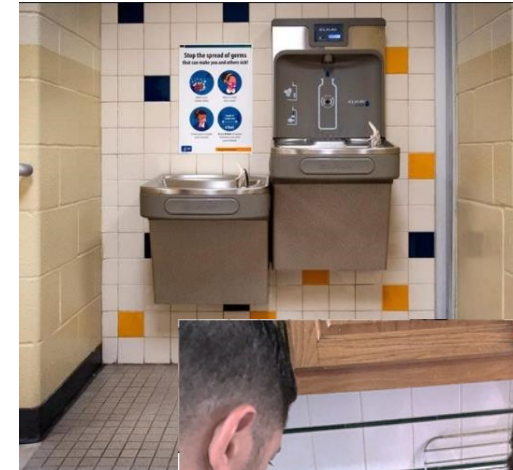


- ✓ Conservation
- ✓ Quality
- Infrastructure

# Water Quality – New Challenges

## Lead and Copper Rule Revisions (LCRR) Timeline

- Federal Register: January 15, 2021
- Effective date: December 16, 2021
- Compliance date: October 16, 2024
- Presidential directive: January 20, 2021 requires review by EPA
- Three potential outcomes from EPA review:
  1. No change
  2. Handful of targeted revisions
  3. Wholesale revision (i.e., new Rule)
- Compliance date may get delayed further to September 2025
- Scenarios 2 and 3 will likely result in even more stringent requirements





# QUALITY

- ✓ Conservation
- ✓ Quality
- Infrastructure

## Plumbing Began with Pb

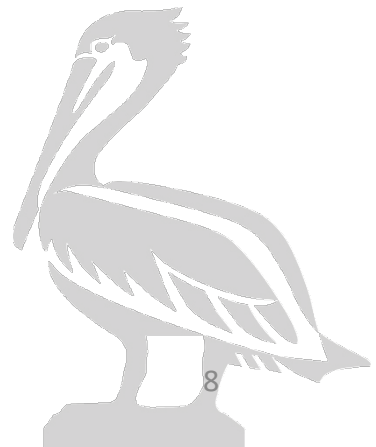
...and Came with Consequences!

A history of benefits

- Usage dates to the Roman Empire
- Resurgence during Industrial Revolution
- By 1900, present in 70% of US cities >30,000
- Applications now found in almost every field

A legacy of health impacts

- Irreversible behavior/development challenges
- Possible carcinogen
- Anemia
- Memory loss
- Pregnancy/fertility issues



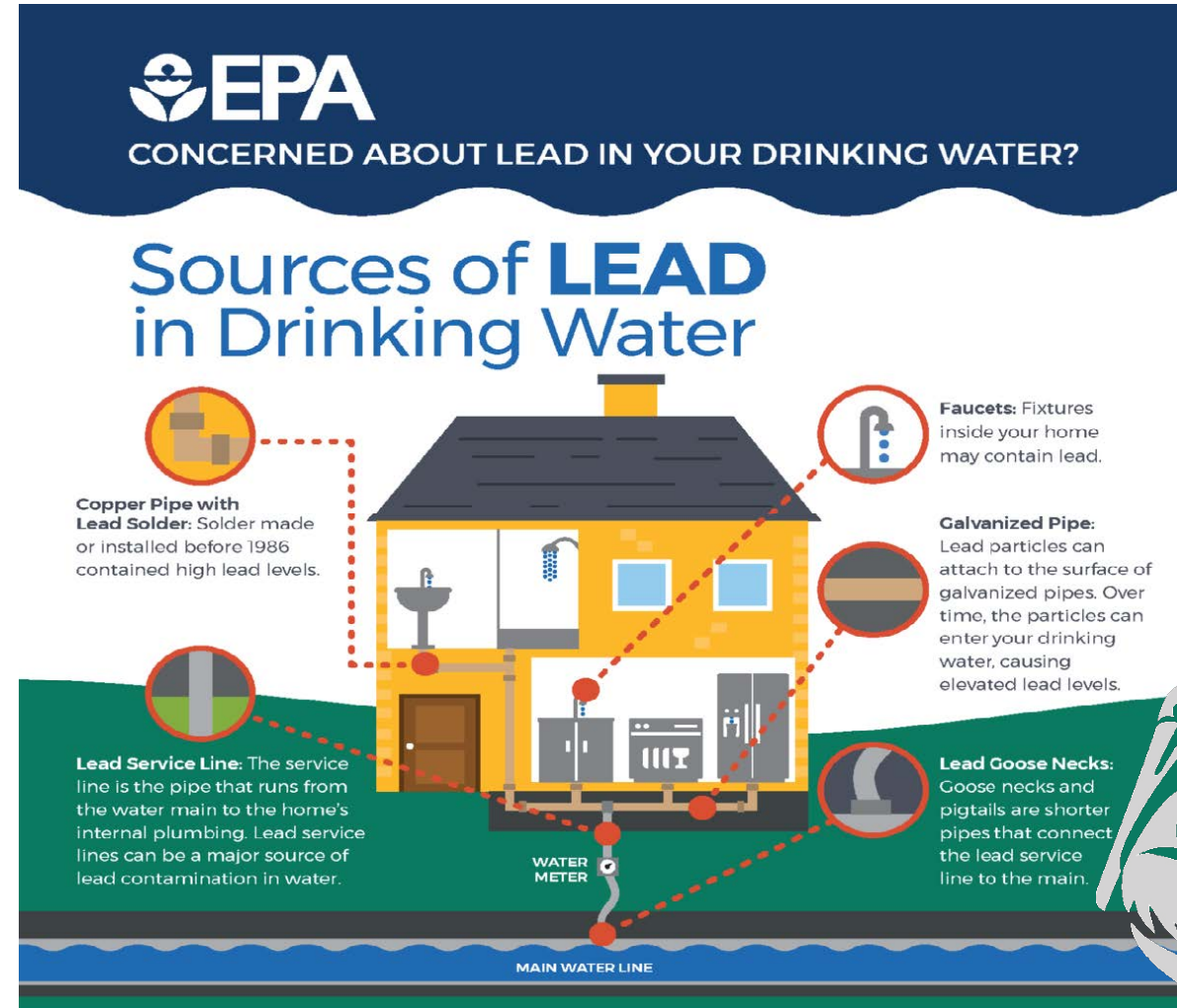


# QUALITY

- ✓ Conservation
- ✓ Quality
- Infrastructure

## Lead has many potential sources

- Service Lines
- Solder
- Meters
- Faucets
- Galvanized Pipe
- Brass
- Bronze



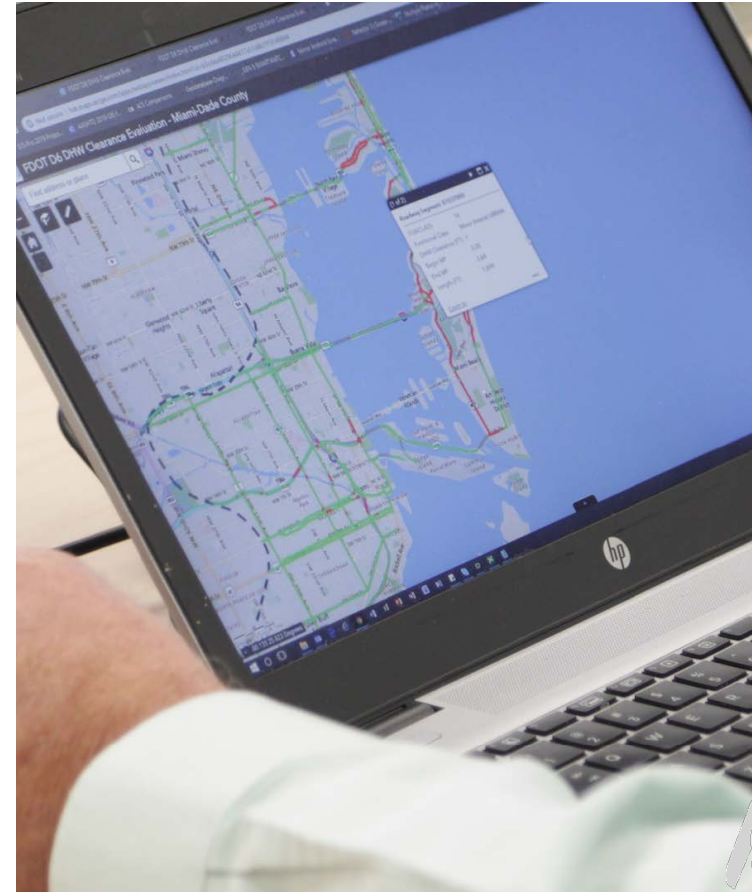


# QUALITY

- ✓ Conservation
- ✓ **Quality**
- Infrastructure

## LCRR Inventory Requirements

- Create an inventory of water system and customer owned service lines
- Classify service line as LSL, Non-LSL, or Unknown
- Identify location (e.g street intersection, landmark)
- Make inventory publicly available
- (>100,000 post on internet)
- Update the LSL inventory annually

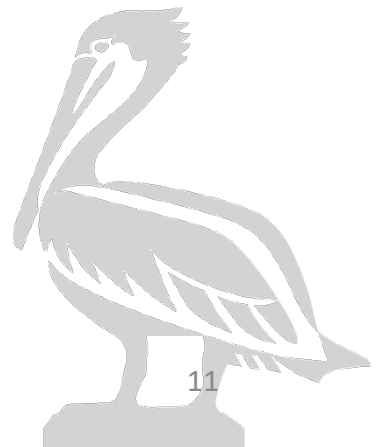
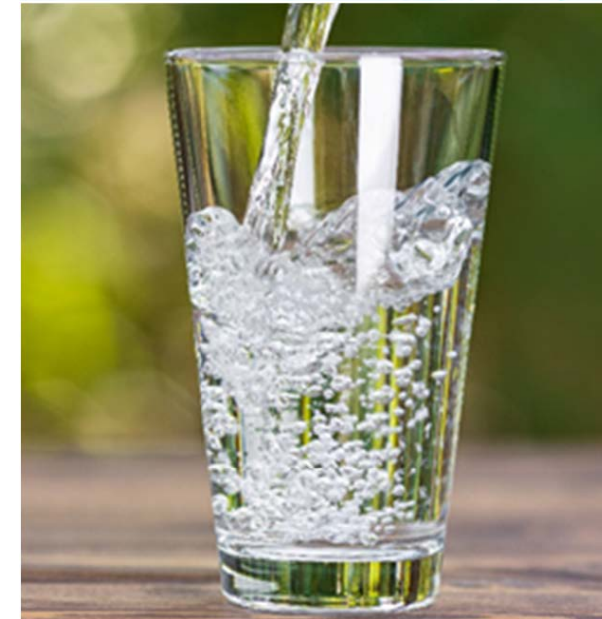




# QUALITY

- ✓ Conservation
- ✓ Quality
- Infrastructure

Regardless of Impact, Communicating is Critical





# QUALITY

- ✓ Conservation
- ✓ **Quality**
- Infrastructure

## Risk Communications

### Gap Analysis

- Who are our Key audiences?
- What do they need to know from us? Do we need anything from them?
- How do we connect with them now? What tools do we already have?
- How do we educate our workforce?
- What are our media protocols? What additional training is needed?





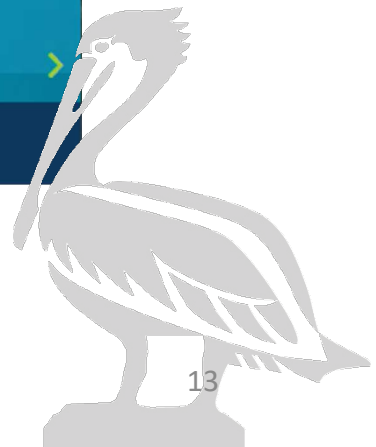
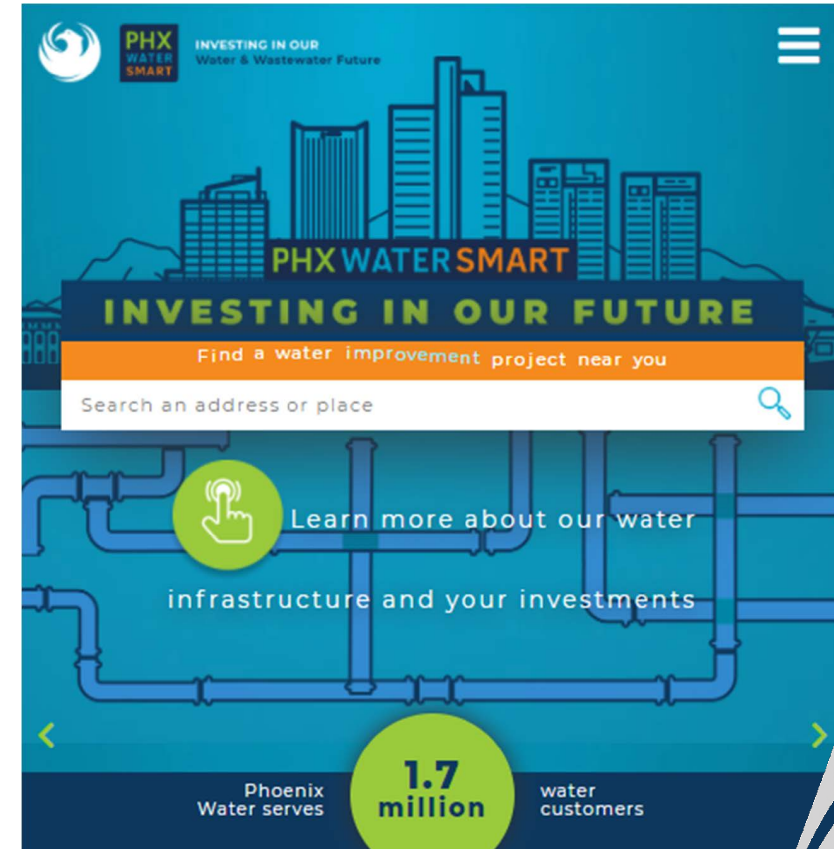
# QUALITY

- ✓ Conservation
- ✓ Quality
- Infrastructure

## Risk Communications

### Public Inventory and More

- Communication Tools
  - Interactive Mapping
  - Dynamic report formats
  - Social media campaign
- Exceedance Notifications
- Schools and Daycares





# QUALITY

- ✓ Conservation
- ✓ Quality
- Infrastructure

## Pinellas County Schools

- 8th largest district in the State
- 27th largest in the U.S.
- 15,000 employees
- 102,000 students. Pre-K through 12th
  - Elementary Schools
  - Largest employer in Pinellas County
- Partnering for success means preparing the school district's internal and external communications for this issue





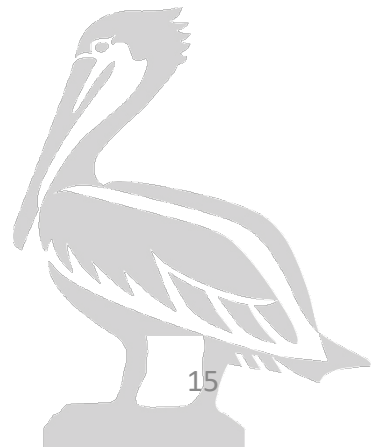
# QUALITY

- ✓ Conservation
- ✓ Quality
- Infrastructure



## Daycares

- More than 400 children's centers are regulated in Pinellas County
  - Drop-in care center
  - An indoor recreational facility
  - Nursery school
  - School age center
  - Religiously exempt from licensure
  - Non-public pre-kindergarten program





# QUALITY

- ✓ Conservation
- ✓ Quality
- Infrastructure

## The Impact of the LCRR will Vary by Utility

### Lead & Copper Rule Revision



### Inventory, Corrosion Control, Renewal Budgets



### Reporting & Sampling



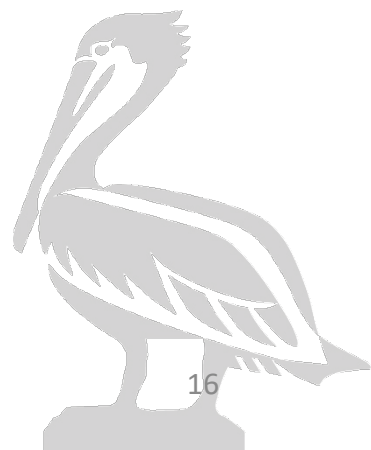
WQ: Near Action Level  
Unknown Materials  
Limited Historic LCR Program

WQ: Low lead levels  
Known materials (public/private)  
Robust historic LCR Program

High

Impact

Low



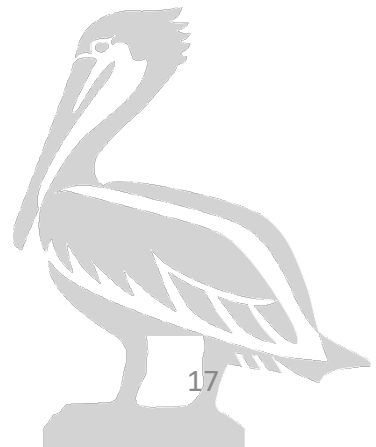


# INFRASTRUCTURE

- ✓ Conservation
- ✓ Quality
- ✓ Infrastructure



- The City of St. Petersburg's Cosme WTP Operational and SCADA Improvements project is the culmination of more than a decade of evaluation and study.
- The overall project combines two previously designed projects: Cosme Main Header Valve Replacement and Cosme WTP Optimization.
- These projects targeted improving effluent water control, blending, bypassing, and quality through piping, chemical, and SCADA improvements and replacing critical high-service pump isolation and control valves.

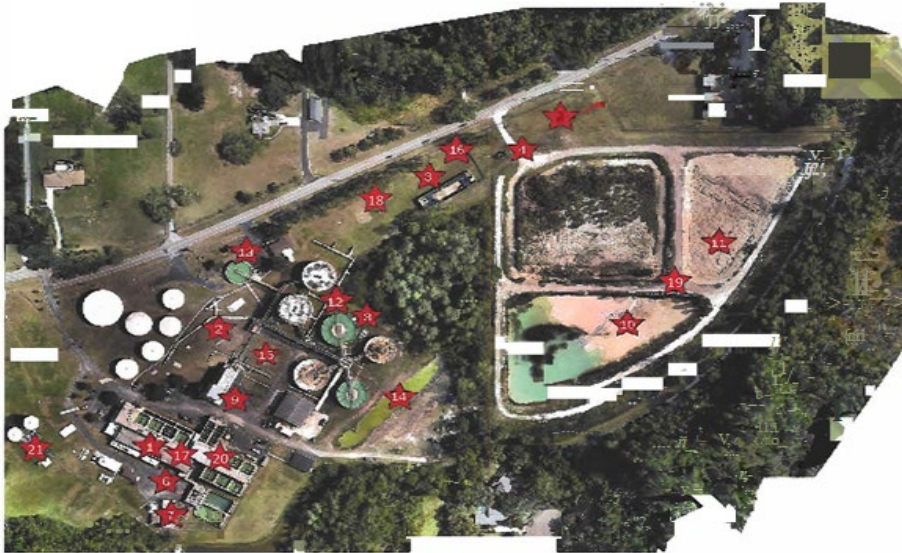




# INFRASTRUCTURE

- ✓ Conservation
- ✓ Quality
- ✓ Infrastructure

## Cosme Capital Projects FY22 through FY26



1. Stormwater roof drainage
2. At-grade yard piping
3. Tampa Bay Water interconnect
4. Eagles Well
5. Eagles Well transmission main
6. Header valve replacement
7. Chlorination system
8. Solids contact basin
9. Lime softening system
10. Lime sludge removal, Phase 1
11. Lime sludge removal, Phase 2
12. Aeration piping
13. Gravity sludge thickener rehab
14. Backwash ditch
15. Corrosion inhibition study
16. Regional distribution interconnect
17. Pipe loop study
18. NW Regional interconnects
19. Sludge lagoon improvements
20. Junction Chamber 2 repairs
21. Cosme optimization





# INFRASTRUCTURE

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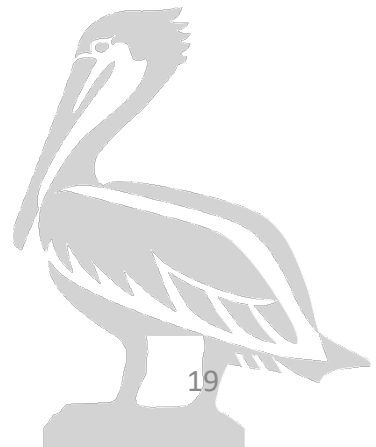
- ✓ Conservation
- ✓ Quality
- ✓ Infrastructure

## Optimization Improvements

- The Optimization project included items to enhance and solidify the plant's chemical feed systems, as well as construct permanent above-ground piping for the plant's Tampa Bay Water interconnect at the entrance and exit of the facility. Review of this project and the Main Header Valve project revealed some overlap in work activities and materials that will be benefited by the joint project approach.

### POWER CONVERSION

- Currently the plant runs on 2,300-volt power, which is an outdated technology, and the City would like to update it to 4,160 volts. Several systems will need to be modified to implement this improvement.
- High Service Pump replacement with conversion from 2,300 to 4,160 volt
- Generator Upgrade dual fuel
- New electrical/switchgear and Control Room outside of 500-year floodplain





# INFRASTRUCTURE

- ✓ Conservation
- ✓ Quality
- ✓ **Infrastructure**

- Evaluating high-service pump capacity and VFD sizing to meet plant capacity of 68 MGD
- New laboratory, breakroom, locker room, kitchen, showers, and bathrooms
- Upgrading/replacing control cabinets
- Evaluating wiring ductbanks
- Constructing a new control console operations building
- Providing stairwell and elevator
- Upgrading all programmable logic controller equipment
- Upgrading plant instrumentation to increase efficiency through automation
- Upgrading/replacing the existing SCADA system
- Providing space to sleep during emergency operations
- Upgrading stormwater and site management





**DATE:** September 1, 2021  
**TO:** Board of Directors  
**THRU:** Charles H. Carden, Interim General Manager  
**FROM:** Division Officers and Directors  
**SUBJECT:** Agency Division Activity Reports for August 2021 - *Receive Report*

**SUMMARY**

The following is an update on current activities for each Tampa Bay Water Division for the month of August 2021.

**SUGGESTED ACTION**

Receive and File

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

The following is an update on current activities for each Tampa Bay Water Division for the month of August 2021.

**Finance and Administration Division**

The Finance and Administration Division is responsible for finances, procurement, risk, vital records and information technology support the agency. Departments include Finance, Purchasing and



Warehouse, Records and Information Technology. The following are major division activities for August 2021.

- Prepared for fiscal year 2021 interim financial statement audit.
- Continued working with vendors and other utilities on addressing chemical shortages and finding a way to get the agency to the front of the line for delivery.
- Requested quotes from vendors for courier services.
- Tested and started implementation of Multi-Factor Authentication on all workstations, servers and network assets.

### *Finance*

Finance manages the budget, payroll, account payables and receivables, capital assets, cash and investments, debt management and financial compliance for the Agency. They also assist with the training and maintenance of the accounting software, Munis.

- Prepared for fiscal year 2021 interim financial statement audit.
- Reviewed finalized reports with Chief Financial Officer for implementation of GASB 87, leases.

### *Purchasing and Warehouse*

Purchasing issues, processes and administers the appropriate solicitations and ensures that all procurement activities are conducted in compliance with statutes, policies and provides best value solutions for the Agency. They also are responsible for the management and accountability of the agency's warehouse and inventory items.

- Continued working with vendors and other utilities on addressing chemical shortages and finding a way to get the agency to the front of the line for delivery.
- Completed selection committee interviews for the Integrated Program Manager contract.

### *Records*

Records manages the central repository for the Agency's records efficiently and effectively through their life cycle and assists staff in complying with applicable public records laws regarding retention, management and disposition of records. They are also responsible for responding to public records requests and assist with agenda preparation. Additionally, they are responsible for managing the Agency's insurance programs and provides staff and vendors assistance regarding required insurance coverage.

- Requested quotes from vendors for courier services.
- Completed and submitted employee performance evaluations for review.

### *Information Technology*

Information Technology designs, builds, supports, manages and maintains information technology



systems, applications, networks and databases to optimize agency productivity. They are responsible for the efficient management and security of the Agency's data, electronic information and network systems. Information Technology is composed of four cross functional areas, Applications, Systems, SCADA and Cybersecurity.

### *Applications*

Applications creates databases that hold the agency's enterprise data, write custom software applications program for other agency departments and provides support of third-party software used by agency staff.

- Implemented improved logging for custom applications to improve reporting and metrics.
- Prepared for final 2021 Long-term Demand Forecast Model production run.

### *Systems*

Systems installs and maintains the agency's computer hardware, data networks, computer operating systems and communication systems. They also perform computer maintenance support throughout the agency, including daily and weekly data backups.

- Tested and started implementation of Multi-Factor Authentication on all workstations, servers and network assets.
- Completed and tested configuration of server infrastructure of agency backup server equipment. Equipment is ready to move to off-site co-location.

### *SCADA*

The SCADA group are responsible for the ongoing development, maintenance and security of the Survalent SCADA system, including managing its communications infrastructure.

- Installed the Archiver Reporting Application (ARA) to provide any easier way to view data.
- Completed multifactor authentication (MFA) deployment in the QA environment and PROD is in progress.

### *Cybersecurity*

Cybersecurity is responsible for monitoring and auditing network and application performance to identify any irregular activity and remediate information technology security vulnerabilities.

- Researched and supported Multi-Factor Authentication capabilities for internal administrator accounts.
- Reviewed all options within the Mobile Device Management program to better support end-user phone functionality.



## **Human Resources Department**

The Human Resources Department is responsible for establishing and administering human resources policies and procedures in accordance with federal, state and local laws and requirements, under the oversight and approval by the agency's general manager and board of directors. In addition, Human Resources is responsible for employee recruitment and retention, benefits administration, employee relations, training and development, employee compensation and oversight of the Employee Appreciation Team. The following are major department activities for August 2021.

- Served as project manager for the recruitment of the General Manager position; coordinated work of the executive recruiting firm; working with Chief Communications Officer and General Counsel on coordination of luncheon and presentation for candidate and special board meeting interviews.
- Participated with other agency leaders on COVID-19 response and communications.
- Continued to conduct employee, co-op students, interviewees, and new employee screening. On August 13, 2021, the Agency returned to 50% telework for non-critical staff. Monitored illness, and potential exposures.
- Participated in the Strategic Planning Workshop on August 19, 2021 as a member of the Executive Management Team and Core Planning Team.
- Continued to negotiate employee insurance renewals with the assistance of Gehring Group. Scheduled virtual open enrollment meetings and employee health screenings by appointment for all employees.
- Reviewed and updated the following policies: Drug-Free Workplace, Motor Vehicle Usage Policy and Motor Vehicle Replacement Policy
- All managers utilized the NEOGOV Perform platform to evaluate employee performance for the past fiscal year. Performance Evaluations are required for all employees eligible for merit increases. Scheduled trainings for all employees in September.
- Held monthly all employee virtual meeting.
- Continued to evaluate formal approach for tracking licenses and/or continuing professional education.

### *COVID-19 Response*

Worked collaboratively with the Interim General Manager, Chief Financial Officer, Chief Science & Technical Officer, Chief Communications Officer, Acting Chief Operating Officer, Information Technology Senior Manager, and Safety Services Manager on plans for the health and safety of agency employees.

- Given the rise in COVID -19 cases in the community, the agency reverted to a 50% telework for all non-critical staff.
- Continued to provide COVID-19 screening pursuant to agency guidelines for employees, co-op students, security officers, full-time consultants and all interviewees who enter Tampa Bay Water properties.
- Worked on updating the COVID-19 Infection Control Guidance



### *Employee Relations*

The Human Resources Department staff identify and resolve employee complaints in an expeditious and equitable manner to prevent complaint escalation and act as a liaison or intermediary between employees and managers and employees in general. In addition, the Human Resources Department encourages that agency policies are fair and are enforced consistently.

- Worked with the Interim General Manager and Chief Communications Officer on finalizing and announcing a reorganization plan to accommodate the retirement of the Chief Science and Technical Officer.
- Began review and approval of annual Performance Evaluations for every employee who is eligible for a merit increase.

### *Employee Recruitment*

- Served as project manager for the recruitment of the General Manager position and coordinating the work of the Executive Recruiting Firm, Colin Baenziger & Associates. to fill General Manager position.
- Information Technology Director position was posted by the Executive Recruitment firm, GOVHR USA. The advertisement was reviewed and approved. In addition, the recruitment brochure was finalized.
- Conducted the recruitment for the following staff positions:

Construction Inspector, Electrician I (North & South), Laboratory Manager, Laboratory Scientist II, Water Plan Operators (North & South), Planning Program Manager, Government Affairs Program Manager (FY22), Construction Project Manager (FY22) and Mechanical Technician (FY22).

- Reviewed the following vacant position descriptions in anticipation of recruitment:

Utility Conflict Coordinator (FY22), Senior Cyber Security Analyst (formerly GIS Administrator), Operations Manager, Regulatory Compliance Engineer and Environmental Regulatory Compliance Senior Manager.

- Hired: Electrician (South)

### *Benefits*

The Human Resources Department is responsible for performing routine benefits administration activities and resolving benefit issues.

- Continued to negotiate employee insurance renewals with the assistance of Gehring Group.
- Scheduled virtual open enrollment meetings and employee health screenings by appointment for all employees



- Processed Family Medical Leave Act (FMLA) applications and answered questions.
- Conducted meetings with employees on a variety of issues, such as: personal illness, family illness, FMLA, worker's compensation, retirement questions, stress, etc.

### *Compensation*

- Updated and amended job descriptions on an as-needed basis. Created a new career ladder for the records analyst position. Worked with MGT Consulting for grade assignment and internal review and approval.
- Reviewed possible additional career ladder positions.

### *Employee Safety*

The Human Resources team is responsible for promoting employee safety practices, reviewing workers compensation cases and participating on the agency safety team.

- Reported workers compensation injury and coordinated care and modified duty recommendations.
- Worked with employees who expressed safety concerns or made suggestions.
- Participated in monthly Safety Team Meeting and met with Safety Services Manager.

### *Training and Development*

- Scheduled NEOGOV Perform platform training for all employees in September.
- Evaluated formal approach for tracking licenses and/or continuing professional education. Coordinated and attended a presentation with NEOGOV and members of the Training Coordination Team of the NEOGOV Train platform that is used for training and has the capability of tracking licenses and continuing education credits. Safety Services is obtaining information regarding the contract with Skillsoft and possible early termination of the contract.
- Coordinate monthly employee meeting and presentations with the safety service manager and the Interim General Manager.

## **Public Affairs Division**

The Public Affairs division develops and executes strategic initiatives to advocate for the agency and its members; builds and maintains the agency reputation; provides education, information and outreach on agency projects, programs and policies to stakeholders; and develops and implements critical water supply plans. Division responsibilities include public communications, outreach and education, and grant funding and government affairs. For August 2021, Public Affairs:

- Managed the agency strategic planning and performance measurement process in coordination with WSP USA, Inc; held sixth workshop on August 19, 2021.
- With Dialogue Public Relations, continued public outreach for the Brandon Booster Station and South Hillsborough Wellfield via Aquifer Recharge Credits projects.



- Met with members of legislative team and internal capital improvement program staff to identify projects for state funding requests.

### *Grant Funding and Government Affairs*

Grant Funding and Government Affairs is responsible for developing and implementing strategic positions and priorities for the Agency's legislative, grant funding and regulatory policy initiatives.

- Met with members of legislative team and internal capital improvement program staff to identify projects for state funding requests.
- Participated in monthly call with federal legislative consultant, Dentons, to discuss legislative and funding changes under the new administration.
- Reviewed applications and scheduled interviews for Government Affairs Program Manager position.

### *Project Public Engagement*

Tampa Bay Water includes public outreach and public engagement in each agency project – from conception to completion. The agency has several on-going projects through the renewal & replacement program, capital improvement program and Long-term Master Water Plan.

- South Hillsborough Wellfield via Aquifer Recharge Credits – coordinated and executed public outreach initiatives including social media posts and ads; updating project frequently asked questions based on initial public feedback; held a virtual community meeting on August 24, Hillsborough County staff participated to respond to questions from the public.
- Brandon Booster Station – reviewed 90% design plans and provided feedback to project team to ensure public input was included; project team and public information sub-consultant, Dialogue Public Relations, visited Hillsborough County's Northwest Water Reclamation Facility to view sound mitigation measures.
- Participated in Masterworks training to learn capital planning and construction management software to track public engagement activities.

### *Public Communications, Outreach and Education*

Public Communications, Outreach and Education develop and execute strategic communications programs that support and promote agency projects, policies and initiatives, and build and maintain relationships with agency stakeholders.

- Launched 2022 Source Water Protection Min-grant program application cycle and managed last-cycle projects including copy and logo reviews of signs for the Florida Botanical Gardens and creating content for the Keep Pinellas Beautiful weekly newsletter.
- Coordinated with the demand management program administrator and working group on the regional marketing campaign for the Tampa Bay Water Wise demand management rebate program.
- Created and executed social media campaigns for Water Quality Month and the 2022 Source



Water Protection Mini-grant program, Tampa Bay Water Wise rebate program, storm preparation tips related to water supply and storage, as well as developed posts regarding job openings, the South Hillsborough Wellfield public meeting, and demand management / conservation.

- Completed activities for the marketing and outreach campaign to promote the Tampa Bay Community Water Wise Awards program in coordination with member government conservation staff and UF/IFAS Extension agents.
- Informed news media and responded to news media requests regarding stories on the emergency siren testing at the regional reservoir, the South Hillsborough Wellfield project and liquid oxygen shortages (conducted 12 interviews on liquid oxygen shortage).
- Completed public information for monthly reservoir emergency siren tests.
- Continued project management to migrate Tampa Bay Water's websites to a more secure content management system and web hosting environment.
- Drafted and distributed the Water News, agency newsletter.

#### *Employee Communications, Graphic and Audio-Visual Coordination*

- Produced videos and social media graphics for all agency social media campaigns.
- Continued work on a guide for staff on setting up documents to be ADA compliant, compiled list of agency PDF documents for accessibility remediation.
- Drafted and distributed The Source employee newsletter.
- Managed audio/visual production for Board meeting and other agency meetings.
- Continued project to upgrade conference and training room audio visual systems.

### **Science and Technical Division**

The Science and Technical Division provides water resource technical support for planning, operations, demand management, water quality and regulatory functions of the Agency. This Activity Report summarizes the key activities of the Systems Decision Support, Environmental Regulatory Compliance, Water Use Permitting and Water Quality Services Departments. For August 2021, Science and Technical:

- Coordinated with engineering on water supply and demand management options for South Hillsborough County.
- Coordinated with WSP, USA on groundwater credit/reclaimed water pricing recommendations for the South Hillsborough Aquifer Recharge Project.
- Worked on the yield and reliability assessment of the City of Tampa's PURE project. Staff conducted four sets of scenarios, each with different future supply and demand outlooks. Results are under internal review.

#### *Planning & Projects*

\*Effective August 23, 2021, the Planning & Projects Department is part of the Engineering Division.



## *Systems Decision Support*

Addresses the Agency's system-wide decision support needs on a multi-scale time horizon: from week-to-week operational support to seasonal resource allocation, annual demand and supply projections, to decadal water supply planning and environmental recovery assessments. Designs, implements, and maintains water resources optimization tools, integrated hydrological models, risk and reliability analysis tools, water demand management and forecasting programs and models all in support of operational, annual budgeting and long-range planning needs. Leads the Agency's effort in climate variability and climate change assessment and adaptation.

- Continued System-Wide Reliability Evaluation (SWRE) model analysis. Also, worked with GSI Environmental Consultant on the 'Calibrating IHM/INTB Model' and the 'Stochastic Bayesian (radar based) Rainfall Time-Series Generation'.
- Continued implementation of seasonal resources allocation modeling tool. Continued working with member government staff on billing data collection and started the Annual Demand Forecast update. We now have all the member governments billing data complete through March.
- Continued implementation of the Tampa Bay Water Wise program, coordinated with member governments working group, implemented refinement to web portal to improve user application experience.

## *Permitting*

The Water Use Permitting Department is responsible for the acquisition and renewal of, and compliance with, Agency Water Use Permits including implementation of the domestic well mitigation program. Work also includes monitoring and management of wetland impacts associated with construction and/or past operation of Agency facilities and infrastructure and management of lands owned by the Agency to maintain appropriate natural habitat.

- Consolidated Water Use Permit renewal – Two Environmental Resource Permit Applications required for the renewal of the Consolidated Permit were submitted to the District in June 2021 and are under current review. A site visit with the district was held in early August for the wetland at the Cypress Creek Wellfield to be mitigated and this permit application is now complete. Staff are currently discussing legal property control with the District and Hillsborough County for the Model Dairy Wetland Mitigation Project site; discussions continue related to Tampa Bay Water acquiring the legal instruments required by the District. Submitted responses to District questions on the Consolidated Permit renewal application in August 2021.
- Lake Augmentation Water Use Permits near the Cross Bar Ranch Wellfield – All four permits were issued by the District on August 12, 2021; staff have published legal notice of the issuance of the renewed permits to allow any affected party to raise issues related to the renewed permits.
- South Hillsborough Wellfield test well construction – Assisted with the completion of construction of the test well and monitor wells required for the aquifer performance test. Test was completed in August 2021.

## *Environmental Regulatory Compliance*



Environmental Regulatory Compliance is responsible for guiding the implementation of an Environmental Management System (EMS) in conformance with ISO 14001, environmental compliance tracking and reporting, and coordination of environmental permit applications and renewals.

- Continued coordination with Engineering, Operations, Water Quality and Water Use Permitting Departments in the development of an Environmental Permitting SOP. This SOP is a critical component in establishing an EMS in conformance with ISO 14001.
- Continued implementation of the project initiated for remediation of surface water management units (SWMUs) for compliance with environmental resource permits at 18 Tampa Bay Water facilities. Second round of SWMU quarterly maintenance activities has been initiated.

#### *Water Quality Services*

Water Quality Services is responsible for laboratory testing, water quality compliance reporting, environmental/hydrologic/hydrobiological monitoring, source water assessment and protection, and water quality treatment support to operations and others.

#### *Laboratory*

- Completed routine monthly water quality compliance reports.
- Completed chloramine decay tests to evaluate odor potential as a function of pH, chloramine dose, and contact time for Northwest Hillsborough production wells.
- Completed monitoring of Northwest Hillsborough transmission main during maintenance.
- Completed interviewing candidates for Laboratory Manager. Continued interviewing for other open positions.

#### *Environmental/Hydrologic /Hydrobiological Monitoring*

- Completed monthly hydrologic monitoring of groundwater/surface water elevations.
- Continued monitoring station upgrades to improve detection, data transfer, and reliability.
- Completed monitoring support for South Hillsborough Wellfield test well program.
- Continued hydrobiological monitoring for the Alafia River and Tampa Bypass Canal.

#### *Source Water Assessment and Protection*

- Continued to enhance source water quality monitoring for the Alafia River and Tampa Bypass Canal.
- Continued to refine watershed data collection and management procedures for the Alafia River and Tampa Bypass Canal.
- Continued to update potential contaminant source inventories and refine source water protection plans for the Alafia River, Tampa Bypass Canal, and wellfields.
- Continued the Alafia watershed fluoride sources study and multi-partner restoration plan.

#### *Water Quality Treatment Support*



- Continued work on Regional Chlorine Maintenance Evaluation report recommendations.
- Completed treatability bench testing for the Regional Water Quality (TOC) Study.
- Continued to assess chloramines stability in the northwest service region.
- Led Water Quality Working Group (WQWG) monthly meeting with member governments.

## **Water Production Division**

The Water Production division is responsible for the operation and maintenance of the agency's water production assets that provide drinking water to the members. Departments within the division include: Buildings & Grounds and Fleet Services, Engineering Construction and Real Estate, Operations & Maintenance, and Safety Services. The following are major division activities for August 2021:

- Provided drinking water to meet member government demands in compliance with Exhibit D and Safe Drinking Water Act water quality standards.
- Reduced production at the Tampa Bay Surface Water Treatment Plant to 30 mgd in response to a shortage of Liquid Oxygen supply.
- Continued running desalination plant pretreatment to provide water to the expansion feasibility study pilot plant.
- Met biweekly with Hillsborough County staff on a Memorandum of Understanding and Joint Project Agreement for a pipeline to supply additional water capacity to South Hillsborough County. Added discussions of stopgap measures to meet increasing demands by the dry season of the first half of 2022 to the agenda.
- Continued design work on Brandon Booster Station to provide additional water capacity to South Hillsborough County.
- Continued construction activities on the Tampa Bay Desalination Facility Intake Connection project, construction began May 10, 2021.

### *Buildings & Grounds and Fleet Services*

The Buildings & Grounds and Fleet Services team is responsible for maintaining the primary physical plants of each facility, including HVAC systems, roadways, fire safety systems, and roofing and coating systems. The team also takes care of the acquisition and maintenance of fleet vehicles for the entire agency. Highlights from the Building & Grounds and Fleet Services team for the month include:

- Continued to closely monitor the nationwide vehicle production situation and modify agency purchasing timelines to account for delays in procurement for the agency fleet. Prepared a July Board Item for FY2022 Fleet Procurement in response to these issues. The item was approved and the majority of FY2022 vehicles have been ordered. Also received the first six FY2021 vehicles, which were ordered before Christmas 2020.
- Completed Roofing repair at Lithia H2S Facilities and have planned roof repair work at the Clearwater Building to begin on September 25th.
- Started a 20 Ton HVAC condenser unit replacement for the main electrical building at the Morris



Bridge Water Treatment facility.

- Completed Painting of all above ground appurtenances at the South Pasco Wellfield.
- Completed work modifying four office spaces at the Cypress Creek Administration Building. Planning Clearwater 2<sup>nd</sup> floor modifications of 3 office spaces.
- Continued installation of an IOT based system to monitor Clearwater Office Building Power, HVAC, and Generator systems with real time alerts and control capabilities.
- Completed tree trimming and invasive species removal at multiple pipeline locations in Brandon and Trinity.

### *Engineering, Construction and Real Estate*

The Engineering, Construction and Real Estate department is responsible for engineering standards and records, project development support, construction of facilities, surveying and acquisition and maintenance of real estate.

- Issued updated version for capital improvement software.
- Continued construction bidding for Cypress Bridge Wellfield Improvements project.
- Completed excavation and TECO Big Bend Tunnel #1 entry for Tampa Bay Desalination Facility Intake Connection Phase I project.

### *Operations & Maintenance*

The Operations & Maintenance team is responsible for ensuring that the Agency's production assets are maintained and operated in a sustainable and resilient manner to fulfill the drinking water needs of the member governments. They provide continuous attention to the system, adjusting to changing conditions and in compliance with permit and environmental recovery constraints. Highlights from the Operations & Maintenance team for the month include:

- Moved the system from typical wet season production mode to primarily groundwater production mode due to a shortage of Liquid Oxygen supply. The Surface Water Treatment Plant production was reduced to 30 mgd, with the balance of the 185 mgd average daily demand being supplied by groundwater sources.
- Mobilized a temporary chlorine feed system to the Lithia Hydrogen Sulfide Removal facility and converted that plant to chlorine rather than ozone due to the Liquid Oxygen supply shortage.
- Completed superchlorination of the Northwest Hillsborough Transmission Main.
- The level in the regional reservoir at the end of the month was 135.31 feet, corresponding to 14.90 billion gallons of storage. Filling was stopped on August 7, 2021.

### *Safety Services*

Safety Services is responsible for agency Safety, Security and Emergency Management. Highlights from Safety Services for July 2021 include:

- The agency COVID-19 response has been adjusted and is no longer in full recovery phase. Delta Variant surveillance is ongoing. There has been some illness reported by agency staff however



there has not been an incident of sustained spread among the staff.

- Continued Hurricane Season Response Readiness and monitoring.
- Scheduled Regional Resiliency Assessment Program Tabletop Drill for November 2, 2021.
- Engaged Hillsborough County Emergency Management to participate in the agency Regional Reservoir Emergency Plan Review and Exercise on September 24, 2021. The event will be conducted virtually due to COVID-19. Facility tours for new members of the Hillsborough County Emergency Management team will be conducted in small groups in the weeks following the event.
- Continued Emergency Response Two Way Radio Enhancement (Florida Fire Code 11.10) surveys for all agency buildings.



**DATE:** September 1, 2021

**TO:** Board of Directors

**FROM:** Barrie Buenaventura, General Counsel

**SUBJECT:** Legal Services Activity Report for August 2021 - *Receive Report*

**SUMMARY**

The General Counsel Activity Report summarizes the major activities and work effort of the General Counsel and provides an update on the status of ongoing litigation and any other matters being handled by Special Counsel.

**SUGGESTED ACTION**

Receive and File

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

The General Counsel provides legal services to the Board and agency staff and manages Special Counsel in their representation of Tampa Bay Water. During August 2021, the major activities and work effort for legal services included:

**Board of Director**

- Attended the August 16 regular Board meeting and advance briefings with Board members.
- Attended August 31 special Board meeting..

**Facilities and Property**



- Reviewed documents for, and advised agency staff regarding, real estate matters.
- Working with staff on property acquisition issues related to the SHARP test well site and production well sites.
- Working with staff on planning for pipeline project property acquisition.
- Working with staff on PURE project concepts.

### **Contracts and Procurement**

- Reviewed contracts and contract amendments for commodities, construction, grants and professional services.
- Advised staff on ongoing procurement matters and assisted with bid review and contract negotiation.
- Prepare Guaranteed Maximum Price contract amendments for booster station CMAR contract.

### **Legislative Activities**

- Prepare legislative summary and recommendations for agency staff.
- Prepare Tampa Bay Water's Regulatory Plan.

### **Science and Technology**

- Working with Special Counsel and staff on PFAS matter.

### **Coordination with Agency Management**

- Participated in weekly meetings with the Interim General Manager and Officers.
- Attended the August 30 orientation session with General Manager candidates.

### **Litigation**

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***Ruben Bazarte, Jr. v. Hillsborough County and Tampa Bay Water*** , Case No. 2018-275, Hillsborough County Circuit Court, Civil Division

**Counsel:** David Smith and Charles Thomas, Gray Robinson Law Firm

**Issue:** Complaint for damages based on allegations that Plaintiff's drinking water was contaminated with reclaimed water and wastewater. The Amended Complaint includes counts against Tampa Bay Water for negligence; violating the Safe Drinking Water Act; product liability; and breach of warranty.

**Status:** The case was dismissed with prejudice on August 3, 2021.

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***Tampa Bay Water v. E.I. Dupont de Nemours and Company, et al.*** Case No. 2:20-cv-1867 RMG, United States District Court for the District of South Carolina, Charleston Division

**Counsel:** Frazer PLC, Napoli Shkolnik, PLLC, Ventura Law, and Frank Charles Miranda, P.A.

**Issue:** Complaint for damages pertaining to PFAS and related compounds including counts for strict



liability, failure to warn, design defect, negligence, private nuisance, public nuisance, and fraudulent conveyance.

**Status:** Complaint filed May 14, 2020



**DATE:** September 1, 2021

**TO:** Board of Directors

**FROM:** Barrie Buenaventura, General Counsel

**SUBJECT:** Legal Services Budget Report for August 2021 - *Receive Report*

**SUMMARY**

This item presents the status of the budget for the General Counsel and legal services for August 2021.

**SUGGESTED ACTION**

Receive and File

**COST/FUNDING SOURCE**

Uniform Rate

**DISCUSSION**

As of August 31, 2021, with invoices received through eleven months of FY 2021, legal expenditures approved for payment totaled \$319,967.66. All expenditures were associated with general operations activities and appropriately paid for from the Uniform Rate. Attached is a spreadsheet showing payments made to each law firm in August 2021.

Attachment (1)

[GC Budget Chart - 2021-8-31](#)



STATUS OF LEGAL BUDGET – FY 2021  
AS OF AUGUST 31, 2021

Law Firm	Tasks	PO Amount & PO Number	Monthly Expenditures	Expenditures to Date	Remaining PO Amount
Brown Law and Consulting, PLLC	Workplace Investigation	\$30,581.66 PO# 21-0199	\$0	\$30,581.66	\$0.00
Busack Law Firm	Real Property and Eminent Domain	\$20,000 PO# 21-0233	\$0	\$0	\$20,000.00
Conn & Buenaventura, P.A.	General Counsel Services (under contract 2018-44 in effect 5/1/2018-4/30/2021)	\$125,125 PO# 20-0232	\$0	\$125,125.00	\$0.00
Conn & Buenaventura, P.A.	General Counsel Services (under contract 2021-049 in effect 5/1/2021-4/30/2023)	\$99,000 PO#21-0487	\$18,114.32	\$44,140.43	\$54,859.57
Conn & Buenaventura, P.A.	Special Assignments Outside Scope of General Counsel Contract	\$20,000 PO# 21-0238	\$0	\$0	\$20,000.00
Dean Mead, P.A.	Legislative, Administrative Law, Environmental Law	\$120,000 PO# 21-0234	\$6,666.67	\$73,523.37	\$46,476.63
Gray Robinson, P.A.	Admin, Construction, Contracts, Civil Claims, Employment, Property, etc.	\$50,000 PO# 21-0235	\$2,475.00	\$39,000.42	\$10,999.58
Nabors, Giblin & Nickerson, P.A.	Admin, Construction, Contracts, Civil Claims, Property, etc.	\$30,000 PO# 21-0236	\$0	\$5,562.78	\$24,437.22
Stearns Weaver	Admin, Construction, Contracts, Civil Claims, Property, etc.	\$20,000 PO# 21-0237	\$0	\$2,034.00	\$17,966.00
<b>TOTALS</b>		<b>\$514,706.66</b>	<b>\$27,255.99</b>	<b>\$319,967.66</b>	<b>\$194,739.00</b>

Total Budget: \$545,000    Allocated Funds: \$514,706.66    Unallocated Funds: \$30,293.34



**DATE:** September 2, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Christina Sackett, Chief Financial Officer

**SUBJECT:** Investment Schedule for July 2021 - *Receive Report*

**SUMMARY**

The attached investment statement and report provides details of Tampa Bay Water's investments as of July 2021.

**SUGGESTED ACTION**

Receive and File

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

The attached Chandler Asset Management Consolidated Statement and Bond Market Review provide a monthly summary of the agency's asset allocations and the drivers of the economy that may affect investment performance.

Chandler Asset Management, the Board's contracted investment advisor, manages a portion of the agency's funds to earn a higher return, without sacrificing or risking principal.

As of July 31, 2021, the funds currently managed by Chandler Asset Management had a Market Value



of \$166,715,488 and are detailed in the attached statement. All the investments are held in a third-party trust account with Regions Bank as custodian.

As of July 31, 2021, the Agency had \$116,803,944 held in deposit accounts or certificates of deposits with multiple banking institutions, with interest rates ranging from .05% to .40%. In addition, these banking institutions participate in the State of Florida Public Funds pool and are designated Public Funds. Under this program, each participating bank is required to post collateral with the State at a percentage of the amount of Public Funds held by that bank. The percentage of collateral required is determined by the State and may vary by institution. Of the funds held by Tampa Bay Water, 64% are restricted as to purpose. An additional \$31.2 million in the Utility Reserve Fund is not restricted as to purpose but must be maintained at levels sufficient to ensure compliance with debt coverage requirements.

## **BACKGROUND**

Resolution 2017-002 approves the Agency's Investment Policy.

US Government Securities - Treasuries (100%) - Collective term used to describe debt instruments backed by the US Government and issued through the US Department of Treasury.

US Government Agency (50%) – A debt instrument issued by one of the Federal Agencies.

Federal Instrumentalities (80%) - A government sponsored/owned entity created by US Congress.

Mortgage-Backed Securities (20%) – An ownership interest in a pool of mortgage loans made by financial institutions to finance the borrower's purchase of a home or other real estate.

Repurchase Agreements (50%) - A short-term investment vehicle where an investor agrees to buy securities from a counterparty and simultaneously agrees to resell the securities back to the counterparty at an agreed upon time for an agreed upon price.

Commercial Paper (25%) – Short term unsecured promissory note issued by a company or financial institution. Issued at a discount and matures for par or face value.

Corporate Note (25%) – A debt instrument issued by a corporation with a maturity of greater than one year and less than ten years.

Bankers' Acceptances (25%) – A draft or bill of exchange drawn upon and accepted by a bank.

Municipal Note/Bond (20%) – A debt instrument issued by a state, local government or public agency.

Supranationals (15%) – A debt instrument issued by the International Bank for Reconstruction and Development, International Finance Corporation or Inter-American Development Bank.

Money Market Mutual Funds (50%) – Market in which short-term debt instruments are issued/traded.



Intergovernmental Investment Pool (25%) – An investment by local governments in which their money is pooled as a method for managing local funds.

Attachments (2)

[Investment Schedule for July 2021 \(1 of 2\)](#)

[Investment Schedule for July 2021 \(2 of 2\)](#)





# Tampa Bay Water Consolidated - Account #10504

## MONTHLY ACCOUNT STATEMENT

JULY 1, 2021 THROUGH JULY 31, 2021

### Chandler Team:

For questions about your account, please call (800) 317-4747,  
or contact [operations@chandlerasset.com](mailto:operations@chandlerasset.com)

**CHANDLER** ASSET MANAGEMENT  
[chandlerasset.com](http://chandlerasset.com)

*Information contained herein is confidential. We urge you to compare this statement to the one you receive from your qualified custodian. Please see Important Disclosures.*



## Portfolio Summary

As of July 31, 2021



## PORTFOLIO CHARACTERISTICS

Average Modified Duration	1.77
Average Coupon	1.50%
Average Purchase YTM	0.99%
Average Market YTM	0.27%
Average S&P/Moody Rating	AA/Aa1
Average Final Maturity	1.84 yrs
Average Life	1.80 yrs

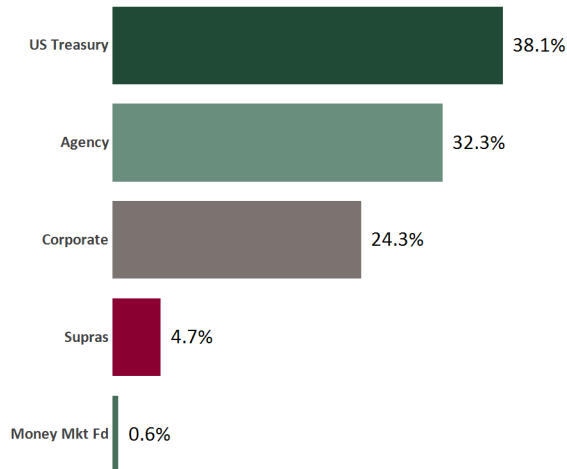
## ACCOUNT SUMMARY

	Beg. Values as of 6/30/21	End Values as of 7/31/21
Market Value	165,812,682	166,114,868
Accrued Interest	614,272	600,620
Total Market Value	<b>166,426,954</b>	<b>166,715,488</b>
Income Earned	144,449	138,772
Cont/WD		
Par	163,079,494	163,211,089
Book Value	164,667,654	164,822,428
Cost Value	164,693,494	165,021,071

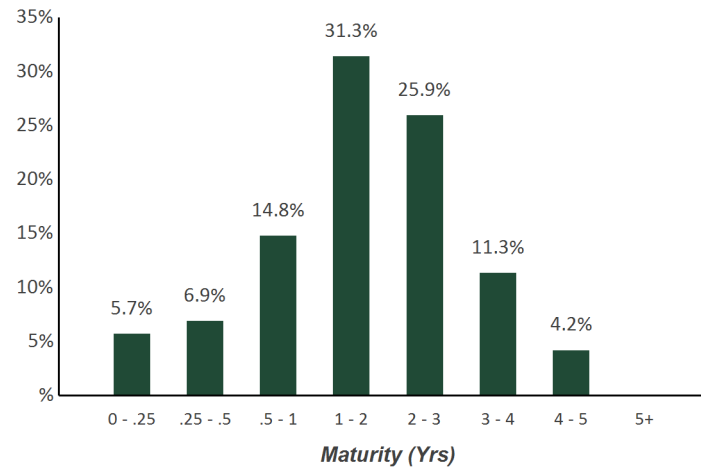
## TOP ISSUERS

Government of United States	38.1%
Federal Home Loan Bank	11.6%
Federal National Mortgage Assoc	9.4%
Federal Home Loan Mortgage Corp	8.5%
Federal Farm Credit Bank	2.7%
Bank of America Corp	2.4%
Intl Bank Recon and Development	2.2%
JP Morgan Chase & Co	1.8%
<b>Total</b>	<b>76.8%</b>

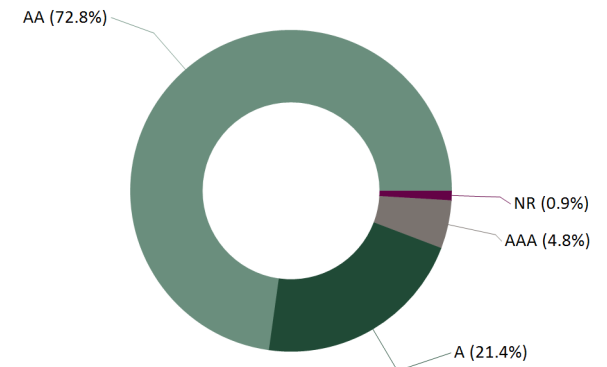
## SECTOR ALLOCATION



## MATURITY DISTRIBUTION



## CREDIT QUALITY (S&amp;P)





## Holdings Report

As of July 31, 2021



CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
<b>AGENCY</b>									
313383ZU8	FHLB Note 3% Due 9/10/2021	500,000.00	08/16/2018 2.76%	503,495.00 500,124.82	100.31 0.16%	501,535.50 5,875.00	0.30% 1,410.68	Aaa / AA+ NR	0.11 0.11
3130AF5B9	FHLB Note 3% Due 10/12/2021	600,000.00	Various 2.93%	601,109.00 600,084.72	100.57 0.09%	603,441.00 5,450.00	0.37% 3,356.28	Aaa / AA+ NR	0.20 0.20
3130AF5B9	FHLB Note 3% Due 10/12/2021	2,150,000.00	Various 2.87%	2,157,416.50 2,150,547.67	100.57 0.09%	2,162,330.25 19,529.17	1.31% 11,782.58	Aaa / AA+ NR	0.20 0.20
313376C94	FHLB Note 2.625% Due 12/10/2021	3,000,000.00	10/01/2018 2.94%	2,970,963.00 2,996,734.90	100.91 0.09%	3,027,210.00 11,156.25	1.82% 30,475.10	Aaa / AA+ AAA	0.36 0.36
313376C94	FHLB Note 2.625% Due 12/10/2021	600,000.00	12/28/2018 2.63%	599,844.00 599,980.99	100.91 0.09%	605,442.00 2,231.25	0.36% 5,461.01	Aaa / AA+ AAA	0.36 0.36
313376C94	FHLB Note 2.625% Due 12/10/2021	500,000.00	02/18/2020 1.46%	510,377.00 502,059.68	100.91 0.09%	504,535.00 1,859.38	0.30% 2,475.32	Aaa / AA+ AAA	0.36 0.36
3137EADB2	FHLMC Note 2.375% Due 1/13/2022	450,000.00	11/14/2019 1.64%	456,952.50 451,452.10	101.03 0.08%	454,647.60 534.38	0.27% 3,195.50	Aaa / AA+ AAA	0.45 0.45
3137EADB2	FHLMC Note 2.375% Due 1/13/2022	1,250,000.00	11/14/2019 1.64%	1,269,312.50 1,254,033.62	101.03 0.08%	1,262,910.00 1,484.38	0.76% 8,876.38	Aaa / AA+ AAA	0.45 0.45
313378WG2	FHLB Note 2.5% Due 3/11/2022	300,000.00	03/28/2019 2.26%	302,073.00 300,428.10	101.48 0.08%	304,429.20 2,916.67	0.18% 4,001.10	Aaa / AA+ NR	0.61 0.60
313378WG2	FHLB Note 2.5% Due 3/11/2022	1,750,000.00	04/15/2019 2.41%	1,754,340.00 1,750,908.94	101.48 0.08%	1,775,837.00 17,013.89	1.08% 24,928.06	Aaa / AA+ NR	0.61 0.60
313378CR0	FHLB Note 2.25% Due 3/11/2022	500,000.00	04/09/2020 0.36%	518,005.00 505,734.73	101.33 0.07%	506,673.50 4,375.00	0.31% 938.77	Aaa / AA+ NR	0.61 0.61
3133ELWD2	FFCB Note 0.375% Due 4/8/2022	370,000.00	04/03/2020 0.45%	369,452.40 369,812.47	100.21 0.06%	370,792.17 435.52	0.22% 979.70	Aaa / AA+ AAA	0.69 0.68
3133ELWD2	FFCB Note 0.375% Due 4/8/2022	500,000.00	04/09/2020 0.36%	500,133.50 500,046.03	100.21 0.06%	501,070.50 588.54	0.30% 1,024.47	Aaa / AA+ AAA	0.69 0.68
3133ELWD2	FFCB Note 0.375% Due 4/8/2022	1,500,000.00	04/09/2020 0.36%	1,500,400.50 1,500,138.10	100.21 0.06%	1,503,211.50 1,765.63	0.90% 3,073.40	Aaa / AA+ AAA	0.69 0.68
3134GVJ66	FHLMC Note 0.25% Due 6/8/2022	500,000.00	06/04/2020 0.28%	499,700.00 499,872.19	100.15 0.07%	500,764.00 184.03	0.30% 891.81	Aaa / NR AAA	0.85 0.85
313379Q69	FHLB Note 2.125% Due 6/10/2022	350,000.00	10/01/2018 2.93%	340,193.00 347,721.16	101.74 0.10%	356,078.80 1,053.65	0.21% 8,357.64	Aaa / AA+ AAA	0.86 0.85



## Holdings Report

As of July 31, 2021



CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
<b>AGENCY</b>									
313379Q69	FHLB Note 2.125% Due 6/10/2022	3,215,000.00	10/01/2018 2.93%	3,124,915.70 3,194,067.27	101.74 0.10%	3,270,838.12 9,678.49	1.97% 76,770.85	Aaa / AA+ AAA	0.86 0.85
313379Q69	FHLB Note 2.125% Due 6/10/2022	500,000.00	07/17/2020 0.22%	517,945.00 508,140.27	101.74 0.10%	508,684.00 1,505.21	0.31% 543.73	Aaa / AA+ AAA	0.86 0.85
3137EAET2	FHLMC Note 0.125% Due 7/25/2022	320,000.00	07/21/2020 0.24%	319,276.80 319,646.30	100.05 0.07%	320,166.40 6.67	0.19% 520.10	Aaa / AA+ AAA	0.98 0.98
3137EAET2	FHLMC Note 0.125% Due 7/25/2022	850,000.00	07/21/2020 0.24%	848,079.00 849,060.49	100.05 0.07%	850,442.00 17.71	0.51% 1,381.51	Aaa / AA+ AAA	0.98 0.98
3130AJY52	FHLB Note 0.125% Due 8/12/2022	500,000.00	08/13/2020 0.22%	499,090.00 499,530.00	100.05 0.07%	500,266.00 293.40	0.30% 736.00	Aaa / AA+ AAA	1.03 1.03
3135G0W33	FNMA Note 1.375% Due 9/6/2022	450,000.00	09/11/2019 1.66%	446,265.00 448,625.93	101.38 0.11%	456,221.70 2,492.19	0.28% 7,595.77	Aaa / AA+ AAA	1.10 1.09
3135G0W33	FNMA Note 1.375% Due 9/6/2022	1,500,000.00	09/11/2019 1.66%	1,487,550.00 1,495,419.77	101.38 0.11%	1,520,739.00 8,307.29	0.92% 25,319.23	Aaa / AA+ AAA	1.10 1.09
3130A3KM5	FHLB Note 2.5% Due 12/9/2022	250,000.00	10/29/2020 0.20%	262,107.50 257,783.39	103.18 0.15%	257,939.75 902.78	0.16% 156.36	Aaa / AA+ NR	1.36 1.34
3135G0T94	FNMA Note 2.375% Due 1/19/2023	350,000.00	07/18/2019 1.87%	355,915.00 352,476.91	103.30 0.13%	361,532.50 277.08	0.22% 9,055.59	Aaa / AA+ AAA	1.47 1.45
3133ELNW0	FFCB Note 1.45% Due 2/21/2023	600,000.00	02/19/2020 1.45%	599,929.80 599,963.55	102.03 0.14%	612,172.80 3,866.67	0.37% 12,209.25	Aaa / AA+ AAA	1.56 1.53
3133ELNW0	FFCB Note 1.45% Due 2/21/2023	1,500,000.00	02/19/2020 1.45%	1,499,824.50 1,499,908.89	102.03 0.14%	1,530,432.00 9,666.67	0.92% 30,523.11	Aaa / AA+ AAA	1.56 1.53
3130ALRG1	FHLB Note 0.125% Due 3/17/2023	380,000.00	03/17/2021 0.18%	379,582.00 379,659.98	99.96 0.15%	379,838.50 175.49	0.23% 178.52	Aaa / AA+ AAA	1.63 1.62
3137EAEQ8	FHLMC Note 0.375% Due 4/20/2023	460,000.00	04/17/2020 0.46%	458,850.00 459,341.51	100.39 0.15%	461,791.24 483.96	0.28% 2,449.73	Aaa / AA+ AAA	1.72 1.71
3137EAEQ8	FHLMC Note 0.375% Due 4/20/2023	1,225,000.00	04/17/2020 0.46%	1,221,937.50 1,223,246.40	100.39 0.15%	1,229,770.15 1,288.80	0.74% 6,523.75	Aaa / AA+ AAA	1.72 1.71
3137EAER6	FHLMC Note 0.375% Due 5/5/2023	1,535,000.00	05/05/2020 0.39%	1,534,355.30 1,534,621.32	100.35 0.17%	1,540,426.23 1,375.10	0.92% 5,804.91	Aaa / AA+ AAA	1.76 1.75
3137EAER6	FHLMC Note 0.375% Due 5/5/2023	575,000.00	05/05/2020 0.39%	574,758.50 574,858.15	100.35 0.17%	577,032.63 515.10	0.35% 2,174.48	Aaa / AA+ AAA	1.76 1.75



## Holdings Report

As of July 31, 2021



CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
<b>AGENCY</b>									
3135G04Q3	FNMA Note 0.25% Due 5/22/2023	460,000.00	05/20/2020 0.35%	458,615.40	100.22	461,001.88	0.28%	Aaa / AA+ AAA	1.81
				459,166.71	0.13%	220.42	1,835.17		1.80
3135G04Q3	FNMA Note 0.25% Due 5/22/2023	1,645,000.00	05/20/2020 0.35%	1,640,048.55	100.22	1,648,582.81	0.99%	Aaa / AA+ AAA	1.81
				1,642,020.09	0.13%	788.23	6,562.72		1.80
3135G05G4	FNMA Note 0.25% Due 7/10/2023	1,435,000.00	07/08/2020 0.32%	1,431,914.75	100.11	1,436,637.34	0.86%	Aaa / AA+ AAA	1.94
				1,433,005.15	0.19%	209.27	3,632.19		1.94
3135G05G4	FNMA Note 0.25% Due 7/10/2023	535,000.00	07/08/2020 0.32%	533,849.75	100.11	535,610.44	0.32%	Aaa / AA+ AAA	1.94
				534,256.28	0.19%	78.02	1,354.16		1.94
3137EAEV7	FHLMC Note 0.25% Due 8/24/2023	565,000.00	08/19/2020 0.28%	564,423.70	100.09	565,524.89	0.34%	Aaa / AA+ AAA	2.07
				564,604.78	0.20%	616.01	920.11		2.06
3137EAEV7	FHLMC Note 0.25% Due 8/24/2023	1,515,000.00	08/19/2020 0.28%	1,513,454.70	100.09	1,516,407.44	0.91%	Aaa / AA+ AAA	2.07
				1,513,940.25	0.20%	1,651.77	2,467.19		2.06
3137EAEW5	FHLMC Note 0.25% Due 9/8/2023	1,030,000.00	09/02/2020 0.26%	1,029,660.10	100.03	1,030,327.54	0.62%	Aaa / AA+ AAA	2.11
				1,029,762.47	0.23%	1,022.85	565.07		2.09
3137EAEW5	FHLMC Note 0.25% Due 9/8/2023	385,000.00	09/02/2020 0.26%	384,872.95	100.03	385,122.43	0.23%	Aaa / AA+ AAA	2.11
				384,911.22	0.23%	382.33	211.21		2.09
3135G0U43	FNMA Note 2.875% Due 9/12/2023	350,000.00	07/18/2019 1.88%	363,793.50	105.63	369,708.15	0.22%	Aaa / AA+ AAA	2.12
				357,024.13	0.20%	3,885.24	12,684.02		2.04
3135G0U43	FNMA Note 2.875% Due 9/12/2023	1,250,000.00	07/18/2019 1.88%	1,299,262.50	105.63	1,320,386.25	0.80%	Aaa / AA+ AAA	2.12
				1,275,086.18	0.20%	13,875.87	45,300.07		2.04
3137EAF2	FHLMC Note 0.25% Due 12/4/2023	1,200,000.00	12/02/2020 0.28%	1,198,812.00	100.09	1,201,083.60	0.72%	Aaa / AA+ AAA	2.35
				1,199,072.38	0.21%	475.00	2,011.22		2.33
3137EAF2	FHLMC Note 0.25% Due 12/4/2023	450,000.00	12/02/2020 0.28%	449,554.50	100.09	450,406.35	0.27%	Aaa / AA+ AAA	2.35
				449,652.14	0.21%	178.13	754.21		2.33
3130A0F70	FHLB Note 3.375% Due 12/8/2023	600,000.00	12/28/2018 2.73%	617,658.00	107.29	643,712.40	0.39%	Aaa / AA+ AAA	2.36
				608,412.77	0.27%	2,981.25	35,299.63		2.27
3130A0F70	FHLB Note 3.375% Due 12/8/2023	1,200,000.00	12/28/2018 2.73%	1,235,316.00	107.29	1,287,424.80	0.78%	Aaa / AA+ AAA	2.36
				1,216,825.54	0.27%	5,962.50	70,599.26		2.27
3130A1XJ2	FHLB Note 2.875% Due 6/14/2024	1,200,000.00	06/14/2019 1.97%	1,251,612.00	107.15	1,285,762.80	0.77%	Aaa / AA+ NR	2.87
				1,229,654.26	0.37%	4,504.17	56,108.54		2.76
3130A1XJ2	FHLB Note 2.875% Due 6/14/2024	750,000.00	06/14/2019 1.97%	782,257.50	107.15	803,601.75	0.48%	Aaa / AA+ NR	2.87
				768,533.91	0.37%	2,815.10	35,067.84		2.76





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<b>AGENCY</b>									
3135G0W66	FNMA Note 1.625% Due 10/15/2024	390,000.00	10/17/2019 1.66%	389,333.10 389,571.85	103.94 0.39%	405,369.12 1,866.04	0.24% 15,797.27	Aaa / AA+ AAA	3.21 3.12
3135G0W66	FNMA Note 1.625% Due 10/15/2024	1,220,000.00	10/17/2019 1.66%	1,217,913.80 1,218,660.67	103.94 0.39%	1,268,077.76 5,837.36	0.76% 49,417.09	Aaa / AA+ AAA	3.21 3.12
3135G04Z3	FNMA Note 0.5% Due 6/17/2025	1,750,000.00	06/17/2020 0.54%	1,746,377.50 1,747,187.80	99.84 0.54%	1,747,201.75 1,069.44	1.05% 13.95	Aaa / AA+ AAA	3.88 3.83
3135G04Z3	FNMA Note 0.5% Due 6/17/2025	655,000.00	06/17/2020 0.54%	653,644.15 653,947.43	99.84 0.54%	653,952.66 400.28	0.39% 5.23	Aaa / AA+ AAA	3.88 3.83
3135G05X7	FNMA Note 0.375% Due 8/25/2025	395,000.00	08/25/2020 0.47%	393,151.40 393,494.97	99.11 0.60%	391,495.56 641.88	0.24% (1,999.41)	Aaa / AA+ AAA	4.07 4.02
3135G05X7	FNMA Note 0.375% Due 8/25/2025	1,050,000.00	08/25/2020 0.47%	1,045,086.00 1,045,999.29	99.11 0.60%	1,040,684.40 1,706.25	0.63% (5,314.89)	Aaa / AA+ AAA	4.07 4.02
3137EAEX3	FHLMC Note 0.375% Due 9/23/2025	1,350,000.00	09/23/2020 0.44%	1,345,936.50 1,346,627.12	99.12 0.59%	1,338,099.75 1,800.00	0.80% (8,527.37)	Aaa / AA+ AAA	4.15 4.10
3137EAEX3	FHLMC Note 0.375% Due 9/23/2025	505,000.00	09/23/2020 0.44%	503,479.95 503,738.29	99.12 0.59%	500,548.43 673.33	0.30% (3,189.86)	Aaa / AA+ AAA	4.15 4.10
3135G06G3	FNMA Note 0.5% Due 11/7/2025	545,000.00	11/09/2020 0.57%	543,048.90 543,329.62	99.52 0.61%	542,397.08 635.83	0.33% (932.54)	Aaa / AA+ AAA	4.27 4.21
3135G06G3	FNMA Note 0.5% Due 11/7/2025	1,455,000.00	11/09/2020 0.57%	1,449,791.10 1,450,540.54	99.52 0.61%	1,448,050.92 1,697.50	0.87% (2,489.62)	Aaa / AA+ AAA	4.27 4.21
<b>Total Agency</b>		<b>52,915,000.00</b>	<b>1.33%</b>	<b>53,027,016.80</b> <b>52,985,056.19</b>	<b>0.22%</b>	<b>53,596,379.34</b> <b>173,279.42</b>	<b>32.25%</b> <b>611,323.15</b>	<b>Aaa / AA+</b> <b>AAA</b>	<b>1.77</b> <b>1.75</b>
<b>CORPORATE</b>									
69371RP42	Paccar Financial Corp Note 3.15% Due 8/9/2021	1,000,000.00	08/06/2018 3.16%	999,690.00 999,997.74	100.05 0.89%	1,000,500.00 15,050.00	0.61% 502.26	A1 / A+ NR	0.02 0.02
69371RP42	Paccar Financial Corp Note 3.15% Due 8/9/2021	350,000.00	08/06/2018 3.16%	349,891.50 349,999.21	100.05 0.89%	350,175.00 5,267.50	0.21% 175.79	A1 / A+ NR	0.02 0.02
89236TDP7	Toyota Motor Credit Corp Note 2.6% Due 1/11/2022	345,000.00	02/23/2021 0.21%	352,217.40 348,676.36	101.05 0.23%	348,637.34 498.33	0.21% (39.02)	A1 / A+ A+	0.45 0.44
91159HHP8	US Bancorp Callable Note Cont 12/23/2021 2.625% Due 1/24/2022	350,000.00	05/01/2017 2.41%	353,262.00 350,332.63	100.95 0.20%	353,337.25 178.65	0.21% 3,004.62	A2 / A+ A+	0.48 0.40



## Holdings Report

As of July 31, 2021



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<b>CORPORATE</b>									
91159HHP8	US Bancorp Callable Note Cont 12/23/2021 2.625% Due 1/24/2022	1,000,000.00	05/01/2017 2.41%	1,009,320.00 1,000,950.36	100.95 0.20%	1,009,535.00 510.42	0.61% 8,584.64	A2 / A+ A+	0.48 0.40
46625HJD3	JP Morgan Chase Note 4.5% Due 1/24/2022	1,000,000.00	05/18/2021 0.16%	1,029,360.00 1,020,752.45	102.05 0.23%	1,020,474.00 875.00	0.61% (278.45)	A2 / A- AA-	0.48 0.48
594918BW3	Microsoft Callable Note Cont 1/6/2022 2.4% Due 2/6/2022	290,000.00	02/23/2021 0.38%	295,524.50 293,017.72	100.96 0.18%	292,774.43 3,383.33	0.18% (243.29)	Aaa / AAA AAA	0.52 0.43
69371RP75	Paccar Financial Corp Note 2.85% Due 3/1/2022	250,000.00	06/23/2020 0.49%	259,870.00 253,407.88	101.54 0.21%	253,841.25 2,968.75	0.15% 433.37	A1 / A+ NR	0.58 0.58
78013X6D5	Royal Bank of Canada Note 2.8% Due 4/29/2022	1,000,000.00	05/18/2021 0.14%	1,025,050.00 1,019,734.16	101.93 0.21%	1,019,275.00 7,155.56	0.62% (459.16)	A2 / A AA-	0.75 0.74
084664BT7	Berkshire Hathaway Note 3% Due 5/15/2022	350,000.00	05/12/2017 2.30%	361,480.00 351,806.34	102.19 0.22%	357,652.75 2,216.67	0.22% 5,846.41	Aa2 / AA A+	0.79 0.78
084664BT7	Berkshire Hathaway Note 3% Due 5/15/2022	1,000,000.00	05/12/2017 2.30%	1,032,800.00 1,005,160.96	102.19 0.22%	1,021,865.00 6,333.33	0.62% 16,704.04	Aa2 / AA A+	0.79 0.78
911312BC9	UPS Callable Note Cont 4/16/2022 2.35% Due 5/16/2022	1,000,000.00	10/01/2018 3.30%	967,750.00 992,968.96	101.50 0.22%	1,015,036.00 4,895.83	0.61% 22,067.04	A2 / A- NR	0.79 0.71
911312BC9	UPS Callable Note Cont 4/16/2022 2.35% Due 5/16/2022	350,000.00	10/01/2018 3.30%	338,712.50 347,539.14	101.50 0.22%	355,262.60 1,713.54	0.21% 7,723.46	A2 / A- NR	0.79 0.71
86787EAT4	Suntrust Bank Callable Note Cont 7/1/2022 2.45% Due 8/1/2022	1,000,000.00	05/18/2021 0.34%	1,025,211.50 1,021,009.58	101.99 0.28%	1,019,872.00 12,250.00	0.62% (1,137.58)	A2 / A A+	1.00 0.90
06406RAK3	Bank of NY Mellon Corp Note 1.95% Due 8/23/2022	1,000,000.00	05/18/2021 0.20%	1,021,980.00 1,018,491.87	101.80 0.25%	1,017,955.00 8,558.33	0.62% (536.87)	A1 / A AA-	1.06 1.05
06406RAK3	Bank of NY Mellon Corp Note 1.95% Due 8/23/2022	450,000.00	06/22/2021 0.22%	459,040.50 458,232.17	101.80 0.25%	458,079.75 3,851.25	0.28% (152.42)	A1 / A AA-	1.06 1.05
06406RAK3	Bank of NY Mellon Corp Note 1.95% Due 8/23/2022	1,250,000.00	06/22/2021 0.22%	1,275,112.50 1,272,867.15	101.80 0.25%	1,272,443.75 10,697.92	0.77% (423.40)	A1 / A AA-	1.06 1.05
06367WRC9	Bank of Montreal Note 2.05% Due 11/1/2022	1,000,000.00	05/18/2021 0.20%	1,026,711.20 1,023,032.11	102.29 0.21%	1,022,929.00 5,125.00	0.62% (103.11)	A2 / A- AA-	1.25 1.23
166764AB6	Chevron Corp Callable Note Cont 9/5/2022 2.355% Due 12/5/2022	350,000.00	07/09/2018 3.17%	338,408.00 346,460.40	102.33 0.22%	358,146.95 1,282.17	0.22% 11,686.55	Aa2 / AA- NR	1.35 1.08





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<b>CORPORATE</b>									
24422EUA5	John Deere Capital Corp Note 2.7% Due 1/6/2023	350,000.00	08/16/2018 3.27%	341,918.50 347,358.36	103.44 0.29%	362,045.60 656.25	0.22% 14,687.24	A2 / A A	1.44 1.41
89236TEL5	Toyota Motor Credit Corp Note 2.7% Due 1/11/2023	350,000.00	08/16/2018 3.27%	341,838.00 347,314.93	103.48 0.28%	362,191.90 525.00	0.22% 14,876.97	A1 / A+ A+	1.45 1.42
06051GGE3	Bank of America Corp Callable Note 1X 1/20/2022 3.124% Due 1/20/2023	500,000.00	01/26/2021 1.74%	513,415.00 509,977.64	101.26 0.42%	506,319.50 477.28	0.30% (3,658.14)	A2 / A- AA-	1.47 0.47
808513AT2	Charles Schwab Corp Callable Note Cont 12/25/2022 2.65% Due 1/25/2023	350,000.00	06/18/2018 3.32%	340,081.00 346,799.94	103.29 0.30%	361,501.00 154.58	0.22% 14,701.06	A2 / A A	1.49 1.38
808513AT2	Charles Schwab Corp Callable Note Cont 12/25/2022 2.65% Due 1/25/2023	1,000,000.00	06/18/2018 3.32%	971,660.00 990,856.98	103.29 0.30%	1,032,860.00 441.67	0.62% 42,003.02	A2 / A A	1.49 1.38
437076AZ5	Home Depot Callable Note Cont 1/1/2023 2.7% Due 4/1/2023	1,000,000.00	04/17/2019 2.73%	999,060.00 999,603.11	103.09 0.51%	1,030,903.00 9,000.00	0.62% 31,299.89	A2 / A A	1.67 1.39
89114QCG1	Toronto Dominion Bank Note 0.75% Due 6/12/2023	1,000,000.00	06/07/2021 0.29%	1,009,290.00 1,008,618.28	100.74 0.35%	1,007,411.00 1,020.83	0.60% (1,207.28)	A1 / A AA-	1.87 1.85
14913R2D8	Caterpillar Financial Service Note 0.65% Due 7/7/2023	1,000,000.00	05/24/2021 0.27%	1,008,090.00 1,007,387.89	100.70 0.29%	1,007,021.00 433.33	0.60% (366.89)	A2 / A A	1.93 1.92
06053FAA7	Bank of America Corp Note 4.1% Due 7/24/2023	500,000.00	05/19/2021 0.33%	540,770.00 537,072.97	107.26 0.42%	536,276.00 398.61	0.32% (796.97)	A2 / A- AA-	1.98 1.92
89236THA6	Toyota Motor Credit Corp Note 1.35% Due 8/25/2023	655,000.00	05/19/2021 0.34%	669,829.20 668,536.58	101.93 0.41%	667,633.64 3,831.75	0.40% (902.94)	A1 / A+ A+	2.07 2.03
89236TFS9	Toyota Motor Credit Corp Note 3.35% Due 1/8/2024	1,000,000.00	05/20/2019 2.69%	1,028,610.00 1,015,049.00	106.87 0.51%	1,068,677.00 2,140.28	0.64% 53,628.00	A1 / A+ A+	2.44 2.35
24422EVN6	John Deere Capital Corp Note 0.45% Due 1/17/2024	705,000.00	03/01/2021 0.47%	704,499.45 704,571.03	100.06 0.43%	705,392.69 123.38	0.42% 821.66	A2 / A A	2.47 2.44
24422EVN6	John Deere Capital Corp Note 0.45% Due 1/17/2024	1,000,000.00	05/24/2021 0.42%	1,000,870.00 1,000,809.66	100.06 0.43%	1,000,557.00 175.00	0.60% (252.66)	A2 / A A	2.47 2.44
78015K7L2	Royal Bank of Canada Note 0.425% Due 1/19/2024	1,250,000.00	06/22/2021 0.52%	1,246,975.00 1,247,097.42	100.04 0.41%	1,250,483.75 177.08	0.75% 3,386.33	A2 / A AA-	2.47 2.45
78015K7L2	Royal Bank of Canada Note 0.425% Due 1/19/2024	450,000.00	06/22/2021 0.52%	448,911.00 448,955.07	100.04 0.41%	450,174.15 63.75	0.27% 1,219.08	A2 / A AA-	2.47 2.45





CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
<b>CORPORATE</b>									
46625HJT8	JP Morgan Chase Note 3.875% Due 2/1/2024	500,000.00	03/28/2019 2.89%	521,940.00 511,348.70	108.33 0.52%	541,667.50 9,687.50	0.33% 30,318.80	A2 / A- AA-	2.51 2.36
808513AY1	Charles Schwab Corp Callable Note Cont 1/1/2024 3.55% Due 2/1/2024	1,000,000.00	05/19/2021 0.52%	1,080,950.00 1,075,038.84	107.56 0.40%	1,075,627.00 17,750.00	0.66% 588.16	A2 / A A	2.51 2.30
89114QCQ9	Toronto Dominion Bank Note 0.55% Due 3/4/2024	1,600,000.00	06/09/2021 0.42%	1,605,504.00 1,605,222.45	100.05 0.53%	1,600,798.40 3,593.33	0.96% (4,424.05)	A1 / A AA-	2.59 2.56
89114QCQ9	Toronto Dominion Bank Note 0.55% Due 3/4/2024	250,000.00	06/09/2021 0.42%	250,860.00 250,816.01	100.05 0.53%	250,124.75 561.46	0.15% (691.26)	A1 / A AA-	2.59 2.56
808513BN4	Charles Schwab Corp Callable Note Cont 2/18/2024 0.75% Due 3/18/2024	110,000.00	03/16/2021 0.77%	109,945.00 109,951.82	100.73 0.46%	110,806.30 304.79	0.07% 854.48	A2 / A A	2.63 2.52
808513BN4	Charles Schwab Corp Callable Note Cont 2/18/2024 0.75% Due 3/18/2024	295,000.00	03/16/2021 0.77%	294,852.50 294,870.80	100.73 0.46%	297,162.35 817.40	0.18% 2,291.55	A2 / A A	2.63 2.52
023135BW5	Amazon.com Inc Callable Note Cont 11/12/2021 0.45% Due 5/12/2024	245,000.00	05/10/2021 0.50%	244,642.30 244,668.74	99.98 0.46%	244,947.82 241.94	0.15% 279.08	A1 / AA AA-	2.78 2.76
023135BW5	Amazon.com Inc Callable Note Cont 11/12/2021 0.45% Due 5/12/2024	655,000.00	05/10/2021 0.50%	654,043.70 654,114.38	99.98 0.46%	654,860.49 646.81	0.39% 746.11	A1 / AA AA-	2.78 2.76
14913R2L0	Caterpillar Financial Service Note 0.45% Due 5/17/2024	1,040,000.00	05/10/2021 0.50%	1,038,606.40 1,038,703.04	100.19 0.38%	1,041,980.16 962.00	0.63% 3,277.12	A2 / A A	2.80 2.77
14913R2L0	Caterpillar Financial Service Note 0.45% Due 5/17/2024	390,000.00	05/10/2021 0.50%	389,477.40 389,513.64	100.19 0.38%	390,742.56 360.75	0.23% 1,228.92	A2 / A A	2.80 2.77
06051GJY6	Bank of America Corp Callable Note Cont 6/14/2023 0.523% Due 6/14/2024	195,000.00	06/07/2021 0.50%	195,012.80 195,012.24	100.02 0.51%	195,041.93 133.14	0.12% 29.69	A2 / A- AA-	2.87 1.86
06051GJY6	Bank of America Corp Callable Note Cont 6/14/2023 0.523% Due 6/14/2024	525,000.00	06/07/2021 0.50%	525,035.20 525,033.66	100.02 0.51%	525,112.88 358.48	0.32% 79.22	A2 / A- AA-	2.87 1.86
79466LAG9	Salesforce.com Inc Callable Note Cont 7/15/2022 0.625% Due 7/15/2024	165,000.00	06/29/2021 0.64%	164,915.85 164,917.38	100.27 0.34%	165,440.55 54.43	0.10% 523.17	A2 / A+ NR	2.96 0.95



## Holdings Report

As of July 31, 2021



CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
<b>CORPORATE</b>									
79466LAG9	Salesforce.com Inc Callable Note Cont 7/15/2022 0.625% Due 7/15/2024	60,000.00	06/29/2021 0.64%	59,969.40 59,969.96	100.27 0.34%	60,160.20 19.79	0.04% 190.24	A2 / A+ NR	2.96 0.95
79466LAG9	Salesforce.com Inc Callable Note Cont 7/15/2022 0.625% Due 7/15/2024	105,000.00	06/29/2021 0.64%	104,946.45 104,947.42	100.27 0.34%	105,280.35 34.64	0.06% 332.93	A2 / A+ NR	2.96 0.95
023135AZ9	Amazon.com Inc Callable Note Cont 6/22/2024 2.8% Due 8/22/2024	950,000.00	06/10/2021 0.57%	1,016,937.00 1,014,179.08	106.56 0.51%	1,012,365.60 11,748.33	0.61% (1,813.48)	A1 / AA AA-	3.06 2.76
023135AZ9	Amazon.com Inc Callable Note Cont 6/22/2024 2.8% Due 8/22/2024	225,000.00	06/10/2021 0.57%	240,853.50 240,200.31	106.56 0.51%	239,770.80 2,782.50	0.15% (429.51)	A1 / AA AA-	3.06 2.76
023135AZ9	Amazon.com Inc Callable Note Cont 6/22/2024 2.8% Due 8/22/2024	575,000.00	06/10/2021 0.57%	615,514.50 613,845.23	106.56 0.51%	612,747.60 7,110.83	0.37% (1,097.63)	A1 / AA AA-	3.06 2.76
46625HKC3	JP Morgan Chase Callable Note Cont 10/23/2024 3.125% Due 1/23/2025	500,000.00	02/22/2021 0.92%	542,330.00 537,649.71	107.46 0.78%	537,284.00 347.22	0.32% (365.71)	A2 / A- AA-	3.48 3.09
46625HKC3	JP Morgan Chase Callable Note Cont 10/23/2024 3.125% Due 1/23/2025	375,000.00	02/22/2021 0.92%	406,747.50 403,237.28	107.46 0.78%	402,963.00 260.42	0.24% (274.28)	A2 / A- AA-	3.48 3.09
00440EAS6	Chubb INA Holdings Inc Note 3.15% Due 3/15/2025	1,000,000.00	03/25/2021 1.06%	1,080,660.00 1,073,692.14	108.44 0.78%	1,084,374.00 11,900.00	0.66% 10,681.86	A3 / A A	3.62 3.41
00440EAS6	Chubb INA Holdings Inc Note 3.15% Due 3/15/2025	360,000.00	03/25/2021 1.06%	389,037.60 386,529.17	108.44 0.78%	390,374.64 4,284.00	0.24% 3,845.47	A3 / A A	3.62 3.41
06051GHR3	Bank of America Corp Callable Note 1X 3/15/2024 3.458% Due 3/15/2025	550,000.00	Various 0.82%	593,740.50 590,003.00	106.74 0.85%	587,081.00 7,184.95	0.36% (2,922.00)	A2 / A- AA-	3.62 2.50
06051GHR3	Bank of America Corp Callable Note 1X 3/15/2024 3.458% Due 3/15/2025	1,500,000.00	Various 0.82%	1,620,105.00 1,609,441.13	106.74 0.85%	1,601,130.00 19,595.34	0.97% (8,311.13)	A2 / A- AA-	3.62 2.50
06367WB85	Bank of Montreal Note 1.85% Due 5/1/2025	800,000.00	07/26/2021 0.84%	829,736.00 829,649.37	103.62 0.87%	828,921.60 3,700.00	0.50% (727.77)	A2 / A- AA-	3.75 3.61
06367WB85	Bank of Montreal Note 1.85% Due 5/1/2025	300,000.00	07/26/2021 0.84%	311,151.00 311,118.51	103.62 0.87%	310,845.60 1,387.50	0.19% (272.91)	A2 / A- AA-	3.75 3.61





CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
<b>CORPORATE</b>									
46647PCK0	JP Morgan Chase & Co Callable Note Cont 6/23/2024 0.969% Due 6/23/2025	400,000.00	07/16/2021 0.85%	400,576.00 400,571.18	100.43 0.82%	401,713.60 409.13	0.24% 1,142.42	A2 / A- AA-	3.90 2.85
46647PCK0	JP Morgan Chase & Co Callable Note Cont 6/23/2024 0.969% Due 6/23/2025	150,000.00	07/16/2021 0.85%	150,216.00 150,214.19	100.43 0.82%	150,642.60 153.43	0.09% 428.41	A2 / A- AA-	3.90 2.85
<b>Total Corporate</b>		<b>39,265,000.00</b>	<b>1.13%</b>	<b>40,125,514.35</b> <b>40,038,905.43</b>	<b>0.45%</b>	<b>40,317,206.58</b> <b>218,820.48</b>	<b>24.31%</b> <b>278,301.15</b>	<b>A2 / A</b> <b>A+</b>	<b>2.02</b> <b>1.82</b>
<b>MONEY MARKET FUND</b>									
192826303	Fidelity Institutional Govt Portfolio	421,728.91	Various 0.01%	421,728.91 421,728.91	1.00 0.01%	421,728.91 0.00	0.25% 0.00	Aaa / AAA NR	0.00 0.00
192826303	Fidelity Institutional Govt Portfolio	350,418.80	Various 0.01%	350,418.80 350,418.80	1.00 0.01%	350,418.80 0.00	0.21% 0.00	Aaa / AAA NR	0.00 0.00
192826303	Fidelity Institutional Govt Portfolio	213,940.95	Various 0.01%	213,940.95 213,940.95	1.00 0.01%	213,940.95 0.00	0.13% 0.00	Aaa / AAA NR	0.00 0.00
<b>Total Money Market Fund</b>		<b>986,088.66</b>	<b>0.01%</b>	<b>986,088.66</b> <b>986,088.66</b>	<b>0.01%</b>	<b>986,088.66</b> <b>0.00</b>	<b>0.59%</b> <b>0.00</b>	<b>Aaa / AAA</b> <b>NR</b>	<b>0.00</b> <b>0.00</b>
<b>SUPRANATIONAL</b>									
459058JV6	Intl. Bank Recon & Development Note 0.125% Due 4/20/2023	1,000,000.00	Various 0.20%	998,583.20 998,752.00	99.88 0.19%	998,830.00 350.69	0.60% 78.00	Aaa / AAA AAA	1.72 1.72
4581X0DM7	Inter-American Dev Bank Note 0.5% Due 5/24/2023	1,000,000.00	05/19/2021 0.19%	1,006,290.00 1,005,672.16	100.55 0.20%	1,005,470.00 930.56	0.60% (202.16)	Aaa / AAA NR	1.81 1.80
4581X0CC0	Inter-American Dev Bank Note 3% Due 10/4/2023	1,000,000.00	06/10/2021 0.23%	1,063,630.00 1,060,002.64	105.88 0.28%	1,058,840.00 9,750.00	0.64% (1,162.64)	Aaa / NR AAA	2.18 2.10
459058GQ0	Intl. Bank Recon & Development Note 2.5% Due 3/19/2024	1,000,000.00	06/07/2021 0.32%	1,060,202.00 1,057,055.35	105.62 0.35%	1,056,200.00 9,166.67	0.64% (855.35)	Aaa / AAA AAA	2.64 2.54
45950KCR9	International Finance Corp Note 1.375% Due 10/16/2024	2,000,000.00	Various 0.47%	2,060,490.00 2,057,549.11	102.88 0.47%	2,057,572.00 8,020.84	1.24% 22.89	Aaa / AAA NR	3.21 3.13
459058JL8	Intl. Bank Recon & Development Note 0.5% Due 10/28/2025	455,000.00	10/21/2020 0.52%	454,485.85 454,563.85	99.32 0.66%	451,894.17 587.71	0.27% (2,669.68)	Aaa / AAA AAA	4.25 4.18



## Holdings Report

As of July 31, 2021



CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
<b>SUPRANATIONAL</b>									
459058JL8	Intl. Bank Recon & Development Note 0.5% Due 10/28/2025	1,220,000.00	10/21/2020 0.52%	1,218,621.40 1,218,830.53	99.32 0.66%	1,211,672.28 1,575.83	0.73% (7,158.25)	Aaa / AAA AAA	4.25 4.18
<b>Total Supranational</b>		<b>7,675,000.00</b>	<b>0.36%</b>	<b>7,862,302.45</b> <b>7,852,425.64</b>	<b>0.40%</b>	<b>7,840,478.45</b> <b>30,382.30</b>	<b>4.72%</b> <b>(11,947.19)</b>	<b>Aaa / AAA</b> <b>AAA</b>	<b>2.84</b> <b>2.78</b>
<b>US TREASURY</b>									
9128282F6	US Treasury Note 1.125% Due 8/31/2021	500,000.00	11/14/2019 1.64%	495,507.81 499,794.25	100.09 0.11%	500,426.50 2,353.94	0.30% 632.25	Aaa / AA+ AAA	0.08 0.08
912828T34	US Treasury Note 1.125% Due 9/30/2021	2,000,000.00	08/18/2017 1.67%	1,956,491.07 1,998,260.80	100.17 0.09%	2,003,458.00 7,561.48	1.21% 5,197.20	Aaa / AA+ AAA	0.17 0.17
912828T34	US Treasury Note 1.125% Due 9/30/2021	1,075,000.00	Various 1.68%	1,051,502.63 1,074,062.54	100.17 0.09%	1,076,858.68 4,064.30	0.65% 2,796.14	Aaa / AA+ AAA	0.17 0.17
912828T34	US Treasury Note 1.125% Due 9/30/2021	250,000.00	11/26/2019 1.63%	247,714.84 249,796.27	100.17 0.09%	250,432.25 945.18	0.15% 635.98	Aaa / AA+ AAA	0.17 0.17
912828YP9	US Treasury Note 1.5% Due 10/31/2021	350,000.00	12/30/2019 1.61%	349,330.08 349,909.01	100.35 0.08%	351,239.00 1,326.77	0.21% 1,329.99	Aaa / AA+ AAA	0.25 0.25
9128285L0	US Treasury Note 2.875% Due 11/15/2021	375,000.00	02/20/2020 1.44%	384,184.57 376,538.02	100.81 0.10%	378,019.88 2,285.16	0.23% 1,481.86	Aaa / AA+ AAA	0.29 0.29
912828U65	US Treasury Note 1.75% Due 11/30/2021	875,000.00	Various 2.72%	846,950.20 872,327.54	100.56 0.08%	879,870.25 2,593.92	0.53% 7,542.71	Aaa / AA+ AAA	0.33 0.33
912828U65	US Treasury Note 1.75% Due 11/30/2021	450,000.00	Various 2.70%	436,092.77 448,650.90	100.56 0.08%	452,504.70 1,334.01	0.27% 3,853.80	Aaa / AA+ AAA	0.33 0.33
9128285R7	US Treasury Note 2.625% Due 12/15/2021	375,000.00	02/25/2021 0.08%	382,617.19 378,547.73	100.95 0.08%	378,574.13 1,264.09	0.23% 26.40	Aaa / AA+ AAA	0.38 0.37
9128285V8	US Treasury Note 2.5% Due 1/15/2022	375,000.00	03/04/2020 0.68%	387,641.60 378,100.07	101.11 0.07%	379,160.25 433.08	0.23% 1,060.18	Aaa / AA+ AAA	0.46 0.46
912828Z60	US Treasury Note 1.375% Due 1/31/2022	500,000.00	03/19/2020 0.46%	508,457.03 502,269.26	100.65 0.08%	503,242.00 18.68	0.30% 972.74	Aaa / AA+ AAA	0.50 0.50
9128286C9	US Treasury Note 2.5% Due 2/15/2022	375,000.00	03/04/2020 0.66%	388,315.43 378,702.89	101.31 0.08%	379,907.25 4,324.93	0.23% 1,204.36	Aaa / AA+ AAA	0.55 0.54



## Holdings Report

As of July 31, 2021



CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
<b>US TREASURY</b>									
912828ZA1	US Treasury Note 1.125% Due 2/28/2022	500,000.00	03/19/2020 0.44%	506,660.16 501,979.29	100.61 0.07%	503,066.50 2,353.94	0.30% 1,087.21	Aaa / AA+ AAA	0.58 0.58
9128286H8	US Treasury Note 2.375% Due 3/15/2022	500,000.00	04/29/2020 0.21%	520,292.97 506,704.99	101.43 0.09%	507,148.50 4,485.39	0.31% 443.51	Aaa / AA+ AAA	0.62 0.62
912828W89	US Treasury Note 1.875% Due 3/31/2022	550,000.00	07/31/2018 2.81%	532,275.39 546,794.20	101.19 0.09%	556,531.25 3,465.68	0.34% 9,737.05	Aaa / AA+ AAA	0.67 0.66
912828W89	US Treasury Note 1.875% Due 3/31/2022	1,000,000.00	07/31/2018 2.81%	967,773.44 994,171.28	101.19 0.09%	1,011,875.00 6,301.23	0.61% 17,703.72	Aaa / AA+ AAA	0.67 0.66
912828W89	US Treasury Note 1.875% Due 3/31/2022	500,000.00	04/29/2020 0.21%	515,957.03 505,516.57	101.19 0.09%	505,937.50 3,150.61	0.31% 420.93	Aaa / AA+ AAA	0.67 0.66
9128286M7	US Treasury Note 2.25% Due 4/15/2022	500,000.00	04/29/2020 0.21%	519,941.41 507,167.75	101.52 0.10%	507,597.50 3,319.67	0.31% 429.75	Aaa / AA+ AAA	0.71 0.70
912828ZM5	US Treasury Note 0.125% Due 4/30/2022	300,000.00	12/30/2020 0.12%	300,023.44 300,013.15	100.04 0.07%	300,117.30 94.77	0.18% 104.15	Aaa / AA+ AAA	0.75 0.75
912828ZM5	US Treasury Note 0.125% Due 4/30/2022	450,000.00	03/30/2021 0.08%	450,210.94 450,145.25	100.04 0.07%	450,175.95 142.15	0.27% 30.70	Aaa / AA+ AAA	0.75 0.75
9128286U9	US Treasury Note 2.125% Due 5/15/2022	375,000.00	02/25/2021 0.12%	384,140.63 380,921.81	101.61 0.09%	381,020.63 1,689.03	0.23% 98.82	Aaa / AA+ AAA	0.79 0.79
912828XR6	US Treasury Note 1.75% Due 5/31/2022	1,100,000.00	Various 2.75%	1,063,132.81 1,091,366.92	101.38 0.09%	1,115,210.80 3,260.93	0.67% 23,843.88	Aaa / AA+ AAA	0.83 0.83
912828XR6	US Treasury Note 1.75% Due 5/31/2022	450,000.00	11/14/2019 1.60%	451,634.77 450,533.77	101.38 0.09%	456,222.60 1,334.02	0.27% 5,688.83	Aaa / AA+ AAA	0.83 0.83
912828ZR4	US Treasury Note 0.125% Due 5/31/2022	500,000.00	08/28/2020 0.14%	499,843.75 499,925.79	100.04 0.08%	500,195.50 105.87	0.30% 269.71	Aaa / AA+ AAA	0.83 0.83
9128286Y1	US Treasury Note 1.75% Due 6/15/2022	425,000.00	04/29/2021 0.08%	432,968.75 431,165.60	101.46 0.08%	431,192.25 955.09	0.26% 26.65	Aaa / AA+ AAA	0.87 0.87
912828ZX1	US Treasury Note 0.125% Due 6/30/2022	400,000.00	10/29/2020 0.16%	399,796.88 399,888.75	100.05 0.07%	400,187.60 43.48	0.24% 298.85	Aaa / AA+ AAA	0.92 0.92
9128287C8	US Treasury Note 1.75% Due 7/15/2022	425,000.00	04/29/2021 0.10%	433,483.40 431,694.38	101.59 0.09%	431,740.08 343.58	0.26% 45.70	Aaa / AA+ AAA	0.96 0.95
91282CAC5	US Treasury Note 0.125% Due 7/31/2022	500,000.00	08/28/2020 0.14%	499,843.75 499,918.63	100.04 0.08%	500,215.00 1.70	0.30% 296.37	Aaa / AA+ AAA	1.00 1.00



## Holdings Report

As of July 31, 2021



CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
<b>US TREASURY</b>									
912828TJ9	US Treasury Note 1.625% Due 8/15/2022	375,000.00	02/25/2021 0.14%	383,159.18 380,780.05	101.58 0.11%	380,917.88 2,811.21	0.23% 137.83	Aaa / AA+ AAA	1.04 1.03
91282CAG6	US Treasury Note 0.125% Due 8/31/2022	400,000.00	10/29/2020 0.15%	399,796.88 399,880.25	100.03 0.10%	400,124.80 209.24	0.24% 244.55	Aaa / AA+ AAA	1.08 1.08
912828YF1	US Treasury Note 1.5% Due 9/15/2022	375,000.00	12/28/2020 0.13%	383,774.41 380,756.01	101.57 0.10%	380,903.25 2,124.66	0.23% 147.24	Aaa / AA+ AAA	1.13 1.11
912828L57	US Treasury Note 1.75% Due 9/30/2022	400,000.00	04/29/2021 0.12%	409,250.00 407,589.29	101.91 0.11%	407,656.40 2,352.46	0.25% 67.11	Aaa / AA+ AAA	1.17 1.15
912828L57	US Treasury Note 1.75% Due 9/30/2022	1,250,000.00	04/29/2021 0.12%	1,278,906.25 1,273,716.52	101.91 0.11%	1,273,926.25 7,351.43	0.77% 209.73	Aaa / AA+ AAA	1.17 1.15
91282CAN1	US Treasury Note 0.125% Due 9/30/2022	1,500,000.00	Various 0.11%	1,500,175.79 1,500,210.03	100.02 0.10%	1,500,351.00 630.12	0.90% 140.97	Aaa / AA+ AAA	1.17 1.17
912828YK0	US Treasury Note 1.375% Due 10/15/2022	500,000.00	10/20/2020 0.15%	512,089.84 507,347.42	101.53 0.11%	507,656.00 2,028.69	0.31% 308.58	Aaa / AA+ AAA	1.21 1.20
912828YK0	US Treasury Note 1.375% Due 10/15/2022	1,300,000.00	03/30/2021 0.12%	1,325,136.72 1,319,645.04	101.53 0.11%	1,319,905.60 5,274.59	0.79% 260.56	Aaa / AA+ AAA	1.21 1.20
912828YK0	US Treasury Note 1.375% Due 10/15/2022	450,000.00	03/30/2021 0.12%	458,701.17 456,800.20	101.53 0.11%	456,890.40 1,825.82	0.28% 90.20	Aaa / AA+ AAA	1.21 1.20
9128283C2	US Treasury Note 2% Due 10/31/2022	400,000.00	11/23/2020 0.16%	414,171.88 409,153.51	102.35 0.12%	409,390.80 2,021.74	0.25% 237.29	Aaa / AA+ AAA	1.25 1.23
91282CAR2	US Treasury Note 0.125% Due 10/31/2022	1,000,000.00	05/27/2021 0.10%	1,000,312.50 1,000,273.51	100.02 0.11%	1,000,195.00 315.90	0.60% (78.51)	Aaa / AA+ AAA	1.25 1.25
912828TY6	US Treasury Note 1.625% Due 11/15/2022	400,000.00	11/23/2020 0.17%	411,500.00 407,512.48	101.95 0.11%	407,812.40 1,377.72	0.25% 299.92	Aaa / AA+ AAA	1.29 1.28
91282CAX9	US Treasury Note 0.125% Due 11/30/2022	500,000.00	12/23/2020 0.12%	500,039.06 500,026.89	100.01 0.12%	500,039.00 105.87	0.30% 12.11	Aaa / AA+ AAA	1.33 1.33
912828YW4	US Treasury Note 1.625% Due 12/15/2022	1,000,000.00	Various 0.12%	1,023,450.19 1,020,561.45	102.06 0.13%	1,020,586.00 2,086.75	0.61% 24.55	Aaa / AA+ AAA	1.38 1.36
91282CBD2	US Treasury Note 0.125% Due 12/31/2022	425,000.00	04/29/2021 0.14%	424,867.19 424,887.44	100.00 0.12%	425,016.58 46.20	0.25% 129.14	Aaa / AA+ AAA	1.42 1.41
912828Z29	US Treasury Note 1.5% Due 1/15/2023	1,000,000.00	06/10/2021 0.12%	1,021,914.06 1,019,997.05	102.00 0.13%	1,019,961.00 692.93	0.61% (36.05)	Aaa / AA+ AAA	1.46 1.44



## Holdings Report

As of July 31, 2021



CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
<b>US TREASURY</b>									
91282CBG5	US Treasury Note 0.125% Due 1/31/2023	1,000,000.00	06/07/2021 0.13%	999,882.81 999,893.32	99.99 0.13%	999,922.00 3.40	0.60% 28.68	Aaa / AA+ AAA	1.50 1.50
912828P79	US Treasury Note 1.5% Due 2/28/2023	1,000,000.00	05/27/2021 0.13%	1,024,062.50 1,021,622.46	102.16 0.14%	1,021,562.00 6,277.17	0.62% (60.46)	Aaa / AA+ AAA	1.58 1.56
91282CBN0	US Treasury Note 0.125% Due 2/28/2023	1,000,000.00	Various 0.14%	999,742.19 999,781.73	99.98 0.13%	999,844.00 523.09	0.60% 62.27	Aaa / AA+ AAA	1.58 1.58
912828ZD5	US Treasury Note 0.5% Due 3/15/2023	650,000.00	03/19/2020 0.57%	648,628.90 649,256.59	100.58 0.14%	653,757.65 1,227.58	0.39% 4,501.06	Aaa / AA+ AAA	1.62 1.62
912828ZD5	US Treasury Note 0.5% Due 3/15/2023	1,500,000.00	03/19/2020 0.57%	1,496,835.95 1,498,284.45	100.58 0.14%	1,508,671.50 2,832.88	0.91% 10,387.05	Aaa / AA+ AAA	1.62 1.62
912828ZD5	US Treasury Note 0.5% Due 3/15/2023	1,000,000.00	Various 0.15%	1,006,550.78 1,005,736.18	100.58 0.14%	1,005,781.00 1,888.58	0.60% 44.82	Aaa / AA+ AAA	1.62 1.62
912828Q29	US Treasury Note 1.5% Due 3/31/2023	1,500,000.00	12/10/2019 1.64%	1,493,261.72 1,496,608.51	102.23 0.16%	1,533,457.50 7,561.48	0.92% 36,848.99	Aaa / AA+ AAA	1.67 1.64
912828Q29	US Treasury Note 1.5% Due 3/31/2023	850,000.00	12/10/2019 1.64%	846,181.64 848,078.16	102.23 0.16%	868,959.25 4,284.84	0.52% 20,881.09	Aaa / AA+ AAA	1.67 1.64
912828R28	US Treasury Note 1.625% Due 4/30/2023	1,000,000.00	06/10/2021 0.15%	1,027,851.56 1,025,786.98	102.54 0.17%	1,025,430.00 4,106.66	0.62% (356.98)	Aaa / AA+ AAA	1.75 1.72
912828VB3	US Treasury Note 1.75% Due 5/15/2023	600,000.00	03/03/2020 0.70%	619,921.87 611,130.30	102.82 0.17%	616,898.40 2,225.54	0.37% 5,768.10	Aaa / AA+ AAA	1.79 1.76
912828VB3	US Treasury Note 1.75% Due 5/15/2023	1,500,000.00	03/03/2020 0.70%	1,549,804.69 1,527,825.76	102.82 0.17%	1,542,246.00 5,563.86	0.93% 14,420.24	Aaa / AA+ AAA	1.79 1.76
912828VB3	US Treasury Note 1.75% Due 5/15/2023	1,000,000.00	06/10/2021 0.15%	1,030,820.31 1,028,584.41	102.82 0.17%	1,028,164.00 3,709.24	0.62% (420.41)	Aaa / AA+ AAA	1.79 1.76
912828ZU7	US Treasury Note 0.25% Due 6/15/2023	1,000,000.00	06/10/2021 0.15%	1,001,914.06 1,001,781.07	100.14 0.17%	1,001,406.00 321.04	0.60% (375.07)	Aaa / AA+ AAA	1.87 1.87
912828T26	US Treasury Note 1.375% Due 9/30/2023	730,000.00	06/14/2021 0.20%	749,647.27 748,544.02	102.50 0.22%	748,250.00 3,373.26	0.45% (294.02)	Aaa / AA+ AAA	2.17 2.13
912828WE6	US Treasury Note 2.75% Due 11/15/2023	1,200,000.00	02/23/2021 0.18%	1,283,812.50 1,270,490.19	105.74 0.24%	1,268,859.60 6,994.57	0.77% (1,630.59)	Aaa / AA+ AAA	2.29 2.22
912828WE6	US Treasury Note 2.75% Due 11/15/2023	400,000.00	02/23/2021 0.18%	427,937.50 423,496.73	105.74 0.24%	422,953.20 2,331.52	0.26% (543.53)	Aaa / AA+ AAA	2.29 2.22



## Holdings Report

As of July 31, 2021



CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
<b>US TREASURY</b>									
91282CBA8	US Treasury Note 0.125% Due 12/15/2023	1,500,000.00	12/28/2020 0.18%	1,497,597.66 1,498,075.46	99.72 0.24%	1,495,840.50 240.78	0.90% (2,234.96)	Aaa / AA+ AAA	2.38 2.37
91282CBA8	US Treasury Note 0.125% Due 12/15/2023	1,000,000.00	06/14/2021 0.23%	997,304.69 997,443.44	99.72 0.24%	997,227.00 160.52	0.60% (216.44)	Aaa / AA+ AAA	2.38 2.37
91282CBE0	US Treasury Note 0.125% Due 1/15/2024	1,500,000.00	05/24/2021 0.25%	1,494,960.94 1,495,316.02	99.67 0.26%	1,495,078.50 86.62	0.90% (237.52)	Aaa / AA+ AAA	2.46 2.45
912828V80	US Treasury Note 2.25% Due 1/31/2024	1,500,000.00	03/03/2020 0.72%	1,588,183.59 1,556,380.68	104.94 0.27%	1,574,121.00 91.71	0.94% 17,740.32	Aaa / AA+ AAA	2.50 2.44
912828V80	US Treasury Note 2.25% Due 1/31/2024	600,000.00	03/03/2020 0.72%	635,273.44 622,552.28	104.94 0.27%	629,648.40 36.68	0.38% 7,096.12	Aaa / AA+ AAA	2.50 2.44
912828W48	US Treasury Note 2.125% Due 2/29/2024	1,250,000.00	04/15/2019 2.37%	1,236,035.16 1,242,609.62	104.75 0.28%	1,309,375.00 11,115.83	0.79% 66,765.38	Aaa / AA+ AAA	2.58 2.51
912828W48	US Treasury Note 2.125% Due 2/29/2024	500,000.00	04/29/2019 2.32%	495,605.47 497,655.92	104.75 0.28%	523,750.00 4,446.33	0.32% 26,094.08	Aaa / AA+ AAA	2.58 2.51
91282CBR1	US Treasury Note 0.25% Due 3/15/2024	1,000,000.00	05/27/2021 0.26%	999,804.69 999,817.11	99.92 0.28%	999,180.00 944.29	0.60% (637.11)	Aaa / AA+ AAA	2.62 2.61
912828X70	US Treasury Note 2% Due 4/30/2024	600,000.00	05/30/2019 2.09%	597,609.38 598,664.93	104.63 0.31%	627,773.40 3,032.61	0.38% 29,108.47	Aaa / AA+ AAA	2.75 2.67
912828X70	US Treasury Note 2% Due 4/30/2024	1,250,000.00	11/14/2019 1.64%	1,269,384.77 1,261,942.83	104.63 0.31%	1,307,861.25 6,317.93	0.79% 45,918.42	Aaa / AA+ AAA	2.75 2.67
91282CCC3	US Treasury Note 0.25% Due 5/15/2024	1,000,000.00	05/27/2021 0.31%	998,359.38 998,457.85	99.81 0.32%	998,125.00 529.89	0.60% (332.85)	Aaa / AA+ AAA	2.79 2.78
91282CCG4	US Treasury Note 0.25% Due 6/15/2024	1,000,000.00	06/09/2021 0.31%	998,125.00 998,205.41	99.77 0.33%	997,734.00 321.04	0.60% (471.41)	Aaa / AA+ AAA	2.88 2.86
912828XX3	US Treasury Note 2% Due 6/30/2024	1,300,000.00	03/30/2021 0.42%	1,366,371.09 1,359,493.55	104.80 0.34%	1,362,461.10 2,260.87	0.82% 2,967.55	Aaa / AA+ AAA	2.92 2.84
912828XX3	US Treasury Note 2% Due 6/30/2024	450,000.00	03/30/2021 0.42%	472,974.61 470,593.92	104.80 0.34%	471,621.15 782.61	0.28% 1,027.23	Aaa / AA+ AAA	2.92 2.84
91282CCL3	US Treasury Note 0.375% Due 7/15/2024	400,000.00	07/15/2021 0.44%	399,218.75 399,230.17	100.09 0.35%	400,343.60 69.29	0.24% 1,113.43	Aaa / AA+ AAA	2.96 2.94
912828YY0	US Treasury Note 1.75% Due 12/31/2024	350,000.00	01/30/2020 1.36%	356,384.77 354,436.63	104.46 0.43%	365,613.15 532.61	0.22% 11,176.52	Aaa / AA+ AAA	3.42 3.32



## Holdings Report

As of July 31, 2021



CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
<b>US TREASURY</b>									
912828YY0	US Treasury Note 1.75% Due 12/31/2024	1,000,000.00	01/30/2020 1.36%	1,018,242.19 1,012,676.09	104.46 0.43%	1,044,609.00 1,521.74	0.63% 31,932.91	Aaa / AA+ AAA	3.42 3.32
912828Z52	US Treasury Note 1.375% Due 1/31/2025	790,000.00	01/27/2021 0.28%	824,500.78 820,141.05	103.18 0.46%	815,150.44 29.52	0.49% (4,990.61)	Aaa / AA+ AAA	3.51 3.42
912828Z52	US Treasury Note 1.375% Due 1/31/2025	550,000.00	01/27/2021 0.28%	574,019.53 570,984.28	103.18 0.46%	567,509.80 20.55	0.34% (3,474.48)	Aaa / AA+ AAA	3.51 3.42
912828ZL7	US Treasury Note 0.375% Due 4/30/2025	400,000.00	04/29/2021 0.63%	395,953.13 396,210.73	99.52 0.50%	398,078.00 379.08	0.24% 1,867.27	Aaa / AA+ AAA	3.75 3.71
912828ZL7	US Treasury Note 0.375% Due 4/30/2025	1,250,000.00	04/29/2021 0.63%	1,237,353.52 1,238,158.53	99.52 0.50%	1,243,993.75 1,184.61	0.75% 5,835.22	Aaa / AA+ AAA	3.75 3.71
<b>Total US Treasury</b>		<b>62,370,000.00</b>	<b>0.72%</b>	<b>63,020,148.65</b> <b>62,959,951.91</b>	<b>0.19%</b>	<b>63,374,715.35</b> <b>178,137.83</b>	<b>38.12%</b> <b>414,763.44</b>	<b>Aaa / AA+</b> <b>AAA</b>	<b>1.69</b> <b>1.67</b>
<b>TOTAL PORTFOLIO</b>		<b>163,211,088.66</b>	<b>0.99%</b>	<b>165,021,070.91</b> <b>164,822,427.83</b>	<b>0.27%</b>	<b>166,114,868.38</b> <b>600,620.03</b>	<b>100.00%</b> <b>1,292,440.55</b>	<b>Aa1 / AA</b> <b>AAA</b>	<b>1.84</b> <b>1.77</b>
<b>TOTAL MARKET VALUE PLUS ACCRUED</b>						<b>166,715,488.41</b>			



JULY 2021



## Market Data

World Stock Market Indices  
data as of 6/30/2021

	Change (5/31/21)	%CHG
S&P 500		
4,297.50	93.39	2.22%
NASDAQ		
14,503.95	755.21	5.49%
DOW JONES		
34,502.51	-26.94	-0.08%
FTSE (UK)		
7,037.47	14.86	0.21%
DAX (Germany)		
15,531.04	109.91	0.71%
Hang Seng (Hong Kong)		
28,827.95	-323.85	-1.11%
Nikkei (Japan)		
28,791.53	-68.55	-0.24%

Source: Bloomberg. Please see descriptions of indices on Page 2.

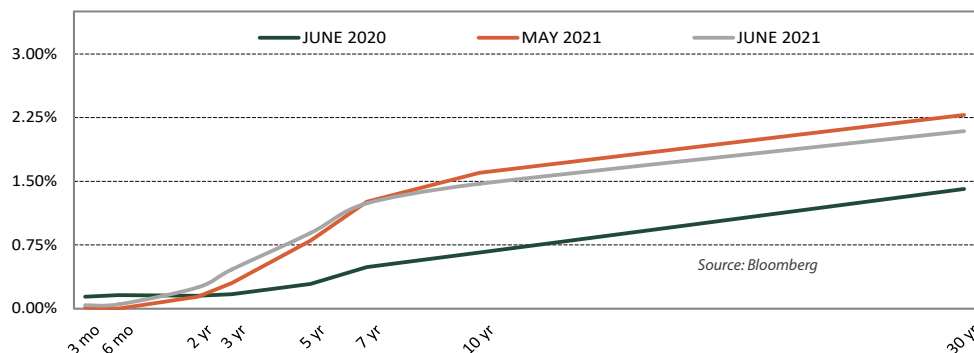
## Market Summary

We believe the outlook for US economic growth in the second half of the year is strong, fueled by ongoing fiscal support, accommodative monetary policy, widespread vaccinations, and the continued reopening of the economy. Although some of these factors have begun to moderate, we expect they will continue to provide tailwinds for the economy through year-end. Vaccination rates in the US have slowed, and infection rates have recently increased but remain well below their peak. Thus far, US-approved vaccines have shown to be effective against COVID-19 as well as more aggressive variants. As such, we remain optimistic about the continued reopening of the US economy. Meanwhile, although some pandemic-related fiscal relief is starting to phase out, President Biden and a group of bipartisan senators have agreed to an overall framework for an infrastructure plan. Though the details haven't been finalized or approved by Congress, the negotiations signal that more fiscal stimulus is likely on the horizon. Meanwhile, the Federal Reserve continues to signal that it will look past the near-term uptick in inflation to facilitate continued improvement in the labor market. While we believe financial market volatility is likely to increase in the second half of the year, we anticipate that gross domestic product (GDP) will continue to grow at an above-trend pace.

The Federal Open Market Committee (FOMC) kept monetary policy unchanged in June. The Fed has started to discuss the idea of reducing its asset purchases at some point, but that decision remains uncertain. FOMC members' updated economic projections also suggest that the Fed may start to raise interest rates in 2023. Overall, monetary policy remains highly accommodative for now, but the Fed seems to be inching toward a path of policy normalization. We believe the Fed will proceed with caution, particularly given the high number of people who remain unemployed and continued uncertainty about the pandemic. Should the U.S. economy remain on its current trajectory, and global vaccination rates improve meaningfully, we believe there is a high probability that the Fed will begin tapering its asset purchases during the first half of next year.

The yield curve flattened in June. We believe multiple factors influenced Treasury rates in June, including market technicals, dollar strengthening, uneven global vaccination rates, and a more modest forecast for U.S. infrastructure spending than initially expected. Nevertheless, we believe longer-term rates have room to move higher this year and we believe the Treasury yield curve is poised to steepen in the second half of the year.

### TREASURY YIELD CURVE POISED TO STEEPEN



The treasury yield curve is steeper on a year-over-year basis. The 3-month T-bill yield was about nine basis points lower, while the 2-year Treasury yield was about ten basis points higher, and the 10-Year Treasury yield was about 81 basis points higher, year-over-year, as of June month-end. The Fed has signaled plans to keep the front end of the Treasury yield curve anchored near zero until 2023. We believe longer-term rates still have room to move higher this year.

TREASURY YIELDS	Trend (▲/▼)	6/30/2021	5/31/2021	Change
3-Month	▲	0.04	0.01	0.03
2-Year	▲	0.25	0.14	0.11
3-Year	▲	0.46	0.30	0.16
5-Year	▲	0.89	0.80	0.09
7-Year	▼	1.24	1.26	-0.02
10-Year	▼	1.47	1.60	-0.13
30-Year	▼	2.09	2.28	-0.20

Source: Bloomberg



# BOND MARKET REVIEW

Since 1988, Chandler Asset Management has specialized in providing fixed income investment solutions to risk-averse public agencies and institutions. Chandler's mission is to provide fully customizable, client-centered portfolio management that preserves principal, mitigates risk and generates income in our clients' portfolios.

## Credit Spreads Tightened in June

CREDIT SPREADS	Spread to Treasuries (%)	One Month Ago (%)	Change
3-month top rated commercial paper	0.12	0.04	0.08
2-year A corporate note	0.14	0.15	(0.01)
5-year A corporate note	0.31	0.36	(0.05)
5-year Agency note	0.00	0.01	(0.01)

Source: Bloomberg

Data as of 6/30/2021

## Economy Is Poised for Continued Above-Trend Growth

ECONOMIC INDICATOR	Current Release	Prior Release	One Year Ago
Trade Balance	(71.24) \$Bln MAY 21	(69.07) \$Bln APR 21	(54.92) \$Bln MAY 20
Gross Domestic Product	6.40% MAR 21	4.30% DEC 20	(5.00%) MAR 20
Unemployment Rate	5.90% JUN 21	5.80% MAY 21	11.10% JUN 20
Prime Rate	3.25% JUN 21	3.25% MAY 21	3.25% JUN 20
Commodity Research Bureau Index	213.39 JUN 21	205.70 MAY 21	137.97 JUN 20
Oil (West Texas Int.)	\$73.47 JUN 21	\$66.32 MAY 21	\$39.27 JUN 20
Consumer Price Index (y/o/y)	5.00% MAY 21	4.20% APR 21	0.10% MAY 20
Producer Price Index (y/o/y)	8.70% MAY 21	9.50% APR 21	(3.20%) MAY 20
Dollar/Euro	1.19 JUN 21	1.22 MAY 21	1.12 JUN 20

Source: Bloomberg

## Economic Roundup

### Consumer Prices

The Consumer Price Index (CPI) was up 5.0% year-over-year in May versus up 4.2% in April. Core CPI (CPI less food and energy) was up 3.8% year-over-year in May, versus up 3.0% in April. The Personal Consumption Expenditures (PCE) index was up 3.9% year-over-year in May, versus up 3.6% year-over-year in April. Core PCE was up 3.4% year-over-year in May, versus up 3.1% year-over-year in April. Current inflation readings are running well above the Fed's longer-run target of around 2.0%, though many of the factors are expected to be temporary.

### Retail Sales

On a year-over-year basis, retail sales were up 28.1% in May versus up 53.4% in April. The year-over-year gains are distorted by the drop-off in spending and activity at the early stage of the pandemic last year. On a month-over-month basis, retail sales declined 1.3% in May, following a 0.9% increase in April. Retail sales have been somewhat uneven due to the timing of fiscal stimulus and economic reopening. Overall, we believe consumer spending remains healthy and consistent with an ongoing recovery in economic activity.

### Labor Market

Job growth was stronger than expected in June. U.S. nonfarm payrolls increased by 850,000, versus the consensus forecast of 720,000. May payrolls were also revised up by 24,000 to 583,000. On a trailing 3-month and 6-month basis, payrolls increased by an average of 567,000 and 543,000 per month, respectively, which is indicative of a steady recovery in the labor market. The leisure and hospitality sectors continue to drive the job gains in June and increased by 343,000. Government payrolls also posted a solid increase of 188,000 in June. The labor participation rate was unchanged at 61.6% in June. The unemployment rate ticked higher to 5.9% in June from 5.8% in May. The U-6 underemployment rate, which includes those who are marginally attached to the labor force and employed part time for economic reasons, declined to 9.8% in June from 10.2% in May. The index of aggregate private weekly payrolls was up 2.8% in June from February 2020, suggesting a solid increase in aggregate wages.

### Housing Starts

Total housing starts rose 3.6% in May to an annual pace of 1,572,000. Single-family starts rose 4.2% in May while multi-family starts were up 2.4%. On a year-over-year basis, housing starts were up 50.3% in May, due in part to the steep decline in activity during the early stage of the pandemic last year.

#### World Stock Market Index Descriptions

S&P 500—The S&P 500 is a market value weighted index of 500 large-capitalization stocks. The 500 companies included in the index capture approximately 80% of available US market capitalization. NASDAQ—The NASDAQ Composite Index is the market capitalization-weighted index of over 3,300 common stocks listed on the NASDAQ stock exchange. Dow Jones—The Dow Jones Industrial Average is an index that tracks 30 large, publicly-owned companies trading on the New York Stock Exchange and the NASDAQ. The Financial Times Stock Exchange Group (FTSE)—The FTSE is a share index of the 100 companies listed on the London Stock Exchange with the highest market capitalization. DAX—The Deutscher Aktienindex (DAX) is a blue chip stock market index consisting of the 30 major German companies trading on the Frankfurt Stock Exchange. Hang Seng—The Hang Seng Index is a freefloat-adjusted market-capitalization-weighted stock market index in Hong Kong. It is used to record and monitor daily changes of the largest companies of the Hong Kong stock market and is the main indicator of overall market performance in Hong Kong. Nikkei—Japan's Nikkei 225 Stock Average is a price-weighted index composed of Japan's top 225 blue-chip companies traded on the Tokyo Stock Exchange.

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**DATE:** September 2, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Christina Sackett, Chief Financial Officer

**SUBJECT:** Disposition of Fixed Assets through July 2021 - *Receive Report*

**SUMMARY**

Attached is a list of fixed assets and minor equipment removed from service and approved by the Interim General Manager for disposal in accordance with agency policy.

**SUGGESTED ACTION**

Receive and File

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

The software applications were no longer needed as they have been replaced with more secure and modern software programs. The analyzer equipment removed from service was disposed as it was no longer in operational condition and has since been replaced with newer, upgraded units. The computer equipment and audio/visual equipment was disposed as it was replaced by a newer, upgraded units. The miscellaneous office furniture was disposed as it was old and no longer met the needs of the agency.

Attachment (1)







TAMPA BAY WATER SURPLUS ITEMS APPROVED FOR DISPOSITION BY THE GENERAL MANAGER, UNDER DELEGATION OF AUTHORITY FROM BOARD POLICY 650-08 MONTH OF JULY 2021							
ASSET#	ASSET DESCRIPTION	ASSET TYPE	SERIAL NUMBER	ACQ DATE	ACQ COST	ACCUM. DEPR	BOOK VALUE
5696	REMOTE TERMINAL UNIT (RTU)	ELECTRONIC EQUIP.	M861210	10/16/95	5,874.53	5,874.53	-
6583	LOCATOR PIPE/CABLE/MCL	ELECTRONIC EQUIP.	5069080	08/19/98	3,036.00	3,036.00	-
8370	MUNIS COMPUTER UPDATES	COMPUTER SOFTWARE	VIRTUAL MUNIS V	04/24/01	12,710.08	12,710.08	-
8728	SWITCH,CISCO CATALYST-C2950G-24-EI	COMPUTER EQUIP	FHK0616W336	04/04/02	2,036.60	2,036.60	-
8761	LOBBY WORKSTATION-COUNTER	FURNITURE	-	09/10/02	8,775.00	8,775.00	-
9168	ILOGCPLX SOFTWARE BUNDLE-OROP	COMPUTER SOFTWARE	-	05/20/04	49,259.05	49,259.05	-
9223	MODULAR WORKSTATION	FURNITURE	Q18004-20870	09/16/04	4,819.54	4,819.54	-
9724	WORKSTATION	FURNITURE	Q17836	12/29/05	1,452.83	1,452.83	-
9970	REMOTE VIDEO SURVEILLANCE SYST	OTHER MACHINERY/EQUIP.	-	04/19/07	89,967.00	89,967.00	-
10755	POLYCOM HDX VIDEO CONF SYS	OTHER MACHINERY/EQUIP.	88104710C3FCCP	01/06/11	6,581.90	6,581.90	-
10757	SERVER,DELL POWEREDGE R710	COMPUTER EQUIP	GSWTBP1	03/10/11	6,661.97	6,661.97	-
10758	SERVER,DELL POWEREDGE R210	COMPUTER EQUIP	GQ3SBP1	03/10/11	1,936.16	1,936.16	-
10815	ELECTRONIC SECURITY SOFTWARE	COMPUTER SOFTWARE	-	04/14/11	6,982.00	6,982.00	-
10847	SERVER,DELL POWEREDGE R210	COMPUTER EQUIP	H002FQ1	05/26/11	2,073.00	2,073.00	-
10851	SAN,DELL EQUALLOGIC PS6000X	COMPUTER EQUIP	2H2KWP1	06/09/11	49,999.00	49,999.00	-
10856	SERVER,DELL POWEREDGE R710	COMPUTER EQUIP	81N2GQ1	06/09/11	7,849.15	7,849.15	-
10918	SCADA QUAD WINDOWS UPGRADE	COMPUTER SOFTWARE	PROJECT 07183	09/30/11	49,000.00	49,000.00	-
10921	SAN,DELL EQUALLOGIC PS6100E	COMPUTER EQUIP	FL21TR1	11/10/11	49,998.00	49,998.00	-
10973	PRESSURE TRANSDUCER,KPSI 500	LAB EQUIP.	905264	07/23/09	1,183.43	1,183.43	-
11023	SAN,DROBO 24TB 12-BAY	COMPUTER EQUIP	DRD114301000005	03/08/12	13,999.00	13,999.00	-
11099	TYLER TECHNOLOGY MUNIS SOFTWARE	COMPUTER SOFTWARE	ESS & TCM	07/12/12	30,415.00	28,915.00	1,500.00
11064	SAN,DELL EQUALLOGIC PS6110XV	COMPUTER EQUIP	H7FXMS1	05/17/12	49,998.00	49,998.00	-
11066	SWITCH,DELL S4810P 48 PORT 10GB	COMPUTER EQUIP	9LQN9T1	06/14/12	18,084.50	18,084.50	-
11067	SWITCH,DELL S4810P 48 PORT 10GB	COMPUTER EQUIP	2PPN9T1	06/14/12	18,084.50	18,084.50	-
11094	SAN,DELL EQUALLOGIC PS6110XV	COMPUTER EQUIP	JVWVMS1	08/02/12	49,998.00	49,998.00	-
11101	PHONE SERVER,CISCO UCS-C200	COMPUTER EQUIP	QC11624A282	08/30/12	4,027.00	4,027.00	-
11118	SAN,DELL EQUALLOGIC PS6110XV	COMPUTER EQUIP	9HGBWV1	11/08/12	49,998.00	49,998.00	-
11134	PC,DELL PRECISION T1650	COMPUTER EQUIP	6CWMYV1	12/06/12	1,712.93	1,712.93	-
11156	SERVER,DELL POWEREDGE R2011I	COMPUTER EQUIP	DFF1TW1	04/11/13	1,758.67	1,758.67	-
11178	SAN,EMC VNX5300	COMPUTER EQUIP	VSPMXG12CUAC	04/18/13	100,701.14	100,701.14	-
11232	SAN,EMC VNX5300	COMPUTER EQUIP	20131010	07/03/13	83,461.78	83,461.78	-
11344	POLYCOM VIDEOCONF HDX6000HD CODEC EGL	OTHER MACHINERY/EQUIP.	821326401F58CP	12/19/13	4,399.00	4,399.00	-
11378	SERVER BACKUP/REPLICATIONS SOFTWARE, VM	COMPUTER SOFTWARE	P-VBRENT-VS-P0000-00	03/27/14	34,380.00	34,380.00	-
11444	PC, DELL OPTIPLEX 3020 MINITOWER	COMPUTER EQUIP	7H4TX12	07/31/14	1,543.00	1,543.00	-
11458	SAN,EMC VNXE3200	COMPUTER EQUIP	FCNBV142900071	09/11/14	17,098.00	17,098.00	-
11461	MS WINDOWS ENTERPRISE PRO PLUS	COMPUTER SOFTWARE	CONTRACT #130733	09/30/14	94,037.95	94,037.95	-
11479	SCALER, CONTEMPORARY RESEARCH QMOD-HD	OTHER MACHINERY/EQUIP.	4595071160	09/30/14	2,494.89	2,494.89	-
11480	STREAMING DEVICE, DIGITAL RAPIDS DRCTS-W	OTHER MACHINERY/EQUIP.	779200105975	09/30/14	8,277.48	8,277.48	-
11491	HDD RECORDER, DATA VIDEO HDR70	OTHER MACHINERY/EQUIP.	00398672	09/30/14	2,186.37	2,186.37	-
11492	HDD RECORDER, DATA VIDEO HDR70	OTHER MACHINERY/EQUIP.	00398677	09/30/14	2,186.37	2,186.37	-
11494	TUNER, CONTEMPORARY RESEARCH ATSC+SDI	OTHER MACHINERY/EQUIP.	0014C803038A	09/30/14	1,151.40	1,151.40	-
11556	PC, DELL OPTIPLEX 7020	COMPUTER EQUIP	995BD42	05/14/15	1,080.65	1,080.65	-
11655	SERVER, SUPER MICRO	COMPUTER EQUIP	S173310X5319683	10/29/15	17,706.20	17,706.20	-
11656	SERVER, SUPER MICRO	COMPUTER EQUIP	S173310X5302195	10/29/15	17,706.20	17,706.20	-
11666	SERVER, SUPER MICRO	COMPUTER EQUIP	S209064X6100778	02/04/16	8,098.81	8,098.81	-
11667	SERVER, SUPER MICRO	COMPUTER EQUIP	S209064X6100777	02/04/16	8,098.81	8,098.81	-
11668	SERVER, SUPER MICRO	COMPUTER EQUIP	S209064Z6100782	02/04/16	8,098.81	8,098.81	-
11733	HDD RECORDER, DATA VIDEO HDR70	OTHER MACHINERY/EQUIP.	561591	08/25/16	2,228.14	2,228.14	-
11783	LAPTOP, DELL 3570 CTO *PARTS ONLY*	NON-CAP COMPUTER EQUIP.	I7F74C2	11/10/16	-	-	-
11802	PC, DELL OPTIPLEX 7010	NON-CAP COMPUTER EQUIP.	7HH0SW1	01/12/17	-	-	-
11989	BACKUP APPLIANCE, RUBRIK R344 4- NODE 48	COMPUTER EQUIP	AA180803440105	05/03/18	81,997.00	81,997.00	-
12071	DVR RECORDER, DATAVIDEO HDR-70	OTHER MACHINERY/EQUIP.	595949	09/04/18	1,872.00	1,872.00	-
Totals					1,097,074.84	1,095,574.84	1,500.00



**DATE:** September 3, 2021  
**TO:** Board of Directors  
**THRU:** Charles H. Carden, Interim General Manager  
**FROM:** Christina Sackett, Chief Financial Officer  
**SUBJECT:** Financial Statement - July 2021 - *Receive Report*

**SUMMARY**

The attached Statement of Revenues and Expenditures summarizes the Agency's uniform rate basis financial activity for July 2021.

**SUGGESTED ACTION**

Receive and File

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

Financial Statement - Summary of Major Points: The agency lags in actual expenditures for the Professional Services category due primarily to the normal nature of the billing and review process which takes typically 60 to 90 days. This is adjusted at year end to reflect all actual activity. Electricity and Water Treatment Chemicals appear low because the budgeted amount is spread evenly over the year, but the use of electricity and chemicals are more seasonal.

Revenues – Operating income consists of water sales (fixed and variable components), sales from the Tampa Bypass Canal to the City of Tampa, and the board-approved balance carried forward from the



previous year through the Rate Stabilization Fund. Other Income consists routinely of interest income received from investments.

Expenditures - Throughout the year, actual expenditures normally lag behind budgeted expenditures by at least one to two months. This is due to the fact that vendor bills and the subsequent payment of those bills generally lag behind the actual performance of the services by 30 to 45 days and the budgeted expenses are distributed evenly across the 12 months of the fiscal year.

When the fiscal year end approaches, the books are held open to allow for all the appropriate activity to be accounted for and shown in the appropriate fiscal year. Variable rate expenditures will have seasonal peaks as the agency enters the dry season and begins to use the costlier supply sources.

The “Encumbrance” balance shown on the bottom of the financial statements represents the amount of open purchase orders (committed funds and blanket purchase orders) as of the end of the month, including purchase orders carried forward from the previous year. Although the encumbrance is presented for informational purposes, it gives a projected contractual commitment against current year funds. There are many purchase orders established at the beginning of the year that will be spent through the year and monthly revenue will be collected through the year to offset that expense.

Rate revenue is shown as being earned in level monthly increments and only catches up to the expenditures at year end. Significant encumbrances include Water Treatment Chemicals, Power, Professional Services and Water for Resale. Professional service tasks frequently carry over beyond the end of a fiscal year, in which case the applicable open purchase orders and the associated budget dollars are carried into the next fiscal year to allow for completion of those tasks as mentioned above.

Attachment (1)

[Financial Statements July 2021](#)



**TAMPA BAY WATER**  
**UNIFORM RATE BASIS**  
**Statement of Revenues and Expenditures**  
**July 31, 2021, 2021**

	Current Month Actual	Current Month Budget	Percent of Budget	\$ Variance	Year to Date Actual	Year to Date Budget	Percent of Budget	\$ Variance
<b>OPERATING REVENUE:</b>								
Operating Grant - SWFWMD	0	-202,687	0.00%	202,687	15,269	2,026,865	0.00%	-2,011,596
Water Sales - Fixed	12,214,962	12,214,962	100.00%	0	122,149,619	122,149,620	100.00%	-1
Water Sales - Variable	2,105,322	2,161,548	97.40%	-56,226	21,846,454	21,615,476	101.07%	230,979
Water Sales - Other	3,500	3,500	100.00%	0	61,788	35,000	176.54%	26,788
Water Sales - Tampa By-Pass Canal	0	32,667	0.00%	-32,667	399,573	326,667	0.00%	72,906
Rate Stabilization (Note 1)	352,777	352,777	100.00%	0	16,668,829	3,527,771	472.50%	13,141,058
<b>Total Operating Revenue</b>	<b>14,676,561</b>	<b>14,562,767</b>	<b>100.78%</b>	<b>113,794</b>	<b>161,141,531</b>	<b>149,681,398</b>	<b>107.66%</b>	<b>11,460,133</b>
<b>OPERATING EXPENSES:</b>								
<b>FIXED OPERATING EXPENSE:</b>								
Personnel Services	1,876,015	1,916,964	97.86%	40,948	14,474,942	19,169,638	75.51%	4,694,696
Materials & Supplies	199,996	254,127	78.70%	54,131	1,970,787	2,541,272	77.55%	570,484
Members Water Quality costs	4,000	4,000	100.00%	0	40,000	40,000	100.00%	0
Legal Services	7,544	58,157	12.97%	50,613	292,712	581,573	50.33%	288,861
Professional Services	1,704,906	3,422,990	49.81%	1,718,084	22,303,899	34,360,984	64.91%	12,057,086
Repairs & Other Services	668,133	552,656	120.89%	-115,476	5,000,533	5,525,446	90.50%	524,913
Rent & Insurance	17,536	196,619	8.92%	179,084	1,974,452	1,967,317	100.36%	-7,136
<b>Total Fixed Operating Expense</b>	<b>4,478,130</b>	<b>6,405,514</b>	<b>69.91%</b>	<b>1,927,384</b>	<b>46,057,325</b>	<b>64,186,229</b>	<b>71.76%</b>	<b>18,128,904</b>
<b>VARIABLE OPERATING EXPENSE:</b>								
Water Treatment Chemicals	890,944	1,186,888	75.07%	295,943	8,670,343	11,868,876	73.05%	3,198,532
Electricity	930,946	1,085,627	85.75%	154,681	9,598,012	10,856,273	88.41%	1,258,260
Water for Resale	38,909	41,733	93.23%	2,825	452,361	417,333	108.39%	-35,028
<b>Total Variable Operating Expense</b>	<b>1,860,799</b>	<b>2,314,248</b>	<b>80.41%</b>	<b>453,449</b>	<b>18,720,717</b>	<b>23,142,482</b>	<b>80.89%</b>	<b>4,421,765</b>
<b>NON-OPERATING INCOME:</b>								
Investment Income (Note 2)	304,123	128,678	236.34%	175,445	339,834	1,286,781	26.41%	-946,947
Miscellaneous	1,753	0	0.00%	1,753	228,378	0	0.00%	228,378
Litigation Recoveries	0	0	0.00%	0	35,724	0	0.00%	35,724
Capital Contributions (Grants)	0	0	0.00%	0	1,331,348	0	0.00%	1,331,348
<b>Total Non-Operating Income</b>	<b>305,876</b>	<b>128,678</b>	<b>237.71%</b>	<b>177,198</b>	<b>1,935,284</b>	<b>1,286,781</b>	<b>150.40%</b>	<b>648,503</b>
<b>NON-OPERATING EXPENSES:</b>								
Bond Issue Cost	0	0	0.00%	0	0	0	0.00%	0
Interest - Acquisition Credits	276,854	276,854	100.00%	0	2,768,538	2,768,538	100.00%	0
Interest - Bonds	2,506,855	2,776,487	90.29%	-269,631	27,701,728	27,764,867	0.00%	-63,138
<b>Total Non-Operating Expenses</b>	<b>2,783,709</b>	<b>3,053,340</b>	<b>91.17%</b>	<b>-269,631</b>	<b>30,470,266</b>	<b>30,533,404</b>	<b>99.79%</b>	<b>-63,138</b>
<b>Excess of Revenues over Expenditures before Capital Transactions and Reserve Funding</b>	<b>5,859,798</b>	<b>2,918,343</b>	<b>200.79%</b>	<b>2,941,455</b>	<b>67,828,507</b>	<b>33,106,064</b>	<b>204.88%</b>	<b>34,722,443</b>
<b>OTHER EXPENDITURES:</b>								
Principal - Acquisition Credits	575,776	575,776	100.00%	0	5,757,761	5,757,760	100.00%	1
Principal - Bonds	3,128,167	3,064,667	102.07%	63,500	30,519,667	30,646,667	99.59%	-127,000
Capital Expenditures	830,461	128,067	648.46%	-702,394	6,927,197	1,280,671	540.90%	-5,646,526
<b>Total Other Expenditures</b>	<b>4,534,404</b>	<b>3,768,510</b>	<b>120.32%</b>	<b>-638,894</b>	<b>43,204,624</b>	<b>37,685,098</b>	<b>114.65%</b>	<b>-5,773,525</b>
<b>RESERVE FUNDING:</b>								
Renewal & Replacement Reserve Funding (Note 3)	277,901	250,000	0.00%	-27,901	2,780,110	2,500,000	0.00%	-280,110
Renewal & Replacement Reserve Used (Note 4)	-419,100	0	0.00%	419,100	-2,735,618	0	0.00%	2,735,618
Operations & Maintenance Reserve	0	0	0.00%	0	0	0	0.00%	0
Rate Stabilization Fund	0	-128,641	0.00%	-128,641	0	-1,286,408	0.00%	-1,286,408
Energy Fund Reserve Funding (Note 3)	1,063	-145,118	0.00%	-146,181	212,629	-1,451,182	0.00%	-1,663,811
Energy Funding Used (Note 4)	0	48,273	0.00%	48,273	0	482,726	0.00%	482,726
Utility Reserve Transfers	0	0	0.00%	0	0	0	0.00%	0
Capital Improvement Funding (Note 3)	170,393	-2,796,975	-6.09%	-2,967,369	1,717,313	-27,969,751	-6.14%	-29,687,064
Capital Improvement Funding Used (Note 4)	-541,542	1,143,928	0.00%	1,685,469	-5,268,588	11,439,275	0.00%	16,707,863
<b>Total Reserve Funding</b>	<b>-511,284</b>	<b>-1,628,534</b>	<b>31.40%</b>	<b>-1,117,250</b>	<b>-3,294,154</b>	<b>-16,285,340</b>	<b>20.23%</b>	<b>-12,991,186</b>
<b>Excess Revenue over Expenditures/ (Expenditures over Revenue) - Rate Basis</b>	<b>1,836,678</b>	<b>778,367</b>	<b>0</b>	<b>1,185,311</b>	<b>27,918,037</b>	<b>11,706,307</b>	<b>0</b>	<b>15,957,732</b>
<b>Encumbrances as of 07/31/2021</b>					<b>47,810,985</b>			

**Note 1** - Rate stabilization year to date actual reflects 10/12th of the approved budget transfer of \$4,233,325, the Board approved purchase orders carried forward of \$11,347,368 and \$1,793,690 of FY20 unencumbered funds carried forward as approved by the Board.

**Note 2** - Investment income year to date actual reflects unrealized loss on investments of \$2,112,100

**Note 3** - Represents retention of the interest earned in the Fund.

**Note 4** - Represents use of the Fund for expenditures on Board approved projects.



**DATE:** September 2, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Christina Sackett, Chief Financial Officer

**SUBJECT:** Potential True Up of Fixed Costs between Member Governments for July 2021 - *Receive Report*

**SUMMARY**

The attached report is the true up of fixed costs between Member Governments as of July 31, 2021.

**SUGGESTED ACTION**

Receive and File

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

To assist our Members in their planning and budgeting, we present a monthly schedule that shows the projected true-up adjustment due each September based on the water production to date for the current fiscal year. This is done to ensure that each member is aware of the up-coming true-up billing and that the member government will have time to take appropriate planning measures for the September 2021 year end.

Each member is billed for fixed charges through the year based upon their respective pro-rata share of the prior year's production.



## **BACKGROUND**

As required by the Master Water Supply Contract, each member's actual contributions are adjusted at year-end to the current year's budgeted fixed costs, based upon their pro-rata portion of current year production. This adjustment is called the true-up. This true-up adjustment results in potential amounts due to/from each member with no net revenue impact to the agency. It is calculated at the conclusion of each fiscal year, resulting in a potential invoice or credit to each member in October of each year.

Attachment (1)

[Potential True Up as of 7-31-21](#)



POTENTIAL TRUE UP FOR FY 2021 AS OF 7/31/2021

Monthly Demand								
MONTH-YEAR	ST PETE	PINELLAS	TAMPA (Morris Br)	HILLSBOROUGH	PASCO	NEW PORT RICHEY	TOTALS	
Oct-20	819.07	1,510.37	-	2,248.81	1,047.63	93.91	5,719.79	
Nov-20	777.31	1,433.68	-	2,128.84	1,011.96	89.15	5,440.94	
Dec-20	796.61	1,442.51	12.97	2,074.84	977.52	88.58	5,393.03	
Jan-21	795.13	1,483.70	-	2,077.85	999.57	88.82	5,445.07	
Feb-21	720.99	1,330.34	-	1,843.04	880.82	80.72	4,855.91	
Mar-21	835.37	1,596.19	-	2,314.76	1,107.26	93.29	5,946.87	
Apr-21	809.76	1,541.03	-	2,233.87	1,074.83	93.64	5,753.13	
May-21	923.05	1,788.67	-	2,810.10	1,383.45	121.96	7,027.23	
Jun-21	830.14	1,573.11	-	2,173.90	1,037.84	105.36	5,720.35	
Jul-21	831.24	1,490.89	-	2,077.39	967.11	104.58	5,471.21	
Aug-21							-	
Sep-21							-	
FY 20 FYE	9,715.33	18,084.24	612.46	25,939.17	11,889.72	1,104.85	67,345.77	184.00 MGD
FY 21 YTD	8,138.67	15,190.49	12.97	21,983.40	10,487.99	960.01	56,773.53	186.76 MGD
+ / -	(1,576.66)	(2,893.75)	(599.49)	(3,955.77)	(1,401.73)	(144.84)	(10,572.24)	2.75 MGD

FY21 YTD MGD	26.77	49.97	0.04	72.31	34.50	3.16	186.76
% of YTD	14.34%	26.76%	0.02%	38.72%	18.47%	1.69%	100.00%
FY 20 MGD	26.54	49.41	1.6734	70.87	32.49	3.02	184.00
% of FY 20	14.43%	26.85%	0.91%	38.52%	17.65%	1.64%	100%
Fixed billed FY21	\$ 21,145,628.43	\$ 39,360,744.26	\$ 1,333,032.60	\$ 56,457,171.36	\$ 25,878,235.87	\$ 2,404,730.21	\$ 146,579,542.73
Actual fixed based on							
% of ytd	\$ 21,012,653.73	\$ 39,219,246.68	\$ 33,486.32	\$ 56,757,378.30	\$ 27,078,196.10	\$ 2,478,581.60	\$ 146,579,542.73
Potential True-up	\$ (132,974.70)	\$ (141,497.58)	\$ (1,299,546.28)	\$ 300,206.94	\$ 1,199,960.23	73,851.39	0.00



**DATE:** September 3, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Christina Sackett, Chief Financial Officer

**SUBJECT:** Management Statistic Report with Aged Accounts Receivable as of July 2021 - *Receive Report*

**SUMMARY**

The Management Statistic Report with Aged Accounts Receivable for July 2021 is attached for the Board's information.

**SUGGESTED ACTION**

Receive and File

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

The Management Statistics report provides a summary of Aged Receivables, Operations and Maintenance (O&M) labor as a percentage of controllable O&M costs and Inventory Turnover fiscal year to date through July 31, 2021.

Attachment (1)

[MgmtStats\\_July\\_2021](#)



## Management Statistics with Aged Accounts Receivable Based on Information Available Month Ending 7/31/2021

1. Aged Accounts Receivable as of July 31, 2021

Acct. Receivable Balance 7/31/21	Current	Past Due Over 30 Days
\$ 12,964,108.95	\$ 12,964,108.95	-

2. O&M Labor as a percentage of Controllable O&M costs = 67.3%  
through July 31, 2021

3. Inventory Turnover Fiscal Year to Date = 13.7%

Inventory at 10/1/2020	\$ 948,758.65
Inventory at 7/31/2021	955,149.99
Average	951,954.32
Cost of Inventory Used	130,424.51
Inventory Turnover Year to Date	13.7%

4. Uniform Rate / 1,000 gallons FY 2021 = \$ 2.5590



**DATE:** September 3, 2021  
**TO:** Board of Directors  
**THRU:** Charles H. Carden, Interim General Manager  
**FROM:** Christina Sackett, Chief Financial Officer  
**SUBJECT:** Vendor's Status Report through July 2021 - *Receive Report*

**SUMMARY**

The attached is a status report of As-Needed Professional Service Contractors and Vendors utilized by Tampa Bay Water through July 2021.

**SUGGESTED ACTION**

Receive and File

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

Attached is a summary of the as-needed contracted services being utilized by the agency through July 2021. This report shows total contract values, cumulative purchase orders issued against the contracts, and actual expenditures made under the contracts.

Attachment (1)

[July 2021](#)



# Contract Summary

Monthly Status Report of Vendors

July 1, 2021 thru July 31, 2021

Vendor Name and Contract Dates				Contract Amount Authorized	Current Period PO Amount Issued	Previous PO Amount Issued	Total PO Issued To Date	Total Expended To Date	Outstanding PO Balance
A J LANDSCAPING LLC				\$450,000.00		\$200,000.00	\$200,000.00	\$71,746.00	\$128,254.00
04/20/20	thru	05/01/22	2020041						
A.C. SCHULTES OF FLORIDA, INC.				\$600,000.00		\$50,000.00	\$50,000.00	\$0.00	\$50,000.00
08/19/19	thru		2019053						
A.C. SCHULTES OF FLORIDA, INC.				\$906,290.00		\$906,290.00	\$906,290.00	\$510,538.97	\$395,751.03
08/19/19	thru		2019055						
AD-VANCE PERSONNEL SERVICES INC				\$100,000.00		\$0.00	\$0.00	\$0.00	\$0.00
05/17/21	thru	04/13/22	2021705						
ADVANCED ENVIRONMENTAL LABORATORIES,				\$246,484.62		\$184,147.00	\$184,147.00	\$156,984.62	\$27,162.38
03/06/18	thru	03/31/19	2018021						
ADVANCED ROOFING, INC.				\$1,499,271.00		\$1,495,671.00	\$1,495,671.00	\$0.00	\$1,495,671.00
02/15/21	thru	02/15/22	2021005						
AGILENT TECHNOLOGIES, INC.				\$39,000.00		\$0.00	\$0.00	\$0.00	\$0.00
01/14/21	thru	01/14/24	2021902						
AIRGAS USA, LLC				\$2,779,628.29		\$2,351,961.81	\$2,351,961.81	\$2,086,784.05	\$265,177.76
01/01/18	thru	09/30/18	2018004						
AJAX PAVING INDUSTRIES OF FLORIDA LLC				\$1,538,714.24		\$439,887.85	\$439,887.85	\$439,787.10	\$100.75
02/17/20	thru	09/30/21	2020702						
ALBERT E ROLLER				\$917,343.99		\$718,549.68	\$718,549.68	\$667,678.37	\$50,871.31
01/01/19	thru	12/31/19	2019001						
ALLIED UNIVERSAL CORPORATION				\$13,991,380.32		\$6,005,913.00	\$6,005,913.00	\$3,246,613.47	\$2,759,299.53
01/01/20	thru	09/30/20	2020024						
AMERICAN ACQUISITION GROUP, LLC				\$200,000.00		\$127,467.30	\$127,467.30	\$70,610.27	\$56,857.03
06/05/17	thru	12/31/21	2017703						
AMERICAN FACILITY SERVICES, INC.				\$93,192.77		\$75,699.27	\$75,699.27	\$69,192.99	\$6,506.28
01/15/19	thru	06/30/20	2019032						
AMERICAN WATER ACCIONA AGUA LLC				\$29,159,916.15		\$29,329,890.46	\$29,329,890.46	\$25,528,014.13	\$3,801,876.33
11/15/04	thru		2005062						



# Contract Summary

Monthly Status Report of Vendors

July 1, 2021 thru July 31, 2021

Vendor Name and Contract Dates				Contract Amount Authorized	Current Period PO Amount Issued	Previous PO Amount Issued	Total PO Issued To Date	Total Expended To Date	Outstanding PO Balance
APPLIED ECOLOGY, INC				\$300,000.00		\$281,427.92	\$281,427.92	\$247,919.27	\$33,508.65
02/18/19	thru	02/18/22	2019022V						
ARCADIS US INC.				\$605,059.44		\$608,977.44	\$608,977.44	\$599,714.13	\$9,263.31
02/20/17	thru	12/31/21	2016033V						
ARCADIS US INC.				\$989,400.00		\$961,470.61	\$961,470.61	\$684,658.98	\$276,811.63
05/11/17	thru		2017020						
ARDURRA GROUP, INC				\$400,000.00		\$19,150.00	\$19,150.00	\$19,050.00	\$100.00
10/01/19	thru	09/30/24	2020003						
AREHNA ENGINEERING, INC.				\$100,000.00		\$26,366.50	\$26,366.50	\$26,366.50	\$0.00
05/11/17	thru		2017034						
ASTRA CONSTRUCTION SERVICES, LLC				\$942,901.88		\$0.00	\$0.00	\$0.00	\$0.00
07/19/21	thru	12/31/24	2021706						
ATC GROUP SERVICES, LLC				\$373,200.00		\$373,200.00	\$373,200.00	\$103,370.62	\$269,829.38
07/22/20	thru	08/31/21	2020043						
ATKINS NORTH AMERICA, INC.				\$750,000.00		\$368,800.00	\$368,800.00	\$258,300.00	\$110,500.00
05/11/17	thru		2017021						
ATKINS NORTH AMERICA, INC.				\$373,761.00		\$210,389.00	\$210,389.00	\$136,328.25	\$74,060.75
08/20/18	thru	08/20/23	2018048						
AVI INTEGRATORS INC				\$356,734.26		\$222,978.02	\$222,978.02	\$210,496.46	\$12,481.56
04/19/19	thru	04/30/20	2019036						
BAL ENGINEERING, INC.				\$90,000.00		\$30,000.00	\$30,000.00	\$28,735.00	\$1,265.00
02/14/19	thru		2019700						
BAYSIDE COATINGS INC				\$450,006.91		\$334,372.77	\$334,372.77	\$301,298.97	\$33,073.80
10/01/18	thru		2019008V						
BLACK & VEATCH CORPORATION				\$2,997,744.00		\$2,997,744.00	\$2,997,744.00	\$1,548,188.98	\$1,449,555.02
09/01/16	thru	10/26/22	2016031						
BLACK & VEATCH CORPORATION				\$784,790.00		\$499,357.00	\$499,357.00	\$452,851.80	\$46,505.20
05/11/17	thru		2017022						



# Contract Summary

Monthly Status Report of Vendors

July 1, 2021 thru July 31, 2021

Vendor Name and Contract Dates				Contract Amount Authorized	Current Period PO Amount Issued	Previous PO Amount Issued	Total PO Issued To Date	Total Expended To Date	Outstanding PO Balance
BLACK & VEATCH CORPORATION				\$750,000.00		\$417,035.00	\$417,035.00	\$392,380.98	\$24,654.02
04/20/17	thru	04/17/22	2017030						
BLACK & VEATCH CORPORATION				\$2,900,000.00		\$2,900,000.00	\$2,900,000.00	\$2,076,830.46	\$823,169.54
10/21/19	thru	11/30/21	2020011						
BRIAN G ORMISTON				\$301,880.00		\$163,801.25	\$163,801.25	\$121,156.50	\$42,644.75
02/18/19	thru	02/28/22	2019016						
BROWN & CALDWELL				\$125,776.89		\$125,776.89	\$125,776.89	\$125,417.25	\$359.64
08/20/18	thru	10/31/20	2018712						
BUSACK LAW FIRM, P.A.				\$40,000.00		\$40,000.00	\$40,000.00	\$0.00	\$40,000.00
12/17/18	thru	09/30/19	2019037						
CARDNO, INC				\$300,000.00		\$306,409.48	\$306,409.48	\$252,786.34	\$53,623.14
04/29/19	thru		2019023						
CARMEUSE LIME & STONE, INC.				\$4,494,029.76		\$2,074,650.00	\$2,074,650.00	\$1,842,081.02	\$232,568.98
01/01/20	thru	09/30/20	2020036						
CAROLLO ENGINEERS INC				\$1,098,792.00		\$900,000.00	\$900,000.00	\$375,656.66	\$524,343.34
08/21/20	thru	06/30/22	2020049						
CDM SMITH INC				\$2,495,216.00		\$1,035,697.50	\$1,035,697.50	\$748,786.18	\$286,911.32
05/11/17	thru	05/11/22	2017023						
CDM SMITH INC				\$300,000.00		\$158,545.00	\$158,545.00	\$95,207.80	\$63,337.20
10/21/19	thru	10/31/22	2020014						
CENTURION PROJECT MANAGEMENT LLC				\$600,000.00		\$0.00	\$0.00	\$0.00	\$0.00
02/15/21	thru	02/28/23	2021020						
CH2M HILL ENGINEERS INC				\$750,000.00		\$363,710.00	\$363,710.00	\$339,956.27	\$23,753.73
04/17/17	thru	04/17/22	2017041						
CHA CONSULTING INC				\$1,195,383.02		\$0.00	\$0.00	\$0.00	\$0.00
07/19/21	thru	04/20/22	2020032V						
CHANDLER ASSET MANAGEMENT, INC.				\$259,500.00		\$262,500.00	\$262,500.00	\$242,143.28	\$20,356.72
10/17/16	thru	10/31/17	2017008						



# Contract Summary

Monthly Status Report of Vendors

July 1, 2021 thru July 31, 2021

Vendor Name and Contract Dates				Contract Amount Authorized	Current Period PO Amount Issued	Previous PO Amount Issued	Total PO Issued To Date	Total Expended To Date	Outstanding PO Balance
CHANDLER ASSET MANAGEMENT, INC.				\$350,000.00		\$65,000.00	\$65,000.00	\$45,563.69	\$19,436.31
08/17/20	thru	12/13/22	2021700						
CHEMICAL SYSTEMS OF ORLANDO, INC.				\$271,235.00		\$186,141.00	\$186,141.00	\$148,700.60	\$37,440.40
10/01/20	thru	09/30/21	2021007						
CITRUS PARK WELL DRILLING & IRRIGATION				\$200,000.00		\$0.00	\$0.00	\$0.00	\$0.00
06/18/18	thru		2018032						
CLIFTONLARSONALLEN LLP				\$50,000.00		\$50,000.00	\$50,000.00	\$39,871.75	\$10,128.25
03/05/18	thru		2018707						
COLIN BAENZIGER				\$28,500.00		\$0.00	\$0.00	\$0.00	\$0.00
04/19/21	thru	12/31/21	2021042						
CONN & BUENAVENTURA, P.A.				\$643,500.00		\$643,500.00	\$643,500.00	\$600,879.51	\$42,620.49
05/01/18	thru		2018044						
CONN & BUENAVENTURA, P.A.				\$475,200.00		\$99,000.00	\$99,000.00	\$26,026.11	\$72,973.89
03/15/21	thru	04/30/23	2021049						
CORCORAN & ASSOCIATES, INC.				\$667,725.00		\$630,655.00	\$630,655.00	\$620,155.00	\$10,500.00
10/19/15	thru	10/19/17	2016002						
CORCORAN & ASSOCIATES, INC.				\$450,000.00		\$138,000.00	\$138,000.00	\$103,750.00	\$34,250.00
08/18/20	thru	08/18/23	2021004						
CROM COATINGS AND RESTORATIONS				\$113,875.00		\$55,365.00	\$55,365.00	\$0.00	\$55,365.00
10/01/20	thru	09/30/21	2021003						
CUMBEY & FAIR, INC.				\$900,000.00		\$244,857.00	\$244,857.00	\$183,454.00	\$61,403.00
10/01/19	thru	09/30/24	2020007						
DEAN, MEAD, EGERTON, BLOODWORTH,				\$125,000.00		\$120,000.00	\$120,000.00	\$81,180.52	\$38,819.48
12/17/18	thru	09/30/19	2019038						
DESIGNER AT LARGE				\$140,283.75		\$65,652.29	\$65,652.29	\$64,862.29	\$790.00
12/01/17	thru	09/30/20	2018018						
DEWBERRY ENGINEERS, INC				\$566,095.97		\$70,000.00	\$70,000.00	\$3,909.44	\$66,090.56
05/17/21	thru	05/11/22	2017026V						



# Contract Summary

Monthly Status Report of Vendors

July 1, 2021 thru July 31, 2021

Vendor Name and Contract Dates				Contract Amount Authorized	Current Period PO Amount Issued	Previous PO Amount Issued	Total PO Issued To Date	Total Expended To Date	Outstanding PO Balance
DEWBERRY ENGINEERS, INC				\$400,000.00		\$85,880.00	\$85,880.00	\$71,580.00	\$14,300.00
10/01/19	thru	09/30/24	2020009						
DIALOGUE PUBLIC RELATIONS, LLC				\$424,598.75	\$100,000.00	\$213,890.00	\$313,890.00	\$199,569.75	\$114,320.25
08/21/17	thru	09/30/20	2018014						
DIGITAL AERIAL SOLUTIONS, LLC				\$509,780.52		\$334,955.36	\$334,955.36	\$324,955.36	\$10,000.00
07/01/18	thru		2018043						
DONALD J POLMANN				\$200,000.00		\$75,000.00	\$75,000.00	\$0.00	\$75,000.00
05/19/21	thru	09/30/22	2021515						
EAU GALLIE ELECTRIC, INC.				\$2,306,855.00		\$2,306,855.00	\$2,306,855.00	\$2,078,523.67	\$228,331.33
09/19/19	thru	02/28/21	2019057						
ELECTRIC GAS INDUSTRIES ASSOCIATION				\$17,455,354.00		\$4,166,661.00	\$4,166,661.00	\$763,008.40	\$3,403,652.60
10/21/19	thru	10/31/24	2020010						
ELECTRICAL ENGINEERING ENTERPRISES INC				\$800,000.00	\$41,433.00	\$593,200.00	\$634,633.00	\$429,540.47	\$205,092.53
12/12/16	thru	12/31/20	2017015						
ELECTRICAL ENGINEERING ENTERPRISES INC				\$949,999.50		\$842,594.00	\$842,594.00	\$768,246.19	\$74,347.81
12/16/16	thru	12/31/20	2017017						
ELECTRICAL ENGINEERING ENTERPRISES INC				\$1,200,000.00		\$100,000.00	\$100,000.00	\$10,370.00	\$89,630.00
12/14/20	thru	12/14/22	2021014						
ENERGYCAP, INC.				\$148,662.25		\$148,662.25	\$148,662.25	\$99,235.07	\$49,427.18
02/18/19	thru		2019030						
ENTERPRISE FM TRUST				\$1,308,094.81		\$976,217.15	\$976,217.15	\$935,742.03	\$40,475.12
02/19/18	thru		2018704						
ENVIRONMENTAL SCIENCE ASSOCIATES				\$2,818,065.09		\$1,882,775.00	\$1,882,775.00	\$1,783,564.09	\$99,210.91
10/01/16	thru	09/30/20	2017004						
ENVIRONMENTAL SCIENCE ASSOCIATES				\$450,000.00		\$438,549.00	\$438,549.00	\$353,282.66	\$85,266.34
08/21/17	thru	10/31/20	2017053						
ENVIRONMENTAL SCIENCE ASSOCIATES				\$300,000.00		\$262,874.00	\$262,874.00	\$70,682.60	\$192,191.40
10/21/19	thru	10/31/22	2020015						



# Contract Summary

Monthly Status Report of Vendors

July 1, 2021 thru July 31, 2021

Vendor Name and Contract Dates				Contract Amount Authorized	Current Period PO Amount Issued	Previous PO Amount Issued	Total PO Issued To Date	Total Expended To Date	Outstanding PO Balance
ENVIRONMENTAL SCIENCE ASSOCIATES				\$960,000.00		\$547,247.00	\$547,247.00	\$166,513.81	\$380,733.19
06/15/20	thru	02/11/24	2020709						
ENVIRONMENTAL SCIENCE ASSOCIATES				\$2,739,331.00		\$592,004.00	\$592,004.00	\$285,665.20	\$306,338.80
08/17/20	thru	09/30/25	2021001						
F.H. BLACK AND COMPANY INC.				\$62,724.00		\$62,724.00	\$62,724.00	\$60,744.00	\$1,980.00
09/07/18	thru	12/31/20	2018713						
F.H. BLACK AND COMPANY INC.				\$100,000.00		\$62,000.00	\$62,000.00	\$23,821.25	\$38,178.75
08/17/20	thru	12/21/22	2021701						
FCX, LLC				\$116,715.00		\$77,810.00	\$77,810.00	\$44,352.00	\$33,458.00
07/01/17	thru	06/30/18	2017055						
FLORIDA JETCLEAN				\$146,750.00		\$146,750.00	\$146,750.00	\$146,440.00	\$310.00
10/01/20	thru	09/30/21	2021006						
GANNETT FLEMING, INC				\$2,500,000.00		\$306,182.00	\$306,182.00	\$171,251.40	\$134,930.60
08/17/20	thru		2020020						
GEORGE F YOUNG INC				\$400,000.00		\$8,100.00	\$8,100.00	\$8,100.00	\$0.00
10/01/19	thru	09/30/24	2020002						
GHD SERVICES, INC.				\$450,000.00		\$228,119.87	\$228,119.87	\$154,362.29	\$73,757.58
08/21/17	thru	09/30/20	2017050						
GRAY ROBINSON, P.A.				\$50,000.00		\$50,000.00	\$50,000.00	\$24,582.99	\$25,417.01
12/17/18	thru	09/30/19	2019039						
GREELEY AND HANSEN LLC				\$750,000.00		\$428,482.00	\$428,482.00	\$182,830.47	\$245,651.53
05/11/17	thru	06/22/22	2017024						
GREENMAN-PEDERSEN, INC.				\$322,508.00		\$233,615.87	\$233,615.87	\$185,069.56	\$48,546.31
08/20/18	thru	08/20/23	2018047						
GREENMAN-PEDERSEN, INC.				\$300,000.00		\$88,445.67	\$88,445.67	\$88,445.67	\$0.00
02/18/19	thru	02/19/22	2019017						
GSI ENVIRONMENTAL, INC.				\$1,035,000.00		\$876,405.50	\$876,405.50	\$797,803.62	\$78,601.88
12/09/13	thru	12/29/19	2014018						



# Contract Summary

Monthly Status Report of Vendors

July 1, 2021 thru July 31, 2021

Vendor Name and Contract Dates				Contract Amount Authorized	Current Period PO Amount Issued	Previous PO Amount Issued	Total PO Issued To Date	Total Expended To Date	Outstanding PO Balance
GSI ENVIRONMENTAL, INC.				\$750,000.00		\$649,098.42	\$649,098.42	\$584,381.43	\$64,716.99
10/21/19	thru	10/31/24	2020017						
HATCH ASSOCIATES CONSULTANTS, INC.				\$750,000.00		\$228,205.00	\$228,205.00	\$160,749.06	\$67,455.94
05/15/17	thru	09/30/22	2017031						
HAWKINS, INC.				\$355,101.56		\$236,260.98	\$236,260.98	\$158,194.56	\$78,066.42
01/01/18	thru		2018008						
HAYS HOLDING CORPORATION				\$2,300,000.00		\$541,412.90	\$541,412.90	\$380,291.33	\$161,121.57
03/06/20	thru	03/31/22	2017705						
HAZEN & SAWYER, P.C.				\$999,275.70		\$640,370.00	\$640,370.00	\$632,133.20	\$8,236.80
11/05/13	thru	10/30/19	2014019						
HAZEN & SAWYER, P.C.				\$4,025,910.00		\$4,025,910.00	\$4,025,910.00	\$2,706,369.52	\$1,319,540.48
08/27/14	thru	12/31/20	2015011						
HAZEN & SAWYER, P.C.				\$750,000.00		\$430,970.00	\$430,970.00	\$336,511.25	\$94,458.75
05/11/17	thru		2017025						
HAZEN & SAWYER, P.C.				\$695,000.00		\$695,000.00	\$695,000.00	\$573,299.91	\$121,700.09
10/21/19	thru	10/30/20	2020012						
HAZEN & SAWYER, P.C.				\$300,000.00		\$294,404.00	\$294,404.00	\$120,156.58	\$174,247.42
10/21/19	thru	10/30/22	2020013						
HAZEN & SAWYER, P.C.				\$750,000.00		\$140,000.00	\$140,000.00	\$98,253.17	\$41,746.83
10/21/19	thru	10/31/24	2020018						
HIGH TECH ENGINEERING INCORPORATED				\$465,527.42	\$50,000.00	\$421,954.06	\$471,954.06	\$421,169.32	\$50,784.74
07/01/17	thru	06/30/18	2017054						
HILLSBOROUGH COUNTY				\$172,880.00		\$172,880.00	\$172,880.00	\$162,114.04	\$10,765.96
10/16/19	thru	12/31/20	AGR2020001						
HILLSBOROUGH COUNTY				\$178,066.00		\$178,066.00	\$178,066.00	\$0.00	\$178,066.00
10/01/20	thru	12/31/21	AGR2021001						
HSW CONSULTING LLC				\$700,000.00		\$473,495.00	\$473,495.00	\$237,430.65	\$236,064.35
08/21/17	thru	10/21/20	2017051						



# Contract Summary

Monthly Status Report of Vendors

July 1, 2021 thru July 31, 2021

Vendor Name and Contract Dates				Contract Amount Authorized	Current Period PO Amount Issued	Previous PO Amount Issued	Total PO Issued To Date	Total Expended To Date	Outstanding PO Balance
HSW CONSULTING LLC				\$300,000.00		\$274,899.00	\$274,899.00	\$73,800.00	\$201,099.00
10/21/19	thru	10/31/22	2020016						
INSTRUMENT SPECIALTIES INC				\$144,634.71		\$97,258.94	\$97,258.94	\$94,634.71	\$2,624.23
12/10/19	thru	12/31/20	2020031						
INTERA, INC.				\$500,000.00		\$513,977.96	\$513,977.96	\$338,035.46	\$175,942.50
11/05/13	thru	12/31/22	2014020						
INTERA, INC.				\$750,000.00	\$30,000.00	\$70,896.32	\$100,896.32	\$44,869.86	\$56,026.46
10/21/19	thru	10/31/24	2020019						
JANICKI ENVIRONMENTAL, INC.				\$300,000.00		\$97,400.00	\$97,400.00	\$97,400.00	\$0.00
02/18/19	thru	02/28/22	2019021						
JEFFREY D BAKER				\$200,000.00		\$0.00	\$0.00	\$0.00	\$0.00
06/18/18	thru		2018031						
JOHN H GRANGER MAINTENANCE &				\$1,500,000.00	\$75,000.00	\$1,437,272.00	\$1,512,272.00	\$1,122,595.94	\$389,676.06
10/01/17	thru	09/30/21	2018003						
JOHNSTON, MIRMIRAN & THOMPSON, INC.				\$750,000.00		\$335,852.00	\$335,852.00	\$271,416.56	\$64,435.44
05/11/17	thru		2017027						
KEMIRA WATER SOLUTIONS, INC.				\$5,036,028.50		\$4,968,281.50	\$4,968,281.50	\$3,717,865.12	\$1,250,416.38
10/01/19	thru	09/30/20	2020021						
LEW ELECTRICAL SERVICES, LLC				\$800,000.00		\$273,600.00	\$273,600.00	\$155,765.66	\$117,834.34
12/01/16	thru	12/31/20	2017016						
LHOIST NORTH AMERICA OF ALABAMA, LLC				\$268,258.48		\$124,326.75	\$124,326.75	\$112,985.80	\$11,340.95
10/01/20	thru	09/30/21	2021011						
LOCHER ENVIRONMENTAL TECHNOLOGY LLC				\$80,000.00		\$108,773.52	\$108,773.52	\$56,703.66	\$52,069.86
10/26/17	thru	12/07/21	2018703						
MAINZER MANAGEMENT INC				\$319,460.00		\$319,460.00	\$319,460.00	\$16,585.00	\$302,875.00
04/20/20	thru	09/30/22	2020045						
MATHESON TRI-GAS INC.				\$869,003.79		\$684,620.00	\$684,620.00	\$558,250.33	\$126,369.67
10/01/20	thru	09/30/21	2021008						



# Contract Summary

Monthly Status Report of Vendors

July 1, 2021 thru July 31, 2021

Vendor Name and Contract Dates				Contract Amount Authorized	Current Period PO Amount Issued	Previous PO Amount Issued	Total PO Issued To Date	Total Expended To Date	Outstanding PO Balance
MAULDIN & JENKINS, LLC				\$667,500.00		\$532,500.00	\$532,500.00	\$478,500.00	\$54,000.00
07/11/17	thru	06/30/20	2017044						
MAYES FACILITATION SERVICES, LLC				\$34,600.00		\$34,600.00	\$34,600.00	\$34,600.00	\$0.00
12/16/19	thru	09/30/20	2020513						
MCKIM & CREED PA				\$900,000.00		\$731,875.33	\$731,875.33	\$396,171.05	\$335,704.28
05/11/17	thru		2017028						
MEASUREMENT SPECIALTIES INC.				\$116,289.50		\$58,120.98	\$58,120.98	\$28,892.89	\$29,228.09
01/09/19	thru	02/28/21	2019031						
MEASUREMENT SPECIALTIES INC.				\$83,043.79	\$20,000.00	\$63,043.00	\$83,043.00	\$67,153.79	\$15,889.21
01/21/21	thru	01/21/22	2021040						
METZGER & WILLARD INC				\$750,000.00	\$173,222.00	\$376,639.70	\$549,861.70	\$239,199.06	\$310,662.64
05/11/17	thru		2017029						
MGT OF AMERICA CONSULTING, LLC				\$36,915.00		\$36,915.00	\$36,915.00	\$30,415.00	\$6,500.00
04/30/19	thru		2019035						
NABORS, GIBLIN, & NICKERSON P.A.				\$50,000.00		\$50,000.00	\$50,000.00	\$13,809.21	\$36,190.79
12/17/18	thru	09/17/19	2019040						
NORTH CAROLINA STATE UNIVERSITY				\$79,962.00		\$79,962.00	\$79,962.00	\$39,981.00	\$39,981.00
10/01/20	thru	03/31/22	AGR2021009						
ODYSSEY MANUFACTURING COMPANY				\$6,903,447.95		\$3,577,129.00	\$3,577,129.00	\$3,236,128.35	\$341,000.65
01/01/19	thru	09/30/19	2019005						
PAFF TREE SERVICE, LLC				\$217,937.20		\$187,726.00	\$187,726.00	\$154,070.20	\$33,655.80
02/26/18	thru	03/31/19	2018028						
PASCO COUNTY OFFICES				\$157,672.00		\$157,672.00	\$157,672.00	\$149,895.63	\$7,776.37
08/19/19	thru	09/30/20	AGR2020002						
PASCO COUNTY OFFICES				\$162,401.00		\$162,401.00	\$162,401.00	\$90,357.06	\$72,043.94
10/01/21	thru	12/31/21	AGR2021002						
PATHOGEN DETECTION SYSTEMS, INC				\$32,130.00		\$0.00	\$0.00	\$0.00	\$0.00
02/02/21	thru	02/28/24	2021903						



# Contract Summary

Monthly Status Report of Vendors

July 1, 2021 thru July 31, 2021

Vendor Name and Contract Dates				Contract Amount Authorized	Current Period PO Amount Issued	Previous PO Amount Issued	Total PO Issued To Date	Total Expended To Date	Outstanding PO Balance
PCL CONSTRUCTION, INC.				\$2,168,480.00		\$2,168,480.00	\$2,168,480.00	\$1,832,135.65	\$336,344.35
11/01/19	thru	02/28/22	2020029						
PCL CONSTRUCTION, INC.				\$1,028,250.00		\$1,028,250.00	\$1,028,250.00	\$886,825.00	\$141,425.00
02/17/20	thru	09/30/22	2020704						
PCL CONSTRUCTION, INC.				\$334,556.00		\$334,556.00	\$334,556.00	\$63,527.00	\$271,029.00
12/14/20	thru	08/31/24	2021012						
PCL CONSTRUCTION, INC.				\$1,367,453.00		\$0.00	\$0.00	\$0.00	\$0.00
07/29/21	thru	12/31/22	2021703						
PERSONNEL SOLUTIONS PLUS LLC				\$100,000.00	\$25,000.00	\$0.00	\$25,000.00	\$0.00	\$25,000.00
05/17/21	thru	03/31/24	2021704						
PFM ASSET MANAGEMENT LLC				\$500,000.00		\$195,915.00	\$195,915.00	\$146,282.50	\$49,632.50
06/09/06	thru	09/30/17	2006067						
PFM FINANCIAL ADVISORS LLC				\$8,002.00		\$0.00	\$0.00	\$0.00	\$0.00
10/17/16	thru		2017700V						
PINELLAS COUNTY BOARD OF COUNTY				\$157,672.00		\$0.00	\$0.00	\$0.00	\$0.00
09/30/19	thru	09/30/20	AGR2020-00						
PINELLAS COUNTY BOARD OF COUNTY				\$157,672.00		\$315,344.00	\$315,344.00	\$141,289.59	\$174,054.41
09/26/19	thru	09/30/20	AGR2020003						
PINELLAS COUNTY BOARD OF COUNTY				\$162,401.00		\$162,401.00	\$162,401.00	\$78,448.03	\$83,952.97
10/01/20	thru	12/31/21	AGR2021003						
PIPER FIRE PROTECTION, INC.				\$425,000.00		\$408,698.18	\$408,698.18	\$286,164.23	\$122,533.95
10/01/18	thru	09/30/19	2019010						
POLYDYNE INC				\$899,144.76		\$755,402.00	\$755,402.00	\$657,865.93	\$97,536.07
10/01/19	thru	09/30/20	2020023						
POND & COMPANY				\$682,000.00		\$123,590.98	\$123,590.98	\$123,590.98	\$0.00
12/14/20	thru	12/14/25	2021017						
PRITCHETT STEINBECK GROUP, INC.				\$535,520.00		\$441,466.12	\$441,466.12	\$309,593.52	\$131,872.60
10/01/18	thru	09/30/23	2018046						



# Contract Summary

Monthly Status Report of Vendors

July 1, 2021 thru July 31, 2021

Vendor Name and Contract Dates				Contract Amount Authorized	Current Period PO Amount Issued	Previous PO Amount Issued	Total PO Issued To Date	Total Expended To Date	Outstanding PO Balance
PRITCHETT STEINBECK GROUP, INC.				\$300,000.00		\$119,552.25	\$119,552.25	\$119,552.25	\$0.00
02/18/19	thru	02/28/22	2019018						
PROC STEP INC.				\$89,816.00		\$89,816.00	\$89,816.00	\$69,216.00	\$20,600.00
10/26/20	thru	09/30/21	2021023						
PROCORR, INC.				\$1,246,685.94		\$1,142,653.09	\$1,142,653.09	\$840,534.73	\$302,118.36
08/15/16	thru	09/30/17	2017005						
PROJECT MANAGEMENT SOLUTIONS, INC.				\$600,000.00	\$212,200.00	\$145,000.00	\$357,200.00	\$98,400.00	\$258,800.00
02/15/21	thru	02/28/23	2021019						
PUBLIC FINANCIAL MGMT., INC. (PFM)				\$80,000.00		\$80,000.00	\$80,000.00	\$75,991.60	\$4,008.40
10/17/16	thru		2017700						
PVS TECHNOLOGIES, INC.				\$671,973.52		\$522,260.00	\$522,260.00	\$223,995.12	\$298,264.88
01/01/18	thru	09/30/18	2018007						
QRC INC				\$1,000,000.00		\$1,070,908.60	\$1,070,908.60	\$166,872.08	\$904,036.52
08/21/17	thru	09/30/21	2018013						
QUEST ECOLOGY INC				\$300,000.00	\$12,452.50	\$44,402.50	\$56,855.00	\$35,382.50	\$21,472.50
02/18/19	thru	02/28/22	2019014						
QUEST ECOLOGY INC				\$300,000.00		\$45,822.50	\$45,822.50	\$28,002.25	\$17,820.25
04/19/19	thru		2019024						
RAFTELIS FINANCIAL CONSULTANTS, INC.				\$750,000.00		\$325,562.00	\$325,562.00	\$272,106.22	\$53,455.78
04/17/17	thru	04/17/22	2017042						
RANDALL ENVIRONMENTAL, INC.				\$13,321,865.00		\$13,321,865.00	\$13,321,865.00	\$1,643,074.62	\$11,678,790.38
11/17/20	thru	10/31/22	2020044						
REISS ENGINEERING INC				\$500,000.00		\$500,307.00	\$500,307.00	\$408,072.16	\$92,234.84
11/05/13	thru	11/05/18	2014012						
REISS ENGINEERING INC				\$1,842,493.00		\$1,842,493.00	\$1,842,493.00	\$647,109.98	\$1,195,383.02
04/20/20	thru	04/20/22	2020032						
REYNOLDS SMITH & HILLS INC				\$333,334.00		\$279,696.12	\$279,696.12	\$225,932.12	\$53,764.00
04/21/14	thru	04/20/19	2014042						



# Contract Summary

Monthly Status Report of Vendors

July 1, 2021 thru July 31, 2021

Vendor Name and Contract Dates				Contract Amount Authorized	Current Period PO Amount Issued	Previous PO Amount Issued	Total PO Issued To Date	Total Expended To Date	Outstanding PO Balance
RICK RICHARDS, INC.				\$88,706.50		\$82,618.00	\$82,618.00	\$70,756.00	\$11,862.00
02/26/18	thru	03/31/19	2018029						
RICK RICHARDS, INC.				\$300,000.00		\$126,243.00	\$126,243.00	\$95,893.00	\$30,350.00
04/19/19	thru		2019027						
RING POWER CORPORATION				\$318,657.57		\$335,211.25	\$335,211.25	\$314,821.81	\$20,389.44
04/16/18	thru		2018708						
ROWLAND INC				\$1,000,136.00		\$869,907.57	\$869,907.57	\$672,209.24	\$197,698.33
10/01/17	thru	09/30/21	2018002						
ROWLAND INC				\$1,000,000.00		\$665,000.00	\$665,000.00	\$522,143.47	\$142,856.53
10/01/17	thru	09/30/21	2018012						
RYMAN ROOFING INC.				\$350,000.00		\$235,000.00	\$235,000.00	\$159,187.00	\$75,813.00
10/25/18	thru	10/31/19	2019003						
S & C JANITORIAL, INC				\$122,885.02		\$104,072.46	\$104,072.46	\$88,564.14	\$15,508.32
01/15/19	thru	06/30/20	2019033						
SMITH INDUSTRIES INC				\$200,000.00		\$178,880.56	\$178,880.56	\$87,590.70	\$91,289.86
06/18/18	thru	04/30/19	2018040						
SOUTHEAST DRILLING SERVICES INC				\$600,000.00		\$610,000.00	\$610,000.00	\$429,059.00	\$180,941.00
08/19/19	thru		2019054						
SOUTHEAST DRILLING SERVICES INC				\$600,000.00		\$0.00	\$0.00	\$0.00	\$0.00
08/19/19	thru		2019056						
SOUTHEASTERN SURVEYING AND MAPPING				\$400,000.00		\$191,157.65	\$191,157.65	\$176,157.65	\$15,000.00
10/01/19	thru	09/30/24	2020006						
SOUTHWEST FLORIDA WATER MANAGEMENT				\$2,864,476.00		\$0.00	\$0.00	\$0.00	\$0.00
10/01/20	thru	08/01/24	AGR2021005						
STANTEC CONSULTING SERVICES, INC.				\$1,319,903.50		\$1,319,903.50	\$1,319,903.50	\$642,917.35	\$676,986.15
02/17/20	thru	08/31/23	2020026						
STANTEC CONSULTING SERVICES, INC.				\$1,721,500.00		\$1,721,499.00	\$1,721,499.00	\$208,292.39	\$1,513,206.61
10/27/20	thru	06/17/24	2021002						



# Contract Summary

Monthly Status Report of Vendors

July 1, 2021 thru July 31, 2021

Vendor Name and Contract Dates				Contract Amount Authorized	Current Period PO Amount Issued	Previous PO Amount Issued	Total PO Issued To Date	Total Expended To Date	Outstanding PO Balance
STEARNS WEAVER MILLER WEISSLER				\$40,000.00		\$40,000.00	\$40,000.00	\$3,049.00	\$36,951.00
12/17/18	thru	09/30/19	2019041						
SULPHURIC ACID TRADING CO. INC				\$3,452,605.99	\$239,274.50	\$3,265,265.01	\$3,504,539.51	\$3,009,775.42	\$494,764.09
01/01/18	thru	09/30/18	2018006						
SURVTECH SOLUTIONS, INC.				\$400,000.00		\$14,756.00	\$14,756.00	\$2,956.00	\$11,800.00
10/01/19	thru	09/30/24	2020008						
TAMCO ELECTRIC INC				\$800,000.00		\$658,538.45	\$658,538.45	\$436,960.24	\$221,578.21
12/16/16	thru	12/31/20	2017018						
TAMCO ELECTRIC INC				\$1,200,000.00		\$220,000.00	\$220,000.00	\$54,153.50	\$165,846.50
12/14/20	thru	12/14/22	2021013						
TAMPA ARMATURE WORKS INC				\$500,000.00		\$128,518.12	\$128,518.12	\$107,574.83	\$20,943.29
05/03/18	thru	05/03/22	2018024						
TAMPA ARMATURE WORKS INC				\$2,000,000.00		\$389,694.00	\$389,694.00	\$259,481.13	\$130,212.87
05/03/18	thru	05/03/22	2018026						
TAMPA BAY ESTUARY PROGRAM				\$60,000.00		\$0.00	\$0.00	\$0.00	\$0.00
07/19/21	thru	12/31/26	AGR2021010						
TAMPA BAY SYSTEM SALES				\$655,000.00		\$651,758.00	\$651,758.00	\$570,873.55	\$80,884.45
10/01/19	thru		2020700						
TANNER INDUSTRIES, INC.				\$1,031,099.76	\$50,000.00	\$668,355.46	\$718,355.46	\$582,133.63	\$136,221.83
01/01/19	thru	09/30/19	2019004						
TAW TECHNICAL FIELD SERVICES INC				\$1,052,330.45		\$1,052,330.45	\$1,052,330.45	\$1,043,617.81	\$8,712.64
09/13/18	thru	12/31/20	2018020						
THATCHER CHEMICAL OF FLORIDA INC.				\$195,250.00		\$156,519.00	\$156,519.00	\$139,879.40	\$16,639.60
10/01/20	thru	09/30/21	2021009						
THE GORDIAN GROUP				\$250,000.00		\$0.00	\$0.00	\$0.00	\$0.00
07/29/21	thru	06/06/22	2021707						
THERMO ELECTRON NORTH AMERICA LLC				\$81,592.00		\$32,156.00	\$32,156.00	\$32,156.00	\$0.00
02/02/21	thru	12/31/23	2021905						



# Contract Summary

Monthly Status Report of Vendors

July 1, 2021 thru July 31, 2021

Vendor Name and Contract Dates				Contract Amount Authorized	Current Period PO Amount Issued	Previous PO Amount Issued	Total PO Issued To Date	Total Expended To Date	Outstanding PO Balance
TONOAH A. HART				\$200,189.50		\$173,790.00	\$173,790.00	\$162,689.50	\$11,100.50
02/26/18	thru	03/31/19	2018030						
TRANE US INC				\$409,027.11	\$10,813.00	\$61,626.34	\$72,439.34	\$54,654.29	\$17,785.05
04/19/21	thru	09/30/22	2020700V						
TRAUTMAN'S PAINTING LLC				\$300,000.00		\$83,600.00	\$83,600.00	\$74,632.66	\$8,967.34
10/01/18	thru	09/30/19	2019009						
UNIVERSAL PROTECTION SERVICE LP				\$1,122,782.00		\$1,010,000.00	\$1,010,000.00	\$1,002,242.21	\$7,757.79
06/15/20	thru	03/09/25	2020707						
UNIVERSITY OF CENTRAL FLORIDA				\$32,880.00		\$32,880.00	\$32,880.00	\$32,880.00	\$0.00
09/26/19	thru	05/31/21	2020034						
UNIVERSITY OF CENTRAL FLORIDA				\$89,470.00		\$89,470.00	\$89,470.00	\$0.00	\$89,470.00
02/18/21	thru	09/30/23	AGR2021008						
UNIVERSITY OF FLORIDA				\$78,859.00		\$0.00	\$0.00	\$0.00	\$0.00
08/19/19	thru	09/30/21	2020037						
UNIVERSITY OF FLORIDA				\$94,076.00		\$94,076.00	\$94,076.00	\$70,557.00	\$23,519.00
09/30/20	thru	08/31/21	AGR2020051						
UNIVERSITY OF FLORIDA				\$90,000.00		\$90,000.00	\$90,000.00	\$20,000.00	\$70,000.00
10/01/20	thru	12/31/22	AGR2021007						
UNIVERSITY OF FLORIDA IFAS EXTENSION				\$90,000.00		\$0.00	\$0.00	\$0.00	\$0.00
09/30/19	thru	12/31/21	AGR2019008						
UNIVERSITY OF NORTH CAROLINA AT CHAPEL				\$250,000.00		\$250,000.00	\$250,000.00	\$100,000.00	\$150,000.00
10/20/20	thru	09/30/22	AGR2019019						
UNIVERSITY OF SOUTH FLORIDA				\$65,000.00		\$65,000.00	\$65,000.00	\$53,181.81	\$11,818.19
04/03/20	thru	12/31/21	2020048						
UNIVERSITY OF SOUTH FLORIDA				\$176,875.00		\$176,875.00	\$176,875.00	\$157,486.34	\$19,388.66
09/01/19	thru		AGR2019006						
USGS				\$125,101.00		\$125,100.00	\$125,100.00	\$93,825.00	\$31,275.00
08/18/20	thru	09/30/21	2021018						



# Contract Summary

Monthly Status Report of Vendors

July 1, 2021 thru July 31, 2021

Vendor Name and Contract Dates				Contract Amount Authorized	Current Period PO Amount Issued	Previous PO Amount Issued	Total PO Issued To Date	Total Expended To Date	Outstanding PO Balance
USGS				\$20,000.00		\$20,000.00	\$20,000.00	\$0.00	\$20,000.00
10/01/19	thru	09/30/21	AGR2020005						
VANASSE HANGEN BRUSTLIN INC				\$571,350.00		\$465,625.00	\$465,625.00	\$445,035.02	\$20,589.98
10/01/17	thru	09/30/20	2017003						
VANASSE HANGEN BRUSTLIN INC				\$956,774.50		\$942,799.00	\$942,799.00	\$645,028.11	\$297,770.89
08/21/17	thru	09/30/21	2017046						
VANASSE HANGEN BRUSTLIN INC				\$300,000.00		\$297,338.17	\$297,338.17	\$256,475.87	\$40,862.30
02/18/19	thru	02/28/22	2019015						
VEOLIA WATER NORTH AMERICA				\$1,959,247.47		\$1,831,178.29	\$1,831,178.29	\$1,467,314.75	\$363,863.54
01/14/14	thru	09/30/20	2014029						
VERIZON FLORIDA INC				\$1,350,000.00		\$400,000.00	\$400,000.00	\$147,632.75	\$252,367.25
08/25/20	thru	12/29/23	2020054						
VOLT AIR CONSULTING ENGINEERS INC.				\$250,000.00		\$49,259.00	\$49,259.00	\$18,834.00	\$30,425.00
05/11/17	thru		2017033						
WANTMAN GROUP, INC				\$400,000.00		\$16,480.00	\$16,480.00	\$16,480.00	\$0.00
10/01/19	thru	09/30/24	2020005						
WATER & AIR RESEARCH, INC.				\$569,738.00		\$368,002.49	\$368,002.49	\$328,381.79	\$39,620.70
09/17/18	thru	09/30/23	2018049						
WATER & AIR RESEARCH, INC.				\$300,000.00	\$7,153.50	\$249,963.56	\$257,117.06	\$227,638.74	\$29,478.32
02/18/19	thru	02/18/22	2019019						
WATER & AIR RESEARCH, INC.				\$300,000.00		\$329,760.25	\$329,760.25	\$186,271.25	\$143,489.00
04/19/19	thru		2019025						
WHARTON-SMITH INC				\$1,849,358.00		\$1,849,356.00	\$1,849,356.00	\$1,810,590.92	\$38,765.08
04/18/19	thru	05/31/21	2019011						
WHARTON-SMITH INC				\$1,726,000.00		\$1,726,000.00	\$1,726,000.00	\$538,675.82	\$1,187,324.18
08/17/20	thru	12/31/22	2020050						
WILDLANDS CONSERVATION, INC.				\$300,000.00		\$258,574.08	\$258,574.08	\$213,221.37	\$45,352.71
04/29/19	thru		2019026						



# Contract Summary

Monthly Status Report of Vendors

July 1, 2021 thru July 31, 2021

Vendor Name and Contract Dates				Contract Amount Authorized	Current Period PO Amount Issued	Previous PO Amount Issued	Total PO Issued To Date	Total Expended To Date	Outstanding PO Balance
WISE CONSULTING GROUP				\$447,828.00		\$536,537.00	\$536,537.00	\$273,194.00	\$263,343.00
08/21/17	thru	09/30/21	2017047						
WISE CONSULTING GROUP				\$550,000.00		\$316,350.00	\$316,350.00	\$279,585.00	\$36,765.00
08/21/17	thru	10/21/20	2017048						
WOOD ENVIRONMENT & INFRASTRUCTURE				\$300,000.00		\$153,132.00	\$153,132.00	\$126,160.75	\$26,971.25
02/18/19	thru	02/28/22	2019020						
WOOD ENVIRONMENT & INFRASTRUCTURE				\$400,000.00		\$23,193.63	\$23,193.63	\$0.00	\$23,193.63
10/01/19	thru	09/30/24	2020004						
WSP USA INC				\$653,970.00		\$220,825.00	\$220,825.00	\$25,150.00	\$195,675.00
12/14/20	thru	04/17/22	2017043V						
WSP USA INC				\$928,375.00		\$928,375.00	\$928,375.00	\$22,659.71	\$905,715.29
12/14/20	thru	02/28/22	2021010						



**DATE:** August 25, 2021

**TO:** Board of Directors

**THRU:** Charles H. Carden, Interim General Manager

**FROM:** Christina Sackett, Chief Financial Officer

**SUBJECT:** Comprehensive Check List with Delegated Check Approval Items for July 2021 -  
*Receive Report*

**SUMMARY**

Attached is a list of all checks and wire transfers written for the month of July 2021. Additional information is provided for checks over \$50,000 and for delegated approval items.

**SUGGESTED ACTION**

Receive and File

**COST/FUNDING SOURCE**

N/A

**DISCUSSION**

The attached report lists all checks and wire transfers which have been written during the month of July 2021. To provide the Board additional information, a description is included for all delegated approval item payments. Delegated approval items were authorized by the General Manager under his delegated approval authority and are marked "Delegated Approval".

Items with delegated approval are generally items such as payroll taxes, Florida Retirement System, utilities, and so forth, which are approved by the board in the budget process but for which there is not a



specific approved contract or agenda item.

By policy, the General Manager is authorized to approve all expenditures of \$100,000 or less. All contractual obligations or purchase orders issued in excess of \$100,000 are approved by the board through the contract approval, agenda approval, or budget approval processes. The comprehensive check list includes a description for all payments over \$50,000 and identifies those items previously approved by the board with "Receive".

Attachments (1)

[Check Register and Delegated Check Approval for July](#)



## TAMPA BAY WATER

## CHECK REGISTER - JUL 2021

<u>CHECK#</u>	<u>CHECK DATE</u>	<u>VENDOR NAME</u>	<u>CHECK AMOUNT</u>	<u>DESCRIPTION</u>	<u>APPROVE/RECEIVE</u>
622492	07/01/2021	ADVANCED ENVIRONMENTAL LABORATORIES, INC	3,611.00		
622493	07/01/2021	ADVANCED ENVIRONMENTAL LABORATORIES, INC	1,160.00		
622494	07/01/2021	AIRGAS USA, LLC	17,685.87		
622495	07/01/2021	ALLIED UNIVERSAL CORPORATION	66,414.29	CHEMICAL - SODIUM HYDROXIDE	RECEIVE
622496	07/01/2021	ALLIED UNIVERSAL CORPORATION	33,686.78		
622497	07/01/2021	BEAUX ARTS GROUP	926.50		
622498	07/01/2021	CAROLLO ENGINEERS INC	39,815.25		
<b>622499</b>	<b>07/01/2021</b>	<b>CITY OF CLEARWATER UTILITIES</b>	<b>2,421.92</b>	<b>UTILITY PAYMENT</b>	<b>DELEGATED APPROVAL</b>
<b>622500</b>	<b>07/01/2021</b>	<b>DUKE ENERGY CORPORATION</b>	<b>25,294.26</b>	<b>ELECTRIC BILL - WELL FIELDS AND PUMPING STATIONS</b>	<b>DELEGATED APPROVAL</b>
622501	07/01/2021	ENVIRONMENTAL SCIENCE ASSOCIATES CORPORATION	708.33		
622502	07/01/2021	EPIC ENGINEERING & CONSULTING GROUP	8,243.21		
622503	07/01/2021	FEDERAL EXPRESS CORPORATION	14.48		
622504	07/01/2021	FISHER SCIENTIFIC COMPANY LLC	525.37		
622505	07/01/2021	BLUE CROSS BLUE SHIELD OF FLORIDA	5,161.84	NOTHSTEIN - AUGUST 2021	RECEIVE
622506	07/01/2021	GSI ENVIRONMENTAL, INC.	2,612.50		
622507	07/01/2021	HACH COMPANY	2,841.87		
622508	07/01/2021	RALPH W HOGG	154.20		
622509	07/01/2021	HYDROLOGIC DATA COLLECTION INC	1,800.00		
622510	07/01/2021	KEMIRA WATER SOLUTIONS, INC.	56,728.99	CHEMICAL - FERRIC SULFATE	RECEIVE
622511	07/01/2021	KEMIRA WATER SOLUTIONS, INC.	4,067.03		
622512	07/01/2021	MATHESON TRI-GAS INC.	17,309.20		
<b>622513</b>	<b>07/01/2021</b>	<b>MICHIGAN STATE DISBURSEMENT UNIT</b>	<b>225.52</b>	<b>CHILD SUPPORT</b>	<b>DELEGATED APPROVAL</b>
622514	07/01/2021	ODYSSEY MANUFACTURING COMPANY	21,806.88		
622515	07/01/2021	POLYDYNE INC	4,679.40		
622516	07/01/2021	PUBLIC FINANCIAL MGMT., INC. (PFM)	1,333.33		
622517	07/01/2021	REPUBLIC SERVICES OF FLORIDA	428.00		
622518	07/01/2021	RICK RICHARDS, INC.	3,400.00		
622519	07/01/2021	RING POWER CORPORATION	3,145.80		
622520	07/01/2021	RING POWER CORPORATION	4,884.55		
622521	07/01/2021	SHI INTERNATIONAL CORP	13,619.66		
622522	07/01/2021	SMITH INDUSTRIES INC	3,035.48		
<b>622523</b>	<b>07/01/2021</b>	<b>STATE OF FLORIDA DISBURSEMENT UNIT</b>	<b>82.82</b>	<b>CHILD SUPPORT</b>	<b>DELEGATED APPROVAL</b>
<b>622524</b>	<b>07/01/2021</b>	<b>STATE OF FLORIDA DISBURSEMENT UNIT</b>	<b>152.77</b>	<b>CHILD SUPPORT</b>	<b>DELEGATED APPROVAL</b>
<b>622525</b>	<b>07/01/2021</b>	<b>TAMPA ELECTRIC CO</b>	<b>320,958.21</b>	<b>ELECTRIC BILL - WELL FIELDS AND PUMPING STATIONS</b>	<b>DELEGATED APPROVAL</b>
<b>622526</b>	<b>07/01/2021</b>	<b>TAMPA ELECTRIC CO</b>	<b>244,439.22</b>	<b>ELECTRIC BILL - WELL FIELDS AND PUMPING STATIONS</b>	<b>DELEGATED APPROVAL</b>
622527	07/01/2021	TANNER INDUSTRIES, INC.	6,626.19		
622528	07/01/2021	THATCHER CHEMICAL OF FLORIDA INC.	5,793.56		
622529	07/01/2021	TIMES PUBLISHING CO	1,269.20		
622530	07/01/2021	TRANE US INC	10,450.95		
622531	07/01/2021	UNITED PARCEL SERVICE	7.55		



## TAMPA BAY WATER

## CHECK REGISTER - JUL 2021

<u>CHECK#</u>	<u>CHECK DATE</u>	<u>VENDOR NAME</u>	<u>CHECK AMOUNT</u>	<u>DESCRIPTION</u>	<u>APPROVE/RECEIVE</u>
622532	07/01/2021	UNIVERSITY OF FLORIDA	30,471.06		
622533	07/01/2021	UNIVERSITY OF FLORIDA IFAS EXTENSION	17,250.00		
622534	07/01/2021	UNIVERSITY OF FLORIDA	23,519.00		
622535	07/01/2021	VEOLIA WATER NORTH AMERICA	575,613.44	SWTP & KELLER O&M - MAY	RECEIVE
622536	07/01/2021	WALPOLE ,INC.	720.00		
622537	07/01/2021	WASTE MANAGEMENT INC. OF FLORIDA	814.98		
622538	07/01/2021	WILLIAMS SCOTSMAN, INC	1,340.29		
<b>622539</b>	<b>07/01/2021</b>	<b>WITHLACOOCHEE RIVER ELECTRIC</b>	<b>71,235.26</b>	<b>ELECTRIC BILL - WELL FIELDS AND PUMPING STATIONS</b>	<b>DELEGATED APPROVAL</b>
<b>WIRE</b>	<b>07/02/2021</b>	<b>INTERNAL REVENUE SERVICE</b>	<b>114,084.87</b>	<b>FEDERAL PAYROLL TAX DEPOSIT</b>	<b>DELEGATED APPROVAL</b>
<b>WIRE</b>	<b>07/07/2021</b>	<b>FLORIDA DIV OF RETIREMENT CASHIER</b>	<b>142,679.84</b>	<b>FEDERAL PAYROLL TAX DEPOSIT</b>	<b>DELEGATED APPROVAL</b>
622540	07/08/2021	ADVANCED ENVIRONMENTAL LABORATORIES, INC	3,596.00		
622541	07/08/2021	AMERICAN FAMILY LIFE ASSURANCE COMPANY OF COLUMBUS	1,423.74		
622542	07/08/2021	AIR CENTERS OF FLORIDA, INC.	3,454.16		
622543	07/08/2021	AIRGAS USA, LLC	19,550.86		
622544	07/08/2021	ALLIED UNIVERSAL CORPORATION	68,083.22	CHEMICAL - SODIUM HYDROXIDE	RECEIVE
622545	07/08/2021	AMERICAN FACILITY SERVICES, INC.	2,399.97		
622546	07/08/2021	APPLIED ECOLOGY, INC	8,617.85		
622547	07/08/2021	ARCADIS US INC.	9,400.65		
622548	07/08/2021	ATC GROUP SERVICES, LLC	60,530.62	HSPS AND CYC DESAL PUMPING TANK IMPROVEMENTS	RECEIVE
622549	07/08/2021	AVI INTEGRATORS INC	3,213.41		
622550	07/08/2021	BLACK & VEATCH CORPORATION	138,832.79	ENG DESAL EXPANSION FEASIBILITY	RECEIVE
622551	07/08/2021	CARDNO, INC	4,773.31		
622552	07/08/2021	CHANDLER ASSET MANAGEMENT, INC.	5,830.24		
622553	07/08/2021	CONN & BUENAVENTURA, P.A.	18,062.16		
622554	07/08/2021	DILLARD CATTLE COMPANY	2,868.72		
622555	07/08/2021	ENVIRONMENTAL SCIENCE ASSOCIATES CORPORATION	56,077.67	RESERVOIR CAL/MAINT & HBMP IMPLEMENTATION	RECEIVE
622556	07/08/2021	EVERBRIDGE, INC.	11,926.73		
622557	07/08/2021	FLORIDA DEPT OF STATE	58.80		
<b>622558</b>	<b>07/08/2021</b>	<b>FRONTIER COMMUNICATIONS</b>	<b>245.46</b>	<b>UTILITY PAYMENT -COMMUNICATION</b>	<b>DELEGATED APPROVAL</b>
<b>622559</b>	<b>07/08/2021</b>	<b>FRONTIER COMMUNICATIONS</b>	<b>247.60</b>	<b>UTILITY PAYMENT -COMMUNICATION</b>	<b>DELEGATED APPROVAL</b>
622560	07/08/2021	GRAY ROBINSON, P.A.	4,988.40		
622561	07/08/2021	GREELEY AND HANSEN LLC	5,464.90		
622562	07/08/2021	HAWKINS, INC.	1,756.35		
622563	07/08/2021	HAYS HOLDING CORPORATION	9,789.38		
622564	07/08/2021	HAZEN & SAWYER, P.C.	336.00		
622565	07/08/2021	HAZEN & SAWYER, P.C.	28,121.20		
622566	07/08/2021	HAZEN & SAWYER, P.C.	1,351.00		
622567	07/08/2021	CLIFTONLARSONALLEN LLP	2,462.50		
622568	07/08/2021	MATHESON TRI-GAS INC.	7,823.02		
622569	07/08/2021	MCDADE WATERWORKS INC	32,623.94		



## TAMPA BAY WATER

## CHECK REGISTER - JUL 2021

<u>CHECK#</u>	<u>CHECK DATE</u>	<u>VENDOR NAME</u>	<u>CHECK AMOUNT</u>	<u>DESCRIPTION</u>	<u>APPROVE/RECEIVE</u>
622570	07/08/2021	ODYSSEY MANUFACTURING COMPANY	7,218.24		
622571	07/08/2021	PINELLAS COUNTY BOARD OF COUNTY COMMISSIONERS	11,334.91		
622572	07/08/2021	PIPER FIRE PROTECTION, INC.	165.00		
622573	07/08/2021	PROJECT MANAGEMENT SOLUTIONS, INC.	94,800.00	PROJ MGMNT CONSULT SRV MAY	RECEIVE
622574	07/08/2021	MULTI SERVICE TECHNOLOGY SOLUTIONS, INC.	229.48		
622575	07/08/2021	RING POWER CORPORATION	2,439.60		
622576	07/08/2021	S & C JANITORIAL, INC	2,866.24		
622577	07/08/2021	STANTEC CONSULTING SERVICES, INC.	47,138.25		
622578	07/08/2021	TAMPA ELECTRIC CO	39,219.75	ELECTRIC BILL - WELL FIELDS AND PUMPING STATIONS	DELEGATED APPROVAL
622579	07/08/2021	TAMPA ELECTRIC CO	3,799.32	ELECTRIC BILL - WELL FIELDS AND PUMPING STATIONS	DELEGATED APPROVAL
622580	07/08/2021	TANNER INDUSTRIES, INC.	7,078.06		
622581	07/08/2021	TRANE US INC	1,676.38		
622582	07/08/2021	UNIVERSAL PROTECTION SERVICE LP	104,942.51	SECURITY SRV - 3/26/21- 5/27/21	RECEIVE
622583	07/08/2021	WATER & AIR RESEARCH, INC.	23,237.00		
622584	07/08/2021	WILDLANDS CONSERVATION, INC.	13,755.00		
622585	07/08/2021	WSP USA INC	6,737.25		
622586	07/15/2021	A.C. SCHULTES OF FLORIDA, INC.	122,372.10	S. HILLS.WF FEASIBILITY TEST	RECEIVE
622587	07/15/2021	ADVANCED ENVIRONMENTAL LABORATORIES, INC	50.00		
622588	07/15/2021	AIRGAS SOUTH, INC.	80.40		
622589	07/15/2021	ALLIED UNIVERSAL CORPORATION	47,209.61		
622590	07/15/2021	J.C. EHRlich CO.	255.39		
622591	07/15/2021	AMERICAN EXPRESS TRAVEL RELATED SERVICES CO INC	384.00		
622592	07/15/2021	AMERICAN WATER ACCIONA AGUA LLC	561,898.63	DESAL O&M - MAY	RECEIVE
622593	07/15/2021	APPLIED ECOLOGY, INC	3,206.09		
622594	07/15/2021	AVI INTEGRATORS INC	6,701.44		
622595	07/15/2021	BEST LINE OIL COMPANY	22,565.14		
622596	07/15/2021	CARMEUSE LIME & STONE, INC.	44,213.22		
622597	07/15/2021	CDW LLC	580.00		
622598	07/15/2021	DEAN, MEAD, EGERTON, BLOODWORTH, CAPOUANO, &	13,333.34		
622599	07/15/2021	DEWBERRY ENGINEERS, INC	3,909.44		
622600	07/15/2021	EYEMED VISION CARE	1,162.93		
622601	07/15/2021	FCX, LLC	1,936.00		
622602	07/15/2021	FEDERAL EXPRESS CORPORATION	95.87		
622603	07/15/2021	FISHER SCIENTIFIC COMPANY LLC	542.07		
622604	07/15/2021	FRONTIER COMMUNICATIONS	129.57	UTILITY PAYMENT -COMMUNICATION	DELEGATED APPROVAL
622605	07/15/2021	FRONTIER COMMUNICATIONS	120.98	UTILITY PAYMENT -COMMUNICATION	DELEGATED APPROVAL
622606	07/15/2021	FRONTIER COMMUNICATIONS	165.17	UTILITY PAYMENT -COMMUNICATION	DELEGATED APPROVAL
622607	07/15/2021	KATHLEEN GOELZ	169.27		
622608	07/15/2021	GREENMAN-PEDERSEN, INC.	20,022.14		
622609	07/15/2021	HACH COMPANY	8,371.58		



## TAMPA BAY WATER

## CHECK REGISTER - JUL 2021

<u>CHECK#</u>	<u>CHECK DATE</u>	<u>VENDOR NAME</u>	<u>CHECK AMOUNT</u>	<u>DESCRIPTION</u>	<u>APPROVE/RECEIVE</u>
622610	07/15/2021	ARROW EXTERMINATORS	95.40		
622611	07/15/2021	INFOARMOR, INC.	352.75		
622612	07/15/2021	LUCIE JOURET	178.48		
622613	07/15/2021	KEMIRA WATER SOLUTIONS, INC.	49,366.26		
622614	07/15/2021	MEASUREMENT SPECIALTIES INC.	13,664.22		
<b>622615</b>	<b>07/15/2021</b>	<b>MICHIGAN STATE DISBURSEMENT UNIT</b>	<b>225.52</b>	<b>CHILD SUPPORT</b>	<b>DELEGATED APPROVAL</b>
622616	07/15/2021	MILLER BUILDING & REPAIR SERVICES, INC.	12,739.00		
622617	07/15/2021	MUTUAL OF OMAHA COMPANY	8,334.68		
622618	07/15/2021	ODYSSEY MANUFACTURING COMPANY	26,521.92		
622619	07/15/2021	OFFICE DEPOT	1,546.76		
622620	07/15/2021	PCL CONSTRUCTION, INC.	192,889.43	TAMPA BYPASS CANAL GATE AUTOMATION PROJ	RECEIVE
622621	07/15/2021	PCL CONSTRUCTION, INC.	9,737.50		
622622	07/15/2021	PERSONNEL SOLUTIONS PLUS LLC	703.36		
622623	07/15/2021	PIPER FIRE PROTECTION, INC.	5,736.41		
622624	07/15/2021	RANDALL ENVIRONMENTAL, INC.	364,708.15	ELDRIDGE WILDE WF PUMP & MOTOR REPLACE & CYP TRAILS	RECEIVE
622625	07/15/2021	RICOH USA, INC.	1,734.82		
622626	07/15/2021	KIM SISCO	134.40		
622627	07/15/2021	STANDARD INSURANCE CO	10,744.56		
<b>622628</b>	<b>07/15/2021</b>	<b>STATE OF FLORIDA DISBURSEMENT UNIT</b>	<b>82.82</b>	<b>CHILD SUPPORT</b>	<b>DELEGATED APPROVAL</b>
<b>622629</b>	<b>07/15/2021</b>	<b>STATE OF FLORIDA DISBURSEMENT UNIT</b>	<b>152.77</b>	<b>CHILD SUPPORT</b>	<b>DELEGATED APPROVAL</b>
622630	07/15/2021	SULPHURIC ACID TRADING CO. INC	47,298.53		
622631	07/15/2021	SULPHURIC ACID TRADING CO. INC	22,463.17		
622632	07/15/2021	SUNSHINE STATE ONE CALL OF FLORIDA INC	710.76		
<b>622633</b>	<b>07/15/2021</b>	<b>CITY OF TAMPA OFFICES</b>	<b>9.37</b>	<b>UTILITY PAYMENT</b>	<b>DELEGATED APPROVAL</b>
<b>622634</b>	<b>07/15/2021</b>	<b>TAMPA ELECTRIC CO</b>	<b>459.31</b>	<b>ELECTRIC BILL - WELL FIELDS AND PUMPING STATIONS</b>	<b>DELEGATED APPROVAL</b>
622635	07/15/2021	TANNER INDUSTRIES, INC.	683.05		
622636	07/15/2021	TONOAH A. HART	3,500.00		
622637	07/15/2021	TRANE US INC	595.00		
<b>622638</b>	<b>07/15/2021</b>	<b>VERIZON WIRELESS COMMUNICATIONS LLC</b>	<b>13.80</b>	<b>UTILITY PAYMENT -COMMUNICATION</b>	<b>DELEGATED APPROVAL</b>
<b>622639</b>	<b>07/15/2021</b>	<b>VERIZON WIRELESS COMMUNICATIONS LLC</b>	<b>3,063.22</b>	<b>UTILITY PAYMENT -COMMUNICATION</b>	<b>DELEGATED APPROVAL</b>
622640	07/15/2021	NISAI WANAKULE	1,456.68		
622641	07/15/2021	WATER & AIR RESEARCH, INC.	14,052.00		
622642	07/15/2021	WHARTON-SMITH INC	294,001.01	CONSTRUCTION - DESAL INTAKE CONNECTION	RECEIVE
<b>WIRE</b>	<b>07/16/2021</b>	<b>INTERNAL REVENUE SERVICE</b>	<b>114,950.75</b>	<b>FEDERAL PAYROLL TAX DEPOSIT</b>	<b>DELEGATED APPROVAL</b>
<b>WIRE</b>	<b>07/16/2021</b>	<b>INTERNAL REVENUE SERVICE</b>	<b>8,853.70</b>	<b>FEDERAL PAYROLL TAX DEPOSIT</b>	<b>DELEGATED APPROVAL</b>
622643	07/22/2021	ADVANCED ENVIRONMENTAL LABORATORIES, INC	2,796.00		
622644	07/22/2021	ADVANCED ENVIRONMENTAL LABORATORIES, INC	50.00		
622645	07/22/2021	AMERICAN FAMILY LIFE ASSURANCE COMPANY OF COLUMBUS	1,423.74		
622646	07/22/2021	AIRGAS USA, LLC	14,960.43		
622647	07/22/2021	ALLIED UNIVERSAL CORPORATION	25,680.13		



## TAMPA BAY WATER

## CHECK REGISTER - JUL 2021

<u>CHECK#</u>	<u>CHECK DATE</u>	<u>VENDOR NAME</u>	<u>CHECK AMOUNT</u>	<u>DESCRIPTION</u>	<u>APPROVE/RECEIVE</u>
622648	07/22/2021	J.C. EHRLICH CO.	141.60		
622649	07/22/2021	FINGER LAKES BUSINESS SERVICES, INC.	78.64		
<b>622650</b>	<b>07/22/2021</b>	<b>AT&amp;T MOBILITY II, LLC</b>	<b>36.24</b>	<b>UTILITY PAYMENT -COMMUNICATION</b>	<b>DELEGATED APPROVAL</b>
622651	07/22/2021	AVI INTEGRATORS INC	472.50		
622652	07/22/2021	BEAMEX INC.	13,089.00		
622653	07/22/2021	BRIGHT HOUSE NETWORKS LLC	4,427.18		
622654	07/22/2021	BROWN, AMELIA	744.72		
622655	07/22/2021	CARMEUSE LIME & STONE, INC.	57,523.44	CHEMICAL - QUICKLIME	RECEIVE
622656	07/22/2021	CDM SMITH INC	5,408.75		
622657	07/22/2021	CDM SMITH INC	9,521.25		
622658	07/22/2021	CINTAS CORPORATION	266.50		
622659	07/22/2021	CITY OF CLEARWATER POLICE DEPT	247.50		
622660	07/22/2021	TERESA COLLINS	76.92		
622661	07/22/2021	CUMBey & FAIR, INC.	18,480.00		
622662	07/22/2021	CABLEXPRESS CORPORATION	22,980.90		
622663	07/22/2021	DIGITAL AERIAL SOLUTIONS, LLC	46,701.71		
622664	07/22/2021	THE DOOR WHISPERER LLC	3,522.00		
622665	07/22/2021	ECHOSAT, INC.	35.94		
622666	07/22/2021	ELECTRIC GAS INDUSTRIES ASSOCIATION	22,673.76		
622667	07/22/2021	ELECTRICAL ENGINEERING ENTERPRISES INC	8,015.00		
622668	07/22/2021	EMPLOYEE BENEFITS CORPORATION	100.00		
622669	07/22/2021	EMPLOYEE BENEFITS CORPORATION	84.60		
622670	07/22/2021	ENTERPRISE FM TRUST	8,057.66		
622671	07/22/2021	ENVIRONMENTAL SCIENCE ASSOCIATES CORPORATION	20,310.69		
622672	07/22/2021	F.H. BLACK AND COMPANY INC.	1,125.00		
622673	07/22/2021	FISHER SCIENTIFIC COMPANY LLC	118.83		
622674	07/22/2021	FL DEPT OF ENVIRONMENTAL PROTECTION	42,150.00		
622675	07/22/2021	FLORIDA DEPT OF STATE	83.16		
<b>622676</b>	<b>07/22/2021</b>	<b>FRONTIER COMMUNICATIONS</b>	<b>140.98</b>	<b>UTILITY PAYMENT -COMMUNICATION</b>	<b>DELEGATED APPROVAL</b>
<b>622677</b>	<b>07/22/2021</b>	<b>FRONTIER COMMUNICATIONS</b>	<b>125.98</b>	<b>UTILITY PAYMENT -COMMUNICATION</b>	<b>DELEGATED APPROVAL</b>
622678	07/22/2021	GANNETT FLEMING, INC	55,337.00	RESEVOIR DAM SAFETY COMPLIANCE	RECEIVE
622679	07/22/2021	GENUINE AUTO PARTS/NAPA	3.59		
622680	07/22/2021	GRAY ROBINSON, P.A.	877.50		
622681	07/22/2021	GRAYBAR ELECTRIC COMPANY INC	21.20		
622682	07/22/2021	GSI ENVIRONMENTAL, INC.	28,471.26		
622683	07/22/2021	HACH COMPANY	5,678.98		
622684	07/22/2021	HAWKINS, INC.	2,840.55		
622685	07/22/2021	HAYS HOLDING CORPORATION	18,583.89		
622686	07/22/2021	HERC RENTALS, INC.	1,859.00		
<b>622687</b>	<b>07/22/2021</b>	<b>HILLSBOROUGH COUNTY</b>	<b>14.83</b>	<b>UTILITY PAYMENT</b>	<b>DELEGATED APPROVAL</b>



## TAMPA BAY WATER

## CHECK REGISTER - JUL 2021

<u>CHECK#</u>	<u>CHECK DATE</u>	<u>VENDOR NAME</u>	<u>CHECK AMOUNT</u>	<u>DESCRIPTION</u>	<u>APPROVE/RECEIVE</u>
622688	07/22/2021	HILLSBOROUGH COUNTY	59.33	UTILITY PAYMENT	DELEGATED APPROVAL
622689	07/22/2021	ARROW EXTERMINATORS	122.70		
622690	07/22/2021	LINDA JONES	356.10		
622691	07/22/2021	KEMIRA WATER SOLUTIONS, INC.	57,807.97	CHEMICAL - FERRIC SULFATE	RECEIVE
622692	07/22/2021	KEMIRA WATER SOLUTIONS, INC.	37,185.83		
622693	07/22/2021	LIQUIDITY SERVICES OPERATIONS LLC	61.89		
622694	07/22/2021	MATHESON TRI-GAS INC.	27,844.87		
622695	07/22/2021	MATHESON TRI-GAS INC.	6,527.55		
622696	07/22/2021	MCMASTER-CARR	371.96		
622697	07/22/2021	METZGER & WILLARD INC	9,798.80		
622698	07/22/2021	MGT OF AMERICA CONSULTING, LLC	400.00		
622699	07/22/2021	MUTUAL OF OMAHA COMPANY	7,960.90		
622700	07/22/2021	NABORS, GIBLIN, & NICKERSON P.A.	32,198.64		
622701	07/22/2021	NORTHERN SAFETY COMPANY INC	125.04		
622702	07/22/2021	ODYSSEY MANUFACTURING COMPANY	21,552.00		
622703	07/22/2021	OHLIN SALES INC.	208.08		
622704	07/22/2021	PCL CONSTRUCTION, INC.	6,887.50		
622705	07/22/2021	PERSONNEL SOLUTIONS PLUS LLC	808.11		
622706	07/22/2021	PHOTOSHELTER, INC.	6,349.00		
622707	07/22/2021	POLYDYNE INC	11,151.99		
622708	07/22/2021	PUBLIC FINANCIAL MGMT., INC. (PFM)	23,832.30		
622709	07/22/2021	PUBLIC RELATIONS	375.00		
622710	07/22/2021	MARK E. RAYMOND	2,500.00		
622711	07/22/2021	MULTI SERVICE TECHNOLOGY SOLUTIONS, INC.	808.95		
622712	07/22/2021	RING POWER CORPORATION	3,086.95		
622713	07/22/2021	ALBERT E ROLLER	25,502.21		
622714	07/22/2021	RYAN HERCO PRODUCTS CORPORATION	497.00		
622715	07/22/2021	SIEMENS INDUSTRY, INC.	6,200.00		
622716	07/22/2021	SOUTHEAST DRILLING SERVICES INC	2,100.00		
622717	07/22/2021	STANTEC CONSULTING SERVICES, INC.	57,319.12	CYPRESS BRG WF IMPROVEMENTS PROJ	RECEIVE
622718	07/22/2021	SULPHURIC ACID TRADING CO. INC	25,715.68		
622719	07/22/2021	TAMPA ELECTRIC CO	138,114.59	ELECTRIC BILL - WELL FIELDS AND PUMPING STATIONS	DELEGATED APPROVAL
622720	07/22/2021	TANNER INDUSTRIES, INC.	11,406.29		
622721	07/22/2021	UNIFIRST CORPORATION	634.43		
622722	07/22/2021	UNIVERSITY OF FLORIDA	13,454.69		
622723	07/22/2021	UNIVERSAL PROTECTION SERVICE LP	79,545.56	SECURITY SRV - 5/28/21 - 6/24/21	RECEIVE
622724	07/22/2021	UNIVERSITY OF FLORIDA	20,000.00		
622725	07/22/2021	UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL	25,000.00		
622726	07/22/2021	VERIZON CONNECT NWF, INC.	107.30	UTILITY PAYMENT -COMMUNICATION	DELEGATED APPROVAL
622727	07/22/2021	VERIZON FLORIDA INC	1,108.86	UTILITY PAYMENT -COMMUNICATION	DELEGATED APPROVAL



## TAMPA BAY WATER

## CHECK REGISTER - JUL 2021

<u>CHECK#</u>	<u>CHECK DATE</u>	<u>VENDOR NAME</u>	<u>CHECK AMOUNT</u>	<u>DESCRIPTION</u>	<u>APPROVE/RECEIVE</u>
622728	07/22/2021	VERIZON FLORIDA INC	28,694.87	UTILITY PAYMENT -COMMUNICATION	DELEGATED APPROVAL
622729	07/22/2021	WASTE MANAGEMENT INC. OF FLORIDA	1,552.31		
622730	07/22/2021	WATER & AIR RESEARCH, INC.	42,136.85		
622731	07/22/2021	WILDLANDS CONSERVATION, INC.	13,219.89		
622732	07/22/2021	WILLIAMS SCOTSMAN, INC	2,117.14		
622733	07/22/2021	WITHLACOOCHEE RIVER ELECTRIC	20,699.97	ELECTRIC BILL - WELL FIELDS AND PUMPING STATIONS	DELEGATED APPROVAL
622734	07/22/2021	WRIGHT EXPRESS CORPORATION	10,924.06		
622735	07/29/2021	ADVANCED ENVIRONMENTAL LABORATORIES, INC	2,203.00		
622736	07/29/2021	AIRGAS USA, LLC	28,434.55		
622737	07/29/2021	AIRGAS SOUTH, INC.	301.21		
622738	07/29/2021	ALLIED UNIVERSAL CORPORATION	3,097.60		
622739	07/29/2021	ARCADIS US INC.	18,413.20		
622740	07/29/2021	AUTOMATIONDIRECT.COM, INC.	996.00		
622741	07/29/2021	BRIGHT HOUSE NETWORKS LLC	1,077.73	UTILITIES - INTERNET	DELEGATED APPROVAL
622742	07/29/2021	CARMEUSE LIME & STONE, INC.	21,131.76		
622743	07/29/2021	CAROLLO ENGINEERS INC	63,046.13	REGIONAL WATER QUALITY SRV	RECEIVE
622744	07/29/2021	CABLEXPRESS CORPORATION	7,190.00		
622745	07/29/2021	DUKE ENERGY CORPORATION	47,601.62	ELECTRIC BILL - WELL FIELDS AND PUMPING STATIONS	DELEGATED APPROVAL
622746	07/29/2021	FEDERAL EXPRESS CORPORATION	112.24		
622747	07/29/2021	BLUE CROSS BLUE SHIELD OF FLORIDA	231,216.81	PPO/HMO MONTH PREM AND NOTHSTEIN - AUGUST 2021	RECEIVE
622748	07/29/2021	FLUID CONTROL SPECIALTIES, INC.	4,256.00		
622749	07/29/2021	FRONTIER COMMUNICATIONS	237.90	UTILITY PAYMENT -COMMUNICATION	DELEGATED APPROVAL
622750	07/29/2021	GEOGRAPHIC INFORMATION SERVICES, INC.	12,271.29		
622751	07/29/2021	GSI ENVIRONMENTAL, INC.	412.50		
622752	07/29/2021	HACH COMPANY	684.29		
622753	07/29/2021	HIGH TECH ENGINEERING INCORPORATED	21,618.17		
622754	07/29/2021	TENCARVA MACHINERY COMPANY	1,224.00		
622755	07/29/2021	INTERA, INC.	13,087.50		
622756	07/29/2021	KEMIRA WATER SOLUTIONS, INC.	50,391.91	CHEMICAL - FERRIC SULFATE	RECEIVE
622757	07/29/2021	CLIFTONLARSONALLEN LLP	3,070.00		
622758	07/29/2021	LAWSON PRODUCTS, INC.	1,445.61		
622759	07/29/2021	LOWE'S COMPANIES, INC.	244.18		
622760	07/29/2021	MATHESON TRI-GAS INC.	9,537.22		
622761	07/29/2021	MCDADE WATERWORKS INC	19,832.80		
622762	07/29/2021	MCKIM & CREED PA	2,520.00		
622763	07/29/2021	MICHIGAN STATE DISBURSEMENT UNIT	225.52	CHILD SUPPORT	DELEGATED APPROVAL
622764	07/29/2021	MILLER BUILDING & REPAIR SERVICES, INC.	470.00		
622765	07/29/2021	ODYSSEY MANUFACTURING COMPANY	12,039.84		
622766	07/29/2021	PALMA CEIA LOCK & KEY, INC.	221.00		
622767	07/29/2021	PERSONNEL SOLUTIONS PLUS LLC	1,915.52		



## TAMPA BAY WATER

## CHECK REGISTER - JUL 2021

<u>CHECK#</u>	<u>CHECK DATE</u>	<u>VENDOR NAME</u>	<u>CHECK AMOUNT</u>	<u>DESCRIPTION</u>	<u>APPROVE/RECEIVE</u>
622768	07/29/2021	PIPER FIRE PROTECTION, INC.	1,165.00		
622769	07/29/2021	POLYDYNE INC	31,952.25		
622770	07/29/2021	PUBLIC FINANCIAL MGMT., INC. (PFM)	1,333.33		
622771	07/29/2021	QUEST ECOLOGY INC	1,815.00		
622772	07/29/2021	RICOH USA, INC.	3,021.07		
622773	07/29/2021	RING POWER CORPORATION	3,114.77		
622774	07/29/2021	RING POWER CORPORATION	10,876.55		
622775	07/29/2021	RING POWER CORPORATION	1,005.80		
622776	07/29/2021	SOUTHEASTERN FREIGHT LINES INC	237.27		
622777	07/29/2021	STANTEC CONSULTING SERVICES, INC.	30,950.42		
622778	07/29/2021	STATE OF FLORIDA DISBURSEMENT UNIT	82.82	CHILD SUPPORT	DELEGATED APPROVAL
622779	07/29/2021	STATE OF FLORIDA DISBURSEMENT UNIT	152.77	CHILD SUPPORT	DELEGATED APPROVAL
622780	07/29/2021	SULPHURIC ACID TRADING CO. INC	6,377.64		
622781	07/29/2021	TAMPA ELECTRIC CO	36,319.73	ELECTRIC BILL - WELL FIELDS AND PUMPING STATIONS	DELEGATED APPROVAL
622782	07/29/2021	TAMPA ELECTRIC CO	60,300.12	ELECTRIC BILL - WELL FIELDS AND PUMPING STATIONS	DELEGATED APPROVAL
622783	07/29/2021	TAMPA ELECTRIC CO	7,729.12	ELECTRIC BILL - WELL FIELDS AND PUMPING STATIONS	DELEGATED APPROVAL
622784	07/29/2021	TANNER INDUSTRIES, INC.	6,216.43		
622785	07/29/2021	TRANE US INC	11,301.57		
622786	07/29/2021	UNITED PARCEL SERVICE	108.05		
622787	07/29/2021	US BANK NATIONAL ASSOCIATION	100.00		
622788	07/29/2021	VEOLIA WATER NORTH AMERICA	13,440.17		
622789	07/29/2021	VERIZON WIRELESS COMMUNICATIONS LLC	490.21	UTILITY PAYMENT -COMMUNICATION	DELEGATED APPROVAL
622790	07/29/2021	VERIZON WIRELESS COMMUNICATIONS LLC	891.10	UTILITY PAYMENT -COMMUNICATION	DELEGATED APPROVAL
622791	07/29/2021	VERIZON WIRELESS COMMUNICATIONS LLC	11,591.28	UTILITY PAYMENT -COMMUNICATION	DELEGATED APPROVAL
622792	07/29/2021	VERIZON WIRELESS COMMUNICATIONS LLC	469.10	UTILITY PAYMENT -COMMUNICATION	DELEGATED APPROVAL
622793	07/29/2021	VERIZON WIRELESS COMMUNICATIONS LLC	3,105.38	UTILITY PAYMENT -COMMUNICATION	DELEGATED APPROVAL
622794	07/29/2021	VERIZON WIRELESS COMMUNICATIONS LLC	9,844.10	UTILITY PAYMENT -COMMUNICATION	DELEGATED APPROVAL
622795	07/29/2021	W W GRAINGER INC	1,691.04		
622796	07/29/2021	WATER & AIR RESEARCH, INC.	10,218.28		
622797	07/29/2021	WILDLANDS CONSERVATION, INC.	24,755.86		
622798	07/29/2021	WILLIAMS SCOTSMAN, INC	1,277.00		
WIRE	07/30/2021	INTERNAL REVENUE SERVICE	117,888.12	FEDERAL PAYROLL TAX DEPOSIT	DELEGATED APPROVAL

312 CHECKS

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