

Brunswick-Glynn County Joint Water and Sewer Commission 1703 Gloucester Street, Brunswick GA 31520 Thursday, December 21, 2017 at 2:00 pm Commission Meeting Room

COMMISSION MEETING AGENDA AMENDED

Call to Order

Invocation

Pledge

PUBLIC COMMENT PERIOD

Public Comments will be limited to 3 minutes per speaker. Comments are to be limited to relevant information regarding your position and should avoid being repetitious. Individuals should sign in stating your name, address and the subject matter on which you wish to speak. Your cooperation in this process will be greatly appreciated.

COMMITTEE UPDATES

Compliance & Legislative – Commissioner Browning Facilities – Commissioner Adams Finance – Chairman Elliott Human Resources & Safety – Commissioner Harvey Public Information & Customer Relations – Commissioner Copeland

APPROVAL

- 1. Minutes from December 7, 2017 Regular Meeting (*subject to any necessary changes*)
- 2. Minutes from December 7, 2017 Executive Session (*subject to any necessary changes*)
- 3. U.S.G.S. Project P. Crosby / Greg Cherry, U.S.G.S.
- 4. JWSC Project #232 SR99/US341/Green Swamp Rd. WM Extension Project Change Order #3 T. Kline
- 5. JWSC Project #421 Mansfield St. Water & Sewer Main Replacement: Change Order #6 – T. Kline

DISCUSSION

- **1.** Sanitary Sewer Flow Monitoring Project Update, St. Simons Island Greg Anderson, PE, McKim & Creed
- 2. Wastewater Treatment Plant Flows Update M. Ryals
- 3. November Month End Financial Statements J. Donaghy

EXECUTIVE DIRECTOR'S UPDATE CHAIRMAN'S UPDATE EXECUTIVE SESSION MEETING ADJOURNED



Brunswick-Glynn County Joint Water and Sewer Commission 1703 Gloucester Street, Brunswick, GA 31520 Thursday, December 21, 2017 at 2:00 PM

COMMISSION MINUTES

PRESENT:	Donald M. Elliott, Chairman
	Cornell L. Harvey, Commissioner
	Mike Browning, Commissioner
	Steve Copeland, Commissioner
	Robert Bowen, Commissioner
ALSO PRESENT:	Jimmy Junkin, Executive Director
	Charlie Dorminy, Legal Counsel HBS
	Andrew Burroughs, Deputy Executive Director
	Todd Kline, Director of Engineering
	Pam Crosby, Director of Procurement
	John D. Donaghy, Director of Finance
	Jay Sellers, Director of Administration
ABSENT:	Cliff Adams, Vice-Chairman
	David Ford, Commissioner

Chairman Elliott called the meeting to order at 2:04 PM.

Commissioner Copeland provided the invocation and Chairman Elliott led the pledge.

PUBLIC COMMENT PERIOD

Chairman Elliott opened the public comment period.

Tim McDermott – Agenda

Mr. McDermott addressed the Commission by noting he had been present at the Finance meeting the day before, and commented that he felt it was important for the attachments for the meeting to be included on the agenda for the public to preview it ahead of the meeting. He noted that the Glynn County Commission does this. Mr. McDermott also commented that based on the presentation on the arrears report, he had looked up the census data and compared the number of accounts to be turned off with the number of households in Brunswick, and it seemed like this large amount of the City that is going to potentially be turned off.

There being no additional citizens for public comment, Chairman Elliott closed the public comment period.

COMMITTEE UPDATES Compliance & Legislative Committee – Commissioner Browning There was no update at this time.

Facilities Committee – Commissioner Adams

There was no update at this time.

Finance Committee – Chairman Elliott

Chairman Elliott noted that most of the points of the Finance Committee would be part of this meeting, except for the matter of the update on plans to reduce the accounts in arrears. He added the statistics were provided and certainly this number of accounts would not be turned off all at once. Chairman Elliott continued that this will be a rigorous program of encouraging people to have payment plans to reduce the arrears, and that if there was not a lot of cooperation in that respect where people do not meet the criteria of their payment plan, then it will be necessary to cut them off. This is the only way to get people to understand they need to pay their water and sewer bills, and this is a course of action that must be taken when people refuse to pay for the service they are receiving. Commissioner Browning added that he thought the Finance Committee discussions were very interesting and noted that regarding the issue of the delinquent accounts there has to be a plan to address them, and that anything to be done will be difficult. **Human Resources & Safety Committee – Commissioner Harvey**

There was no update at this time.

Public Information & Customer Relations Committee – Commissioner Copeland There was no update at this time.

APPROVAL

1. Minutes from the December 7, 2017 Regular Commission Meeting Commissioner Browning made a motion seconded by Commissioner Harvey to approve the minutes from December 7, 2017 Regular Commission Meeting. Motion carried 5-0-2. (Commissioner Adams and Commissioner Ford were absent for the vote.)

2. Minutes from the December 7, 2017 Executive Session

Commissioner Browning made a motion seconded by Commissioner Harvey to approve the minutes from December 7, 2017 Executive Session. Motion carried 5-0-2 (Commissioner Adams and Commissioner Ford were absent for the vote.)

Chairman Elliott then requested a motion to excuse Commissioner Adams and Commissioner Ford from the Commission Meeting.

<u>A motion was made by Commissioner Browning and seconded by Commissioner Harvey to excuse</u> <u>Commissioner Adams and Commissioner Ford from the December 7, 2017 Commission Meeting.</u> <u>Motion carried 5-0-2.</u> (Commissioner Adams and Commissioner Ford were not present for the vote.)

3. U.S.G.S. Project – P. Crosby / Greg Cherry, U.S.G.S.

Pam Crosby introduced Greg Cherry from the U.S.G.S. and she provided the background information that the updates have been discussed regarding the renewal of the annual U.S.G.S. contract with the Brunswick Glynn Joint Water and Sewer. She noted that in each fiscal year prior, the JWSC has fully funded that program for the Glynn County community at an amount of \$129,000.00, and that staff recommended to fund this year's study for \$50,000.00, and that Mr. Cherry was going to provide a brief overview of what the U.S.G.S. study encompasses with regard to the salt water plume and intrusion into the aquifer and the historical funding of that program. She also noted that provided in the packet was a sample letter that would be circulated to other key stakeholders and waters users in the community soliciting a contribution to fully fund the U.S.G.S. study.

Greg Cherry then presented to the Commission an overview and information regarding the U.S.G.S. project of monitoring salt water intrusion in the Upper Floridian Aquifer which included the root causes of salt water intrusion in the area, the current chloride levels in the aquifer, and a brief discussion on the Master Plan and some of the tools that can be used to look at how things will be possibly in 20 years. The first bar chart provided indicated the development of ground water and ground water use from 1940 to October of 2015, including marked bars reflecting the usage of Brunswick Cellulose and Pinova

(formerly Hercules) and the public supply as well as the decline of the water levels over time. The decline of the water level and pumping that could not be sustained is how the problem of saltwater intrusion developed. Additional visuals and charts were presented including a map showing the model, charts for comparison of the chloride levels and the plume development, a conceptual model of local groundwater flow in the Upper Floridian Aquifer in Brunswick, along with a map of Brunswick showing the 2016 chloride plume overlaid on the Brunswick ground map which noted the chloride levels in neighborhoods near the marked plume area. The 2 hot spots are identified in the area of the Brunswick Cellulose plant and the Pinova area. A real time monitoring network map was shown indicating the wells and monitoring equipment placed in the Brunswick area. Mr. Junkin added a note that what is important to be relayed to the Commission is that the study looks at the salt-plume and they have created a digital model that predicts what is going on with the plume and indicates if the situation and levels are going to get worse or get better. This year's data will advise if the predictions were reliable and correct as to what was going to happen with the plume this year. This will also aid in determining future technologies necessary to provide water. He believes that it is in JWSC's best interest to understand that, and if the model can be verified to have some value in predicting what may happen in the future, the impact, and if we need to make some changes. This year's continuation of the study will help to determine that. Mr. Junkin noted that he believes this is something that we need to do not only because of the impacts on us, but on our community as a whole, and that our contribution as the water and sewer utility is a sign of our leadership in an area that we need to be leading. There was some additional questions and discussion regarding the models, scenarios and programs used for this application. Brian Hughes with U.S.G.S. noted that this study helps JWSC in managing the water supply for Glynn County and the City of Brunswick and that the information can be used in communicating with the EPD regarding permitting of industries and water use. Mr. Junkin added that it had been discussed in a previous meeting that JWSC would contribute \$50K towards the matching portion that would have to be contributed from the outside to be required to complete the project for the 2017-2018 phase of the project. The discussion was that JWSC would commit our \$50K and that the other main community stakeholders, that are drawing, that have a reason to be interested in the outcome of this process would be solicited for the balance of the matching funds. At that time, his understanding was that the U.S.G.S. would be doing the solicitation, but that it was discussed in the Finance meeting on Wednesday that all the contributing funds would have to come through JWSC as a public entity to get the matching funds. He suggested a motion to contribute the budgeted \$50K funds, and to have an account to hold the money and as contributions come in from the stakeholders that it would be immediately channeled to the U.S.G.S. for this purpose. Chairman Elliott questioned if the JWSC would be responsible for the entire balance if the worst occurs and no other entities contributed. Mr. Junkin advised that was not the agreement that was being made. Commissioner Browning noted that his understanding from the Finance meeting was that there was a total amount of dollars required to take care of paying for the studies, and that if a lesser amount was provided then the study and monitoring would be tailored and trimmed back. He added that there is no way of knowing at this time if the other stakeholders will provide any funding and added that in his opinion water quality is very important and that if there is already money in the budget to cover the \$50K, that he is for supporting to help finance the continued monitoring of the chloride issue. Knowing that USGS does not need all the money at one time, he would like to wee JWSC make a commitment and encourage the other stakeholders to come forward and contribute. Mr. Junkin mentioned the letter to the stakeholders that had been drafted requesting contributions. Commissioner Copeland added that regarding the letter to the stakeholders, he would like the approach to be to provide the total cost of the study in addition to providing the data indicating their total contribution to the pumping and water usage so that they better understand their percentage of the total flow and ask them to contribute their part to parody their part of the total cost of pumping. Mr. Junkin agreed this was a good proposal, and noted that JWSC has previously gone through this exercise with them and the same data regarding the situation was provided to the other stakeholders at that last meeting. There was not a very forthright response from the representatives there at the time. Not all the stakeholders were present; there were at least 1 of the 2 of the major industrial stakeholders missing. While Mr. Junkin agrees with the proposal, he thinks that for whatever reason those stakeholders don't believe that the impacts are going to ever merit their involvement, and they were very resistant. He believes that we may have to take whatever we can get from them to help mitigate the costs, because there was clearly not the same level of concern as we felt at the meetings. We can do it again, but based on the

reaction we got in the last meeting and previous there was a certain reluctance to be a parodied sharing of cost. Chairman Elliott agreed and added that maybe they believe that the price they have to pay is not worth the product that they receive and we look at it a little differently. He noted that the last 3 commissions have looked at this and have angst over it, but every year, we end up covering the total cost. He recollected that there have been no collections from others during the last 3 years plus of the study and we have made the same plea. Mr. Junkin mentioned that one of his concerns is JWSC staff is put under the burden of tracking the stakeholders down and trying to make it happen. He doesn't mind JWSC sending out the letters, staging a meeting, and holding a place for the stakeholders to meet and get the discussion issues out on the table, but it is to where staff has to phone and repeatedly and constantly contact the other stakeholders of which JWSC does not have the staff time to do that. He added that Greg and Brian have agreed and understand where JWSC is coming from in that regard and they are willing to put in the extra time, so JWSC is willing to be the conduit if U.S.G.S. is willing to have a vested interest in seeing the completion of the project as well and will help in soliciting those added donations. Chairman Elliott noted that his understanding is that JWSC will provide the letter but U.S.G.S. will make the efforts to get the money. Commissioner Browning commented that as we move forward to this next step to get the money from them that he will attend those meetings. He believes that additional discussion with those stakeholders is needed. Chairman Elliott added that this should be brought up to the regional water council that this may be something they want to invest in. Commissioner Browning agreed and noted he would bring it up at the first opportunity. He also expressed disappointment of what he has heard because water is the lifeblood not just to the private citizens, but also to the types of industries we have in Glynn County and they do have an interest in the quality of the water which is not used just for cooling but they also have to have quality water at the paper mill, which they retreat, for their boilers. So, we need good quality water all around in Glynn County. Commissioner Browning continued to say that that the first meeting should be organized. Commissioner Copeland mentioned that it was not just the cost as an issue, but that clean water is the lifeblood of the community; and there are 2 stakeholders that we want to make sure that they fully understand the issue, their contribution to the issue and that they are committed to doing their part to keep this community healthy. It is not the amount of money, it is the commitment level. Chairman Elliott added that if having clean water is paramount to JWSC, then this should be expanded so that we are involved in it so that we know where the wells should be, the types of water and the issues that we have with water within the county and maybe it should expand to the nearby counties outside of Glynn.

Commissioner Bowen made a motion seconded by Commissioner Harvey to fund the WRMAC 2017-2018 aquifer study by \$50,000.00 and to serve as a conduit for other private sector entities to provide the additional matching funds required to complete the project for the 2017-2018 period. Motion carried 5-0-2. (Commissioner Adams and Commissioner Ford were absent for the vote.)

4. JWSC Project #232 – SR99/US341/Green Swamp Rd. WM Extension Project Change Order #3 – T. Kline

Todd Kline updated the Commission as to where Project #232 is currently at, noting that the waterline now extends to the fire station on Grant's Ferry Road and underneath Hwy. 99. He provided a map of the project to the Commissioners and explained the details of it, noting the section concerning the requested Change Order #3. The recommendation is to switch from Open Cut methodology to Horizontal Directional Drilling with the reason being of existing utilities that have been discovered once the construction had already started. The line will be fusible PVC which is very common for directional drilling and requires no special adapters for attachment. He then referred to the Change Order calculations noting the deductions and additions from the variations which netted a total Change Order requested increase of \$98,661.69. Mr. Kline added that this amount still keeps the price of the project below the opinion of probable cost estimate completed by RGA and the JWSC Capital Project Budget. Commissioner Browning questioned the cost of \$88.00 per foot of the PVC pipe and why this cost was so much more. Todd responded that the cost included labor and equipment required for the methodology in Directional Drilling. Commissioner Browning made a motion seconded by Commissioner Copeland that the Brunswick-Glynn County Joint Water & Sewer Commission approve and authorize the Executive Director and Board Chairman to execute the additional pricing provided by Seaboard Construction Company to be processed as Contract Change Order in the amount of \$98,661.69. Motion carried 5-0-2. (Commissioner Adams and Commissioner Ford were absent for the vote.)

5. JWSC Project #421 – Mansfield St. Water & Sewer Main Replacement – Change Order #6 – T. Kline

Todd Kline presented the recommended Change Order #6 for the JWSC Project #421 Mansfield St. Water & Sewer Replacement to the Commission. He gave a brief update and noted that the project was complete with respect to JWSC's portion, except for a small amount of water main on Bay Street to be installed by the contractor. Due to necessary incidentals incurred by some minor changes that were required, the requested change order in the amount of \$31,499.90 is needed to reimburse the contractor for the list of various incidentals. The changes have been inspected and approved by JWSC inspectors, and all prices are consistent with the original bid documents.

Commissioner Harvey made a motion seconded by Commissioner Copeland to authorize the Executive Director to execute a contract change order in the amount of \$31,499.90 for the additional work described in Exhibit "A". Motion carried 5-0-2. (Commissioner Adams and Commissioner Ford were absent for the vote.)

DISCUSSION

1. Sanitary Sewer Flow Monitoring Project Update, St. Simons Island – Greg Anderson, PE, McKim & Creed

Ellis Zeitler from the JWSC Planning & Construction Division introduced the Sanitary Sewer Flow Monitoring Project update and Greg Anderson to the Commission. Greg Anderson gave his presentation on the update for the flow monitoring that has been incurring on St. Simons Island. This was started on November 22nd. JWSC has a direct link to the flow monitors that were installed in each location. He explained the details of the project and what is involved. The monitoring is involving the flow of storm water intrusion into the JWSC system. Mr. Anderson gave a very thorough and detailed update and discussion of the project and advised that there would be recurring updates for the Commission.

2. Wastewater Treatment Plant Flows Update – M. Ryals

Mark Ryals presented the Wastewater Treatment Plant Flows update to the Commission. The update included data from the Academy Creek, Dunbar, and Southport Wastewater Treatment Plants. He discussed the flows from each plant, the B.O.D. averages and plant performance.

3. November Month End Financial Statements – J. Donaghy

John Donaghy presented the November Month End Financial Statements to the Commission, which encompasses the first 5 months of the current fiscal year. He noted various accounts on the Balance Sheet and discussed those with the Commission, with additional discussion regarding the Capital Tap Fees fund balance. Mr. Donaghy then proceeded to discuss the data provided on the Combined Revenue Statement noting revenues and expenses, the Project Report for 2017-2018 and the anticipated balances for June 30, 2018, and mentioned the Overtime Report for month end November 30, 2017.

EXECUTIVE SESSION

<u>Commissioner Copeland made a motion seconded by Commissioner Harvey to adjourn into Executive</u> Session. Motion carried 5-0-2. (Commissioner Adams and Commissioner Ford were absent for the vote).

The Chairman stated that there will be a vote after the Executive Session.

Return to Regular Session.

<u>Commissioner Harvey made a motion seconded by Commissioner Copeland to return to the Regular</u> <u>Meeting. Motion carried 5-0-2. (Commissioner Adams and Commissioner Ford were absent for the</u> <u>vote).</u>

<u>Commissioner Copeland made a motion seconded by Commissioner Harvey to add an agenda item, the</u> renewal of the Executive Director's contract. Motion carried 5-0-2. (Commissioner Adams and Commissioner Ford were absent for the vote.)

<u>Commissioner Copeland made a motion seconded by Commissioner Browning to renew the Executive</u> <u>Director's contract for one year and make it retroactive to August 15, 2017 to August 15, 2018. Motion</u> <u>carried 5-0-2. (Commissioner Adams and Commissioner Ford were absent for the vote.)</u>

EXECUTIVE DIRECTOR'S UPDATE

Mr. Junkin reminded the Commission that on December 27th the refinancing of the 2010C bonds will be executed. He also noted that staff is still working on options for the Capital Improvement Fees and have come up with a possible option, staff is also working on the rate model that will be presented to the Commission during the budgeting process, and that staff is continuing to work with customer service and the upcoming call center.

CHAIRMAN'S UPDATE

Chairman Elliott noted that this meeting concludes this Commission for the current year, and the new Commissioners would be starting in January. He commented that this has been the best Commission that he has worked with regarding people who have grasped how the utility functions, and it has been a pleasure to work with this Commission.

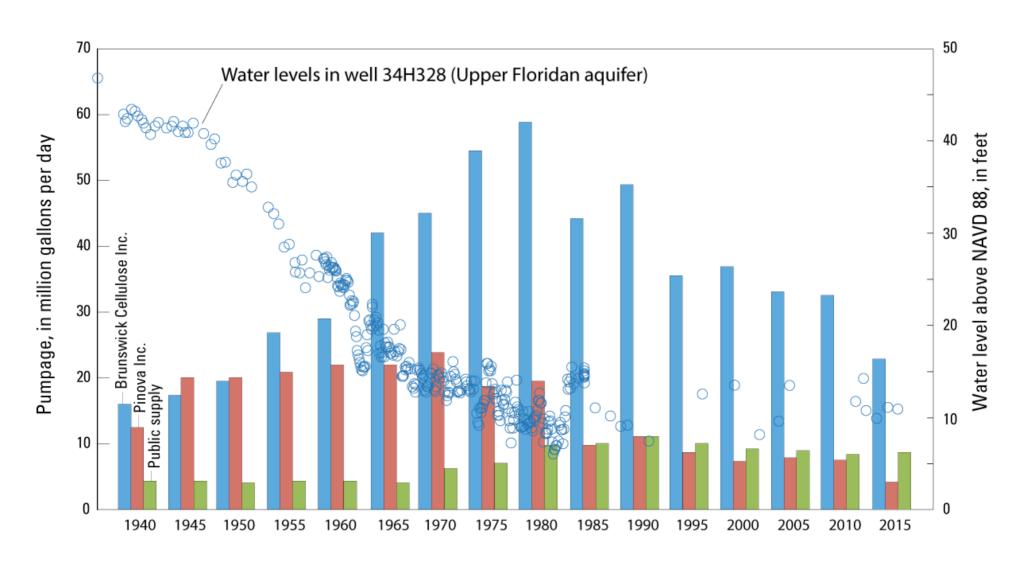
There being no additional business to bring before the Commission, Chairman Elliott adjourned the open meeting at 4:35 p.m.

Donald M. Elliott, Chairman

Attest:

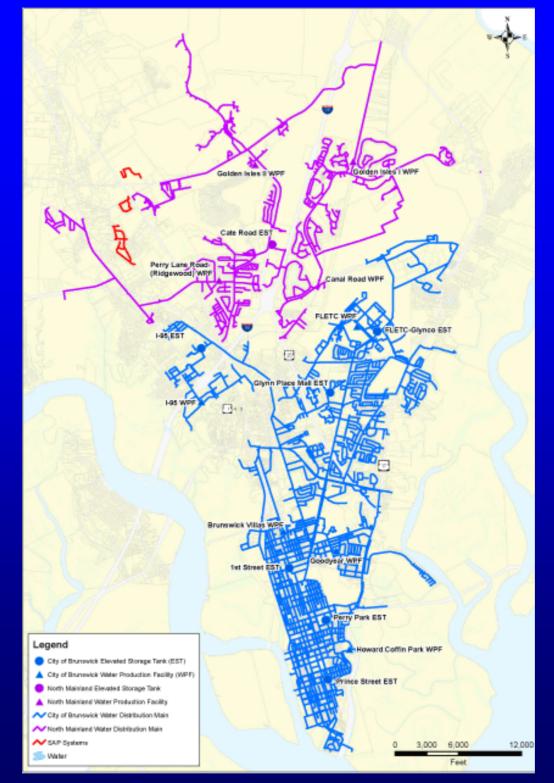
Janice Meridith.

Executive Commission Administrator



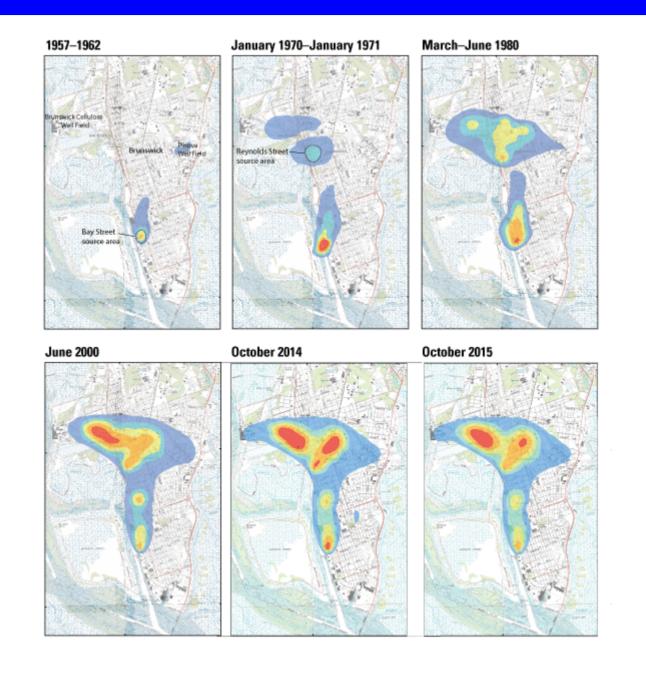








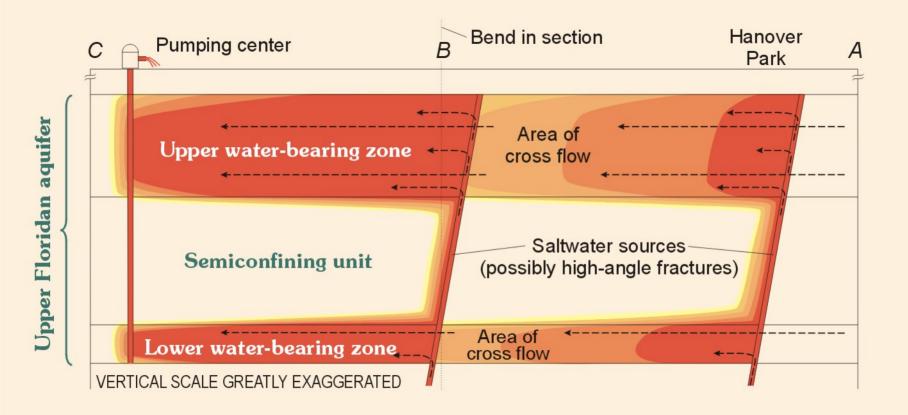








Conceptual Model of Local Ground-Water Flow in the Upper Floridan Aquifer in Brunswick

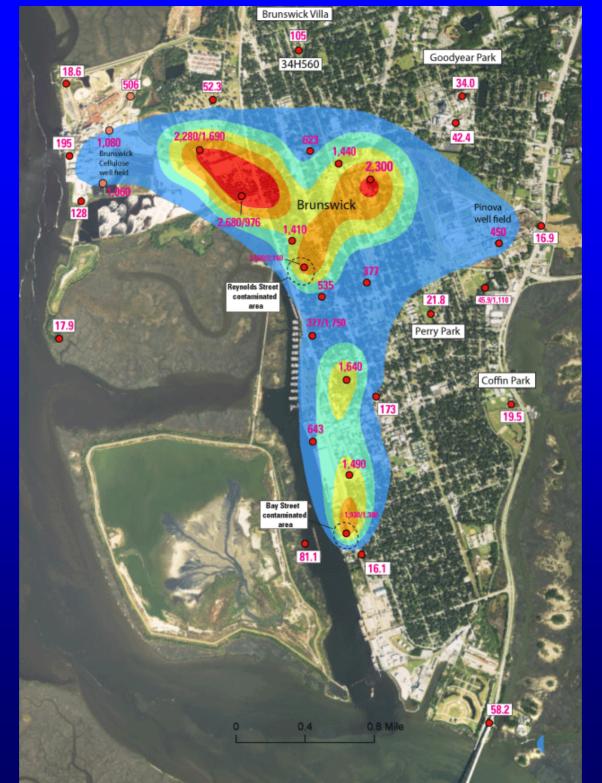


Courtesy of Elliott Jones (USGS)





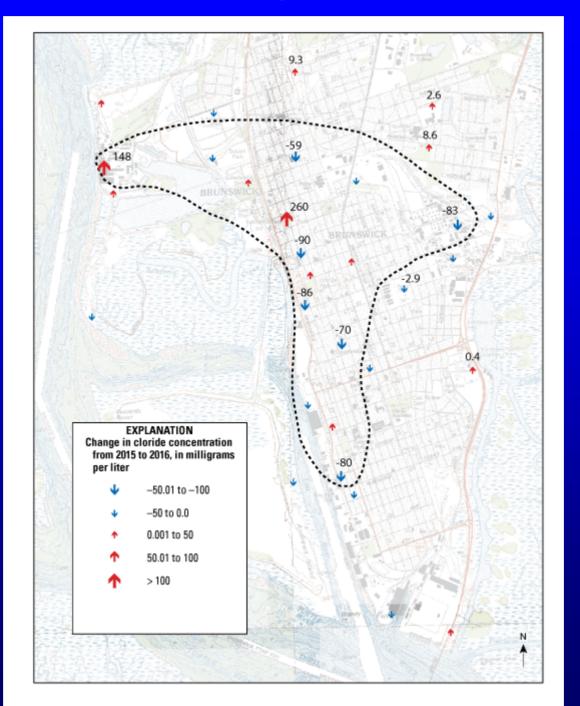
Chloride concentrations during October 2016 for FAS







Chloride Change 2015–2016





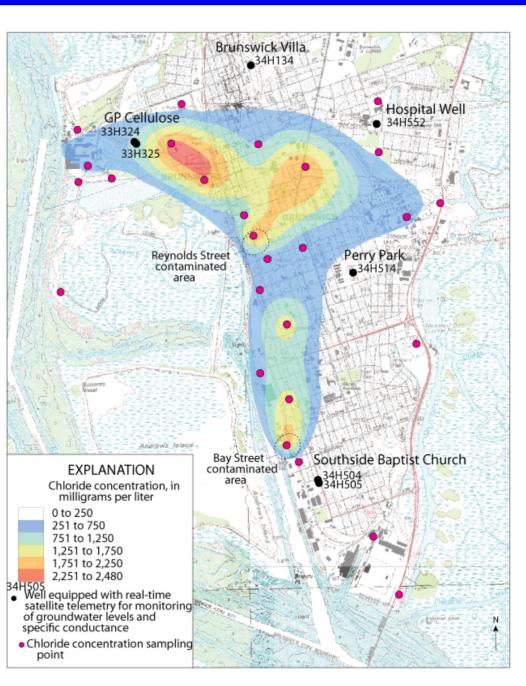


Real Time Monitoring Network

•Real-time monitoring established around perimeter of plume

- •Transmits data via satellite to USGS website
- •WaterAlert system provides email or phone message when threshold value







Proposed Budget FY-2018												
14 FY-15 FY-18												
,075 \$128,075 \$128,075												
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Project website: http://ga.water.usgs.gov/projects/brunswick/



Brunswick—Glynn County Joint Water & Sewer Commission 1703 Gloucester St. Brunswick, GA 31520

December 7, 2017

Dear Mr. Wright,

The Brunswick-Glynn Joint Water & Sewer Commission (BGJWSC) would like to thank you for joining us at the Water Resources Management Advisory Committee (WRMAC) of Glynn County. The purpose of the WRMAC will be active stakeholder participation on water related matters and proactive management of our water resources of Glynn County. The BGJWSC commitment toward the WRMAC extends to a financial contribution of \$50,000 toward the ongoing U.S. Geological Survey (USGS) saltwater intrusion study, which is briefly described below. As part of a proposed cost-sharing, the BGJWSC requests a contribution of \$20,000 from Brunswick Cellulose Inc. to reach the full funding of \$239,050. The USGS has agreed to contribute \$110,000 through their federally funded cooperative water program.

In the downtown Brunswick area, saltwater has been entering the Upper Floridian aquifer (UFA) for about 60 years resulting in a 2-square-mile area where water in the UFA cannot be used as a drinking water source due to high levels of salt (chloride concentrations greater than 2,000 milligrams per liter). Data from test wells indicate that the source of the saltwater is beneath the UFA. Saltwater contamination has constrained further development of the UFA and deteriorating water quality has led to costly measures such as well closures, plugging lower zones in deeper wells, and construction of replacement wells.

The USGS Water Strategy supports the collection of groundwater and hydrolgeologic data, development of groundwater-flow models, and simulation of water management scenarios to predict future hydrologic conditions. The objectives of the current USGS saltwater intrusion study can be subdivided into specific tasks, which are listed below:

- Continue maintenance and data collection from the 10-well continuous recorder network.
- Continue annual chloride (saltwater) sampling and analysis of 40 to 50 wells, and construct chloride-concentration and water-level maps for the January 2018 sampling event.
- Collect groundwater samples from industrial and public-supply wells for analysis of major ions and selected trace constituents to determine groundwater composition in the northern portion of the saltwater plume.
- Assess saltwater movement and develop groundwater-flow models to evaluate various watermanagement scenarios in support of local decisions, such as evaluating optimal pumping distribution to maintain plume position.

BGJWSC is committed to working together in reestablishing the WRMAC organization and fully funding the USGS saltwater intrusion study. We have been encouraged by the level of interest by active stakeholders at previous meetings and feel confident that program funding will be fair and equitable to all participants.

Respectfully,

BGJWSC



Brunswick-Glynn County Joint Water and Sewer Commission

Commission Memo

To:	BGJWSC Members, Jimmy Junkin (Exec. Director)
From:	Todd Kline (Planning & Construction, Senior Engineer)
Date:	December 21, 2017
Re:	JWSC Project #232 – SR 99/US 341/Green Swamp Rd WM Extension Project Change Order #3

Background

BGJWSC is currently under contract with Seaboard Construction Company to facilitate the water main installations on State Route 99, US Highway 341, and Green Swamp Road. The scope of work includes the installation of approximately 17,700 LF of 8" and 10,340 LF of 12" PVC C900 water main, approximately 1150 LF of Directional Bore, connection to the existing system, testing, disinfection, surface restoration and removal and replacement of asphalt where necessary. (See attached project map Exhibit A).

Water main installation on Division IIA and Division III is complete. The contractor has encountered unforeseen utility conflicts on Division II which were not shown on the plans. The JWSC with the help of Richardson, Garretson & Associates, LLC (RGA) redesigned this section to facilitate the water main installation along Hwy 99 by revising installation methods to Horizontal Directional Drill as opposed to open cut to receive G-DOT approval and install the water main safely. To facilitate the necessary changes, the contractor has produced a change order in the amount of **\$98,661.69 (See attached Exhibit B)**.

Pricing has been evaluated and together with the initial price of the contract is still below the opinion of probable cost estimate completed by RGA and the JWSC Capital Project Budget.

Installation of this water main is a vital component to providing the residents and businesses along SR 99, US Highway 341, and Green Swamp Road with potable drinking water and fire protection. Additional change order(s) for Division I are pending plan revisions, possible easement acquisitions and G-DOT approval.

Staff Report

Staff considers these improvements to be beneficial for the purposes of increasing system efficiency, water capacity and service availability. The following three options have been developed for action:

- 1. Do nothing.
- 2. Reject the change order as proposed.
- 3. Approve the change order presented to facilitate continued progress on the water main installation as proposed.

Recommended Action

Staff has reviewed the above options and recommends option #3. It is advantageous and beneficial to have the Contractor facilitate the installation of the new water main as proposed at this time while they are mobilized. The pricing and plan proposed by the Contractor is consistent with other current work.

Recommended Motion

I make a motion that the Brunswick-Glynn County Joint Water & Sewer Commission approve and authorize the Executive Director and Board Chairman to execute the additional pricing provided by Seaboard Construction Company to be processed as Contract Change Order(s) in the amount of **\$98,661.69**

OWNER:	CT CHANGE ORDER Brunswick - Glynn JWSC	DATE:	
OWNER.			
	1703 Gloucester Street	LOCATION:	Glynn County, GA
	Brunswick, GA 31520	CHANGE ORDER NO.	3
-		PROJECT NO:	JWSC #232 Div II
TO:	Plant Improvement Co., Inc.	CONTRACT:	
	dba Seaboard Construction Co.	CURRENT CONTRACT	\$ 441,695.29
	P O Box 1437		
	Brunswick, GA 31521		
You are hereby	requested to comply with the following changes from the contract pla	ns and specifications.	
Div II Item		DECREASE IN	INCREASE IN
(Line No.)	DESCRIPTION OF CHANGE	CONTRACT PRICE	CONTRACT PRICE
	DESCRIPTION OF CHANGE	CONTRACT FRICE	CONTRACT FRICE
3a.	Delete 269 LF 12" PVC Water Main Installation @ \$17.52/LF (Sta 20+49	\$4,712.88	
00.	to 17+80)	\$4,112.00	
NEW	Add 269 LF 12" FPVC Water Main Installation (HDD) @ \$105.73/LF (Sta		\$28,441.3
	2049 to 17+80)		+=0,0
	Delete 164 LF Jack and Bore Installation 20" Steel Casing w/Spacers @	A /	
4e.	\$261.24/LF (Sta17+76 to 16+12 Chris Road & Drainage Ditch)	\$42,843.36	1
2-	Delete 172 LF 12" PVC Water Main Installation @ \$17.52/LF (Sta 17+80	¢2.040.44	l
3a.	to 16+08 Chris Road and drainage ditch)	\$3,013.44	1
NEW	Add 172 LF 12" FPVC Water Main Installation (HDD) @ \$105.73/LF (Sta		**** · · · ·
NEW	17+80 to 16+08 Drainage Ditch)		\$18,185.5
			l
	Delete 278 LF 12" PVC Water Main Installation @ \$17.52/LF (Sta 16+08	1	
3a.	to Sta 13+30)	\$4,870.56	1
	Add 278 LF 12" FPVC Water Main Installation (HDD) @ \$105.73 /LF (Sta		
NEW	16+08 to Sta 13+30)		\$29,392.9
	10+00 to 6ta 10+30)		
3a.	Delete 355 LF 12" PVC Water Main Installation @ \$17.52/LF (Sta 9+58 to	\$6,219.60	
	Sta 6+03)	•-,	
NEW	Add 355 LF 12" FPVC Water Main Installation (HDD) @ \$105.73/LF (Sta		\$37.534.1
	9+58 to Sta 6+03)		
3a.	Delete 395 LF 12" PVC Water Main Installation @ \$17.52/LF (Sta 3+95 to	¢c 020 40	
3d.	Sta 0+00)	\$6,920.40	
NEW	Add 395 LF 12" FPVC Water Main Installation (HDD) @ \$105.73/LF (Sta		¢ 41 762 2
	3+95 to Sta 0+00)		\$41,763.3
4d.	Delete 21 SY Gravel Driveway Remove & Replace @ \$23.11/SY	\$485.31	
4 0.	Delete 21 01 Graver Driveway Keniove & Kepiace @ #23.11/01	\$403.51	
	12' Sleeve		\$5,935.4
	Relocate 8" Water Line		\$4,457.9
	Additional work on Fire Hydrants		\$2,016.5
	Additional work of this rightants		\$2,010.3
Change in Co	ntract Price due to this Change Order:		
Total Decreas		\$ 69,065.55	
		+ 00,000.00	¢ 467 707 04
Total Increase			\$ 167,727.24
Net Change	in Contract Price:		\$ 98,661.69
		1	¢ E40.250.00
<u>TOTAL ADJU</u>	JSTED CONTRACT PRICE: DIVISION II	1	\$ 540,356.98
			<u></u>
			l
0	Calendar days are hereby added to the total time for a second	or completion of the cor	itract.
This document	shall become an amendment to the contract and all provisions	of the contract will apply here	eto.
			[
			<u> </u>
Accepted:			
	Contractor	Date	
Decemary 1			
Recommended			<u> </u>
	Engineer	Date	
Approved:			[
Approveu.		.	
		L LOTA	1
	Owner	Date	



Brunswick-Glynn County Joint Water and Sewer Commission

Memo

To:	BGJWSC Members, Jimmy Junkin (Exec. Director)
From:	Todd Kline, P.E. (Planning & Construction, Senior Engineer)
Date:	December 21, 2017
Re:	JWSC Project #421- Mansfield St. Water & Sewer Main Replacement: Change Order #6

Background

This project is a cooperative effort between the City of Brunswick and the JWSC. The Contract is between the City of Brunswick and J.H. Stone Construction. The JWSC will reimburse the City per an MOU previously set in place.

The main portion of this project is the replacement and upgrade of aged and failing gravity sewer mains, many of which are 50+ years in age. As this is existing infrastructure in a long occupied section of the City, there are many layers of infrastructure that have been added over the last 100 years. As such, the contractor has encountered unknown pipes and mains during the installation of the new system. Each time an unknown or unforeseen main is encountered, the contractor must verify that the infrastructure is no longer in service and then remove that section of main. Removal and replacement of these sewer mains and services has increased the total quantities that have exceeded the original contract sum.

The contractor has submitted a change order (Exhibit A) to the City of Brunswick for additional expenses caused by the above conditions, as well as water and sewer services not shown on the construction plans.

Staff Report

Staff has developed the following options for action:

- 1. Do nothing. Decline to compensate the contractor for the additional claimed work and materials.
- 2. Request modification of the proposed change order.
- 3. Approve the change order as proposed by Stone Construction.

Staff has reviewed the above referenced change order for justification. The requested quantities have been verified in the field by JWSC staff and the pricing requested is consistent with the original bid documents. Staff recommends option No. 3.

Recommended Motion

I move to authorize the Executive Director to execute a contract change order in the amount of **\$31,499.90** for the additional work described in Exhibit A.

CONTRACT CHANGE ORDER

OWNER:	City of Brunswick	DATE:	December 6, 2017
	601 Gloucester St.	LOCATION:	Brunswick, GA
	Brunswick, GA 31521	CHANGE ORDER NO.	6
		PROJECT NO:	178411008/028
TO:	Stone Construction	CONTRACT:	
	4090 Whitlock St.	CURRENT CONTRACT	\$1,617,802.46
	Brunswick, GA 31520		
You are hereby re	quested to comply with the following changes from the	e contract plans and specificatior	IS.
		DECREASE IN	INCREASE IN
Item (Line No.)	DESCRIPTION OF CHANGE	CONTRACT PRICE	CONTRACT PRICE
	Division II Changes		
1	Contract quantity overruns for Division II items including sanitary sewer removal and replacement (see attached request from contractor for itemized schedule of values)		\$ 31,499.90
	Division II Current \$887,276.85 <u>Division II Change \$31,499.90</u> Revised Division II \$918,776.75		
Change in Cont	ract Price due to this Change Order:		
Total Decrease:		\$-	
Total Increase:		-	\$ 31,499.90
	Contract Bries		
Net Change in	Contract Price:		\$ 31,499.90
TOTAL ADJUS	TED CONTRACT PRICE:		<u>\$ 1,649,302.36</u>

This document shall become an amendment to the contract and all provisions of the contract will apply hereto.

Accepted by:			
	Contractor	Date	
Approved by:			
	BGJWSC	Date	
Approved by:			
	Owner	Date	

J.H. Stone Construction Inc 4090 Whitlock St Brunswick GA 31520 912.264.8239 stoneconst@jhstoneconst.com

December 6, 2017

Re: Mansfield Street Contract Amendment

Dear Mr. Alberson & Todd Kline,

We wish to amend the original contract to adjust total quantities that have exceeded 100% of the original unit prices/quantities.

Please find the following line items that have exceeded original contract.

Div II Water & Sewer

- D) 490' of 24" PVC SDR26 sewer 10' 12" cut
- E) 237' of 36" PVC SDR26 sewer 12' 14' cut
- M) 4 6' Dia. Riser 4 (installed 8)
- U) 6" SEWER CONNECTION
- V) 8" Sew Connection
- X) 1 24" Sewer Connection (installed 2)
- Y) 4 4" Sewer Service Connection (installed 5)
- Z) 4" SDR 35 Serv Conn Pipe

Div I Water

- A) Remove Existing Sanitary Sewer Pipe
- C) Remove Existing Manhole (15)

Total change order amount \$31,499.90

Please call with any questions.

Sincerely,

Joe Stone 912-230-6884

- installed 498' 8' @ \$95.20 = \$761.60
 installed 243' 6' @ \$185.30 = \$1111.80
- installed 4 additional @ \$672 = \$2688.00
- installed 1 @ 1500.00
- installed 2 @ \$1842.00 = \$3684.00
- installed 1 @ 4372.00
- installed 4 @ \$900 = \$3600.00
- installed 60 lf @ #13.80 = \$828.00
- 442lf @ \$20.75 = \$9171.50
- removed 3 @ \$1261.00 = \$3,783.00



ACADEMY CREEK WPCP PERMIT NUMBER GA0025313 PLANT PERFORMANCE

Flow (MGD) Monthly Avg. 13.5 Weekly Avg. 16.9 BOD (5-Day) Monthly Avg. 20 mg/l (1024 kg/day) Weekly Avg. 30 mg/l (1279kg/day) TSS Monthly Avg. 30 mg/l (1535 kg/day) Weekly Avg. 45 mg/l (1919 kg/day)

											11	12
	1	2	3	4	5	6	7	8	9	10	EFF	Percent
	INF	INF	Pinova	EFF	EFF	BOD	TSS	Rain	Rain	Rain	Monthly	of
	AVG	MAX	AVG	AVG	MAX	EFF	EFF	Inches	Inches	Total	Limit	Plant
	FLOW	DAILY		FLOW	DAILY	mg/l	mg/l	AVG	MAX		FLOW	Capacity
MONTH	MGD	MGD		MGD	MGD	AVG	AVG				MGD	Used
Jan-16	6.2	7.0	0.5	6.6	7.5	7	18	0.10	1.0	3.0	13.5	49%
Feb-16	7.6	9.4	0.7	7.8	9.7	8	13	0.13	2.0	3.8	13.5	58%
Mar-16	6.7	7.0	0.7	7.0	7.7	8	13	0.04	0.3	1.2	13.5	52%
Apr-16	6.3	7.0	0.6	6.8	7.7	7	12	0.07	1.0	2.2	13.5	50%
May-16	6.1	6.8	0.6	6.6	7.7	7	12	0.10	2.3	3.1	13.5	49%
Jun-16	6.3	7.2	0.6	6.7	8.1	4	9	0.13	2.3	4.0	13.5	50%
Jul-16	6.1	9.7	0.7	6.3	7.1	8	9	0.08	0.9	2.5	13.5	47%
Aug-16	5.7	6.3	0.7	6.2	7.3	7	10	0.14	1.5	4.4	13.5	46%
Sep-16	7.3	12.2	0.7	7.8	13.0	8	12	0.32	4.7	9.7	13.5	58%
Oct-16	10.4	15.5	0.7	10.5	15.4	7	11	0.46	9.8	14.1	13.5	78%
Nov-16	7.4	8.2	0.5	7.6	8.7	8	10	0.00	0.1	0.1	13.5	57%
Dec-16	6.9	8.6	0.6	7.2	8.5	7	12	0.10	1.0	3.2	13.5	53%
Jan-17	7.8	12.7	0.5	8.4	13.4	6	10	0.10	1.0	5.9	13.5	62%
Feb-17	7.0	8.1	0.7	7.5	8.6	5	9	0.13	2.0	2.5	13.5	56%
Mar-17	6.2	6.7	0.7	6.5	7.6	6	12	0.04	0.3	0.9	13.5	48%
Apr-17	5.7	6.3	0.6	6.1	6.7	7	12	0.07	1.0	1.0	13.5	45%
May-17	5.5	6.3	0.6	6.0	7.4	7	13	0.10	2.3	6.2	13.5	44%
Jun-17	7.2	9.6	0.6	7.6	10.3	5	9	0.13	2.3	7.2	13.5	56%
Jul-17	6.6	9.2	0.6	7.0	9.8	5	10	0.15	1.7	4.7	13.5	52%
Aug-17	7.7	9.3	0.6	8.3	10.1	5	11	0.30	1.8	9.3	13.5	61%
Sep-17	10.2	16.7	0.4	11.0	16.0	8	13	0.37	6.3	11.2	13.5	82%
Oct-17		8.7	0.5	8.2	9.6	6	9	0.21	2.3	6.4	13.5	61%
Nov-17	6.0	6.7	0.5	6.9	9.1	4	8	0.35	9.1	10.5	13.5	51%
Dec-17												
AVG	7.0	8.9	0.6	7.4	9.4	7	11	0.2	2.5	5.1		55%
MAX	10.4	16.7	0.7	11.0	16.0	8	18	0.5	9.8	14.1		82%
MIN	5.5	6.3	0.4	6.0	6.7	4	8	0.0	0.1	0.1		44%



DUNBAR CREEK WPCP PERMIT NUMBER GA0021521 PLANT PERFORMANCE Flow (MGD) Monthly Avg. 4.0 Weekly Avg. 5.0 BOD (5-Day) Monthly Avg. 5.0 mg/l (76 kg/day) Weekly Avg. 7.5 mg/l (95 kg/day) TSS Monthly Avg. 20 mg/l (303 kg/day) Weekly Avg. 30 mg/l (379 kg/day)

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INF INF NO EFF EFF BOD TSS Rain Rain Rain Monthly occasi AVG MAX Industrial AVG MAX Industrial AVG MAX Inches											i	11	12
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		1	2	3	4	5	6	7	8	9	10	EFF	Percent
FLOW DAILY Flow FLOW DAILY mg/l mg/l AVG AVG MAX Total Cap MONTH MGD MGD MGD AUG AVG AVG AVG MAX Total MGD Us Jan-16 2.5 2.9 2.3 2.7 1 1 0.11 1.0 3.5 4.0 58 Feb-16 2.8 3.2 2.6 3.1 2 2.0 0.15 2.6 4.5 4.0 660 Mar-16 2.7 3.2 2.4 2.8 3 2 0.05 1.0 1.7 4.0 55 May-16 2.8 3.2 2.2 2.6 2 2 0.05 1.0 1.7 4.0 55 Jun-16 3.2 3.7 2.5 3.0 2 1 0.01 0.2 0.2 4.0 661 Jun-16 3.2 3.52 2.5 3.0 2 <td></td> <td>INF</td> <td>INF</td> <td>No</td> <td>EFF</td> <td>EFF</td> <td>BOD</td> <td>TSS</td> <td>Rain</td> <td>Rain</td> <td>Rain</td> <td>Monthly</td> <td>of</td>		INF	INF	No	EFF	EFF	BOD	TSS	Rain	Rain	Rain	Monthly	of
MONTH MGD MGD MGD MGD AVG AVG AVG MGD MGD Us Jan-16 2.5 2.9 2.3 2.7 1 1 0.11 1.0 3.5 4.0 58 Feb-16 2.8 3.2 2.6 3.1 2 2 0.15 2.6 4.5 4.0 65 Mar-16 2.7 3.2 2.4 2.8 3 2 0.06 0.5 1.9 4.0 660 Apr-16 2.8 3.2 2.4 2.8 2 1 0.09 1.1 2.7 4.0 55 May-16 2.8 3.2 2.2 2.6 2 0.05 1.0 1.7 4.0 56 Jun-16 3.2 3.7 2.5 3.0 2 1 0.01 0.2 0.2 4.0 61 Aug-16 2.9 3.5 2.1 2.6 2 1 0.20 2.		AVG	MAX	Industrial	AVG	MAX	EFF	EFF	Inches	Inches	Inches	Limit	Plant
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		FLOW	DAILY	Flow	FLOW	DAILY	mg/l	mg/l	AVG	MAX	Total		Capacity
Feb-16 2.8 3.2 2.6 3.1 2 2 0.15 2.6 4.5 4.0 655 Mar-16 2.7 3.2 2.4 2.8 3 2 0.06 0.5 1.9 4.0 660 Apr-16 2.8 3.2 2.4 2.8 2 1 0.09 1.1 2.7 4.0 59 May-16 2.8 3.2 2.2 2.6 2 2 0.05 1.0 1.7 4.0 56 Jun-16 3.2 3.7 2.5 3.0 3 2 0.25 3.3 7.6 4.0 61 Aug-16 2.9 3.5 2.1 2.6 2 1 0.20 2.6 6.1 4.0 54 Sep-16 3.3 5.2 2.6 4.7 1 1 0.32 5.5 9.7 4.0 65 Dec-16 2.8 3.4 2.5 3.0 3 1 <td>MONTH</td> <td>MGD</td> <td>MGD</td> <td></td> <td>MGD</td> <td>MGD</td> <td>AVG</td> <td>AVG</td> <td></td> <td></td> <td></td> <td>MGD</td> <td>Used</td>	MONTH	MGD	MGD		MGD	MGD	AVG	AVG				MGD	Used
Mar-16 2.7 3.2 2.4 2.8 3 2 0.06 0.5 1.9 4.0 600 Apr-16 2.8 3.2 2.4 2.8 2 1 0.09 1.1 2.7 4.0 59 May-16 2.8 3.2 2.2 2.6 2 2 0.05 1.0 1.7 4.0 56 Jun-16 3.2 3.7 2.5 3.0 3 2 0.25 3.3 7.6 4.0 61 Jul-16 3.2 3.9 2.5 3.0 2 1 0.01 0.2 0.2 4.0 61 Aug-16 2.9 3.5 2.1 2.6 2 1 0.20 2.6 6.1 4.0 54 Sep-16 3.3 5.2 2.6 4.7 1 1 0.32 5.5 9.7 4.0 65 Dec-16 2.8 3.4 2.5 3.0 3 1 <td>Jan-16</td> <td>2.5</td> <td>2.9</td> <td></td> <td>2.3</td> <td>2.7</td> <td>1</td> <td>1</td> <td>0.11</td> <td>1.0</td> <td>3.5</td> <td>4.0</td> <td>58%</td>	Jan-16	2.5	2.9		2.3	2.7	1	1	0.11	1.0	3.5	4.0	58%
Apr-16 2.8 3.2 2.4 2.8 2 1 0.09 1.1 2.7 4.0 55 May-16 2.8 3.2 2.2 2.6 2 2 0.05 1.0 1.7 4.0 56 Jun-16 3.2 3.7 2.5 3.0 3 2 0.25 3.3 7.6 4.0 61 Jul-16 3.2 3.9 2.5 3.0 2 1 0.01 0.2 0.2 4.0 61 Aug-16 2.9 3.5 2.1 2.6 2 1 0.20 2.6 6.1 4.0 54 Sep-16 3.3 5.2 2.6 4.7 1 1 0.32 5.5 9.7 4.0 65 Oct-16 3.8 5.1 3.0 4.5 2 2 0.01 0.2 0.2 4.0 64 Dec-16 2.8 3.4 2.5 3.0 3 1	Feb-16	2.8	3.2		2.6	3.1	2	2	0.15	2.6	4.5	4.0	65%
May-16 2.8 3.2 2.2 2.6 2 2 0.05 1.0 1.7 4.0 56 Jun-16 3.2 3.7 2.5 3.0 3 2 0.25 3.3 7.6 4.0 61 Jul-16 3.2 3.9 2.5 3.0 2 1 0.01 0.2 0.2 4.0 61 Aug-16 2.9 3.5 2.1 2.6 2 1 0.20 2.6 6.1 4.0 54 Sep-16 3.3 5.2 2.6 4.7 1 1 0.32 5.5 9.7 4.0 65 Oct-16 3.8 5.1 3.0 4.5 2 2 0.01 0.2 0.2 4.0 64 Dec-16 2.8 3.4 2.5 3.0 3 1 0.10 1.7 3.1 4.0 63 Jan-17 2.9 4.2 2.7 3.7 3 3 0.13 1.5 3.9 4.0 64 Apr-17 2.7 3.6 </td <td>Mar-16</td> <td>2.7</td> <td>3.2</td> <td></td> <td>2.4</td> <td>2.8</td> <td>3</td> <td>2</td> <td>0.06</td> <td>0.5</td> <td>1.9</td> <td>4.0</td> <td>60%</td>	Mar-16	2.7	3.2		2.4	2.8	3	2	0.06	0.5	1.9	4.0	60%
Jun-16 3.2 3.7 2.5 3.0 3 2 0.25 3.3 7.6 4.0 61 Jul-16 3.2 3.9 2.5 3.0 2 1 0.01 0.2 0.2 4.0 61 Aug-16 2.9 3.5 2.1 2.6 2 1 0.02 2.6 6.1 4.0 54 Sep-16 3.3 5.2 2.6 4.7 1 1 0.32 5.5 9.7 4.0 65 Oct-16 3.8 5.1 3.0 4.5 2 2 0.01 0.2 0.2 4.0 64 Dec-16 2.8 3.4 2.5 3.0 3 1 0.10 1.7 3.1 4.0 63 Jan-17 2.9 4.2 2.7 3.7 3 3 0.13 1.5 3.9 4.0 64 Mar-17 2.7 3.1 2.6 2.9 2 1	Apr-16	2.8	3.2		2.4	2.8	2	1	0.09	1.1	2.7	4.0	59%
Jul-16 3.2 3.9 2.5 3.0 2 1 0.01 0.2 0.2 4.0 61 Aug-16 2.9 3.5 2.1 2.6 2 1 0.02 2.6 6.1 4.0 54 Sep-16 3.3 5.2 2.6 4.7 1 1 0.32 5.5 9.7 4.0 65 Oct-16 3.8 5.1 3.0 4.5 2 2 0.27 6.1 8.5 4.0 76 Nov-16 2.9 3.2 2.6 2.9 2 0.01 0.2 0.2 4.0 64 Dec-16 2.8 3.4 2.5 3.0 3 1 0.10 1.7 3.1 4.0 63 Jan-17 2.9 4.2 2.7 3.7 3 3 0.13 1.5 3.9 4.0 67 Feb-17 2.8 3.1 2.7 3.0 2 3 0.04 </td <td>May-16</td> <td>2.8</td> <td>3.2</td> <td></td> <td>2.2</td> <td>2.6</td> <td>2</td> <td>2</td> <td>0.05</td> <td>1.0</td> <td>1.7</td> <td>4.0</td> <td>56%</td>	May-16	2.8	3.2		2.2	2.6	2	2	0.05	1.0	1.7	4.0	56%
Aug-16 2.9 3.5 2.1 2.6 2 1 0.20 2.6 6.1 4.0 54 Sep-16 3.3 5.2 2.6 4.7 1 1 0.32 5.5 9.7 4.0 65 Oct-16 3.8 5.1 3.0 4.5 2 2 0.27 6.1 8.5 4.0 76 Nov-16 2.9 3.2 2.6 2.9 2 2 0.01 0.2 0.2 4.0 64 Dec-16 2.8 3.4 2.5 3.0 3 1 0.10 1.7 3.1 4.0 63 Jan-17 2.9 4.2 2.7 3.7 3 3 0.13 1.5 3.9 4.0 67 Feb-17 2.8 3.1 2.7 3.0 2 3 0.04 0.5 1.0 4.0 68 Mar-17 2.7 3.1 2.6 2.9 2 1 0.03 0.7 0.8 4.0 64 Apr-17 2.7 3.6 <td>Jun-16</td> <td>3.2</td> <td>3.7</td> <td></td> <td>2.5</td> <td>3.0</td> <td>3</td> <td>2</td> <td>0.25</td> <td>3.3</td> <td>7.6</td> <td>4.0</td> <td>61%</td>	Jun-16	3.2	3.7		2.5	3.0	3	2	0.25	3.3	7.6	4.0	61%
Aug-16 2.9 3.5 2.1 2.6 2 1 0.20 2.6 6.1 4.0 54 Sep-16 3.3 5.2 2.6 4.7 1 1 0.32 5.5 9.7 4.0 65 Oct-16 3.8 5.1 3.0 4.5 2 2 0.27 6.1 8.5 4.0 76 Nov-16 2.9 3.2 2.6 2.9 2 2 0.01 0.2 0.2 4.0 64 Dec-16 2.8 3.4 2.5 3.0 3 1 0.10 1.7 3.1 4.0 63 Jan-17 2.9 4.2 2.7 3.7 3 3 0.13 1.5 3.9 4.0 67 Feb-17 2.8 3.1 2.7 3.0 2 3 0.04 0.5 1.0 4.0 68 Mar-17 2.7 3.1 2.6 2.9 2 1 0.03 0.7 0.8 4.0 64 Apr-17 2.7 3.6 <td></td>													
Sep-16 3.3 5.2 2.6 4.7 1 1 0.32 5.5 9.7 4.0 65 Oct-16 3.8 5.1 3.0 4.5 2 2 0.27 6.1 8.5 4.0 76 Nov-16 2.9 3.2 2.6 2.9 2 0.01 0.2 0.2 4.0 64 Dec-16 2.8 3.4 2.5 3.0 3 1 0.10 1.7 3.1 4.0 63 Jan-17 2.9 4.2 2.7 3.7 3 3 0.13 1.5 3.9 4.0 67 Feb-17 2.8 3.1 2.7 3.0 2 3 0.04 0.5 1.0 4.0 68 Mar-17 2.7 3.1 2.6 2.9 2 1 0.03 0.7 0.8 4.0 64 Apr-17 2.7 3.6 2.5 2.8 3 1 0.06 </td <td>Jul-16</td> <td>3.2</td> <td>3.9</td> <td></td> <td>2.5</td> <td>3.0</td> <td>2</td> <td>1</td> <td>0.01</td> <td>0.2</td> <td>0.2</td> <td>4.0</td> <td>61%</td>	Jul-16	3.2	3.9		2.5	3.0	2	1	0.01	0.2	0.2	4.0	61%
Oct-16 3.8 5.1 3.0 4.5 2 2 0.27 6.1 8.5 4.0 76 Nov-16 2.9 3.2 2.6 2.9 2 2 0.01 0.2 0.2 4.0 64 Dec-16 2.8 3.4 2.5 3.0 3 1 0.10 1.7 3.1 4.0 63 Jan-17 2.9 4.2 2.7 3.7 3 3 0.13 1.5 3.9 4.0 67 Feb-17 2.8 3.1 2.7 3.0 2 3 0.04 0.5 1.0 4.0 68 Mar-17 2.7 3.1 2.6 2.9 2 1 0.03 0.7 0.8 4.0 64 Apr-17 2.7 3.6 2.5 2.8 3 1 0.06 1.0 1.9 4.0 62 May-17 2.5 3.7 2.6 3.4 2 1 0.12 1.0 3.8 4.0 66 Jun-17 3.4 3.9 <td>Aug-16</td> <td>2.9</td> <td>3.5</td> <td></td> <td>2.1</td> <td>2.6</td> <td>2</td> <td>1</td> <td>0.20</td> <td>2.6</td> <td>6.1</td> <td>4.0</td> <td>54%</td>	Aug-16	2.9	3.5		2.1	2.6	2	1	0.20	2.6	6.1	4.0	54%
Nov-16 2.9 3.2 2.6 2.9 2 2 0.01 0.2 0.2 4.0 64 Dec-16 2.8 3.4 2.5 3.0 3 1 0.10 1.7 3.1 4.0 63 Jan-17 2.9 4.2 2.7 3.7 3 3 0.13 1.5 3.9 4.0 67 Feb-17 2.8 3.1 2.7 3.0 2 3 0.04 0.5 1.0 4.0 68 Mar-17 2.7 3.1 2.6 2.9 2 1 0.03 0.7 0.8 4.0 64 Apr-17 2.7 3.6 2.5 2.8 3 1 0.06 1.0 1.9 4.0 62 May-17 2.5 3.7 2.6 3.4 2 1 0.12 1.0 3.8 4.0 66 Jun-17 3.4 3.9 3.1 3.7 4 2	Sep-16	3.3	5.2		2.6	4.7	1	1	0.32	5.5	9.7	4.0	65%
Dec-16 2.8 3.4 2.5 3.0 3 1 0.10 1.7 3.1 4.0 63 Jan-17 2.9 4.2 2.7 3.7 3 3 0.13 1.5 3.9 4.0 67 Feb-17 2.8 3.1 2.7 3.0 2 3 0.04 0.5 1.0 4.0 68 Mar-17 2.7 3.1 2.6 2.9 2 1 0.03 0.7 0.8 4.0 64 Apr-17 2.7 3.6 2.5 2.8 3 1 0.06 1.0 1.9 4.0 62 May-17 2.5 3.7 2.6 3.4 2 1 0.12 1.0 3.8 4.0 66 Jun-17 3.4 3.9 3.1 3.7 4 2 0.24 2.9 7.3 4.0 79 Jul-17 3.6 4.9 3.3 4.7 4 3	Oct-16	3.8	5.1		3.0	4.5	2	2	0.27	6.1	8.5	4.0	76%
Jan-17 2.9 4.2 2.7 3.7 3 3 0.13 1.5 3.9 4.0 67 Feb-17 2.8 3.1 2.7 3.0 2 3 0.04 0.5 1.0 4.0 68 Mar-17 2.7 3.1 2.6 2.9 2 1 0.03 0.7 0.8 4.0 64 Apr-17 2.7 3.6 2.5 2.8 3 1 0.06 1.0 1.9 4.0 62 May-17 2.5 3.7 2.6 3.4 2 1 0.12 1.0 3.8 4.0 66 Jun-17 3.4 3.9 3.1 3.7 4 2 0.24 2.9 7.3 4.0 79 Jul-17 3.6 4.9 3.3 4.7 4 3 0.27 2.1 8.5 4.0 82 Aug-17 3.4 3.9 3.1 3.6 3 2 0.35 10.4 10.5 4.0 90 Oct-17 3.4 3.9<	Nov-16	2.9	3.2		2.6	2.9	2	2	0.01	0.2	0.2	4.0	64%
Feb-17 2.8 3.1 2.7 3.0 2 3 0.04 0.5 1.0 4.0 68 Mar-17 2.7 3.1 2.6 2.9 2 1 0.03 0.7 0.8 4.0 64 Apr-17 2.7 3.6 2.5 2.8 3 1 0.06 1.0 1.9 4.0 62 May-17 2.5 3.7 2.6 3.4 2 1 0.12 1.0 3.8 4.0 66 Jun-17 3.4 3.9 3.1 3.7 4 2 0.24 2.9 7.3 4.0 79 Jul-17 3.6 4.9 3.3 4.7 4 3 0.27 2.1 8.5 4.0 82 Aug-17 3.4 3.9 3.1 3.6 3 2 0.22 1.4 6.7 4.0 76 Sep-17 3.9 5.0 3.6 4.6 5 2 0.35 10.4 10.5 4.0 90 Oct-17 3.5 4.0<	Dec-16	2.8	3.4		2.5	3.0	3	1	0.10	1.7	3.1	4.0	63%
Mar-17 2.7 3.1 2.6 2.9 2 1 0.03 0.7 0.8 4.0 64 Apr-17 2.7 3.6 2.5 2.8 3 1 0.06 1.0 1.9 4.0 62 May-17 2.5 3.7 2.6 3.4 2 1 0.12 1.0 3.8 4.0 66 Jun-17 3.4 3.9 3.1 3.7 4 2 0.24 2.9 7.3 4.0 79 Jun-17 3.6 4.9 3.3 4.7 4 3 0.27 2.1 8.5 4.0 82 Aug-17 3.6 4.9 3.3 4.7 4 3 0.27 2.1 8.5 4.0 82 Aug-17 3.4 3.9 3.1 3.6 3 2 0.22 1.4 6.7 4.0 82 Aug-17 3.4 3.9 3.1 3.6 3 2 0.35 10.4 10.5 4.0 90 Oct-17 3.1 3.7<	Jan-17	2.9	4.2		2.7	3.7	3	3	0.13	1.5	3.9	4.0	67%
Apr-17 2.7 3.6 2.5 2.8 3 1 0.06 1.0 1.9 4.0 62 May-17 2.5 3.7 2.6 3.4 2 1 0.12 1.0 3.8 4.0 66 Jun-17 3.4 3.9 3.1 3.7 4 2 0.24 2.9 7.3 4.0 79 Jun-17 3.6 4.9 3.3 4.7 4 3 0.27 2.1 8.5 4.0 82 Jul-17 3.6 4.9 3.3 4.7 4 3 0.27 2.1 8.5 4.0 82 Aug-17 3.4 3.9 3.1 3.6 3 2 0.22 1.4 6.7 4.0 76 Sep-17 3.9 5.0 3.6 4.6 5 2 0.35 10.4 10.5 4.0 90 Oct-17 3.5 4.0 3.2 3.7 5 3 0.07 0.6 2.1 4.0 80 Nov-17 3.1 3.7<	Feb-17	2.8	3.1		2.7	3.0	2	3	0.04	0.5	1.0	4.0	68%
May-17 2.5 3.7 2.6 3.4 2 1 0.12 1.0 3.8 4.0 66 Jun-17 3.4 3.9 3.1 3.7 4 2 0.24 2.9 7.3 4.0 79 Jun-17 3.4 3.9 3.1 3.7 4 2 0.24 2.9 7.3 4.0 79 Jul-17 3.6 4.9 3.3 4.7 4 3 0.27 2.1 8.5 4.0 82 Aug-17 3.4 3.9 3.1 3.6 3 2 0.22 1.4 6.7 4.0 76 Sep-17 3.9 5.0 3.6 4.6 5 2 0.35 10.4 10.5 4.0 90 Oct-17 3.5 4.0 3.2 3.7 5 3 0.07 0.6 2.1 4.0 80 Nov-17 3.1 3.7 2.8 3.4 3 2 0.06 1.0 1.8 4.0 69 Dec-17	Mar-17	2.7	3.1		2.6	2.9	2	1	0.03	0.7	0.8	4.0	64%
May-17 2.5 3.7 2.6 3.4 2 1 0.12 1.0 3.8 4.0 66 Jun-17 3.4 3.9 3.1 3.7 4 2 0.24 2.9 7.3 4.0 79 Jun-17 3.4 3.9 3.1 3.7 4 2 0.24 2.9 7.3 4.0 79 Jul-17 3.6 4.9 3.3 4.7 4 3 0.27 2.1 8.5 4.0 82 Aug-17 3.4 3.9 3.1 3.6 3 2 0.22 1.4 6.7 4.0 76 Sep-17 3.9 5.0 3.6 4.6 5 2 0.35 10.4 10.5 4.0 90 Oct-17 3.5 4.0 3.2 3.7 5 3 0.07 0.6 2.1 4.0 80 Nov-17 3.1 3.7 2.8 3.4 3 2 0.06 1.0 1.8 4.0 69 Dec-17	Apr-17	2.7	3.6		2.5	2.8	3	1	0.06	1.0	1.9	4.0	62%
Jul-17 3.6 4.9 3.3 4.7 4 3 0.27 2.1 8.5 4.0 82 Aug-17 3.4 3.9 3.1 3.6 3 2 0.22 1.4 6.7 4.0 76 Sep-17 3.9 5.0 3.6 4.6 5 2 0.35 10.4 10.5 4.0 90 Oct-17 3.5 4.0 3.2 3.7 5 3 0.07 0.6 2.1 4.0 80 Nov-17 3.1 3.7 2.8 3.4 3 2 0.06 1.0 1.8 4.0 69 Dec-17 67 AVG 3.1 3.8 2.7 3.4 3 2 0.1 2.1 4.3 67		2.5	3.7		2.6	3.4	2	1	0.12	1.0	3.8	4.0	66%
Jul-17 3.6 4.9 3.3 4.7 4 3 0.27 2.1 8.5 4.0 82 Aug-17 3.4 3.9 3.1 3.6 3 2 0.22 1.4 6.7 4.0 76 Sep-17 3.9 5.0 3.6 4.6 5 2 0.35 10.4 10.5 4.0 90 Oct-17 3.5 4.0 3.2 3.7 5 3 0.07 0.6 2.1 4.0 80 Nov-17 3.1 3.7 2.8 3.4 3 2 0.06 1.0 1.8 4.0 69 Dec-17	Jun-17	3.4	3.9		3.1	3.7	4	2	0.24	2.9	7.3	4.0	79%
Aug-17 3.4 3.9 3.1 3.6 3 2 0.22 1.4 6.7 4.0 76 Sep-17 3.9 5.0 3.6 4.6 5 2 0.35 10.4 10.5 4.0 90 Oct-17 3.5 4.0 3.2 3.7 5 3 0.07 0.6 2.1 4.0 80 Nov-17 3.1 3.7 2.8 3.4 3 2 0.06 1.0 1.8 4.0 69 Dec-17													
Aug-17 3.4 3.9 3.1 3.6 3 2 0.22 1.4 6.7 4.0 76 Sep-17 3.9 5.0 3.6 4.6 5 2 0.35 10.4 10.5 4.0 90 Oct-17 3.5 4.0 3.2 3.7 5 3 0.07 0.6 2.1 4.0 80 Nov-17 3.1 3.7 2.8 3.4 3 2 0.06 1.0 1.8 4.0 69 Dec-17	Jul-17	3.6	4.9		3.3	4.7	4	3	0.27	2.1	8.5	4.0	82%
Sep-17 3.9 5.0 3.6 4.6 5 2 0.35 10.4 10.5 4.0 90 Oct-17 3.5 4.0 3.2 3.7 5 3 0.07 0.6 2.1 4.0 80 Nov-17 3.1 3.7 2.8 3.4 3 2 0.06 1.0 1.8 4.0 69 Dec-17 67 AVG 3.1 3.8 2.7 3.4 3 2 0.1 2.1 4.3 67			3.9		3.1		3					4.0	76%
Oct-17 3.5 4.0 3.2 3.7 5 3 0.07 0.6 2.1 4.0 80 Nov-17 3.1 3.7 2.8 3.4 3 2 0.06 1.0 1.8 4.0 69 Dec-17 69 AVG 3.1 3.8 2.7 3.4 3 2 0.1 2.1 4.3 67	-							2					90%
Nov-17 3.1 3.7 2.8 3.4 3 2 0.06 1.0 1.8 4.0 69 Dec-17													80%
Dec-17 AVG 3.1 3.8 2.7 3.4 3 2 0.1 2.1 4.3 67													69%
AVG 3.1 3.8 2.7 3.4 3 2 0.1 2.1 4.3 67													
			3.8		2.7	3.4	3	2	0.1	2.1	4.3		67%
MAX 3.9 5.2 3.6 4.7 5 3 0.4 10.4 10.5 90	MAX	3.9	5.2		3.6	4.7	5			10.4	10.5		90%
													54%



Southport WPCP PERMIT NUMBER GA0038938 PLANT PERFORMANCE Flow (MGD) Monthly Avg. 1.5 Weekly Avg. 1.875 BOD (5-Day) Monthly Avg. 30 mg/l (171 kg/day) Weekly Avg. 45 mg/l (320kg/day) TSS Monthly Avg. 30 mg/l (171 kg/day) Weekly Avg. 45 mg/l (320 kg/day)

INFINFNoEFFEFFBODTSSRainRainRainMainMonthyofAVGMAXIndustrialAVGMAXEFFEFFInches <td< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></td<>													
INFINFNOEFFEFFBODTSSRainRainRainMainMonthyofAVGMAXIndustrialAVGMAXEFFEFFInches <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>i</td><td>11</td><td>12</td></td<>											i	11	12
AVG MAX Industrial AVG FLOW DAILY FLOW DAILY FLOW DAILY FLOW DAILY FLOW DAILY MGD MGD </td <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>EFF</td> <td>Percent</td>		1	2	3	4	5	6	7	8	9	10	EFF	Percent
FLOW DAILY MGD MGD<		INF	INF	No	EFF	EFF	BOD	TSS	Rain	Rain	Rain	Monthly	of
MONTH MGD MGD MGD MGD AVG AVG AVG MGD MGD Used Jan-16 0.367 0.389 0.363 0.430 4 9 0.10 0.9 3.2 1.5 24% Feb-16 0.386 0.426 0.358 0.443 4 9 0.13 2.0 3.8 1.5 24% Mar-16 0.381 0.407 0.358 0.409 6 8 0.04 0.55 1.3 1.5 24% Apr-16 0.360 0.382 0.333 0.419 5 5 0.14 2.0 4.2 1.5 22% Jun-16 0.360 0.382 0.312 0.387 6 6 0.08 1.1 2.4 1.5 22% Jun-16 0.360 0.437 0.315 0.477 7 4 0.21 1.8 6.4 1.5 23% Jun-16 0.360 0.437 0.315 0.		AVG	MAX	Industrial	AVG	MAX	EFF	EFF	Inches	Inches	Inches	Limit	Plant
Jan-16 0.367 0.389 0.363 0.430 4 9 0.10 0.9 3.2 1.5 24% Feb-16 0.386 0.426 0.358 0.433 4 9 0.13 2.0 3.8 1.5 24% Mar-16 0.381 0.407 0.332 0.495 6 8 0.04 0.55 1.3 1.5 24% Apr-16 0.362 0.417 0.332 0.425 2 5 0.15 2.0 4.8 1.5 22% Jun-16 0.360 0.382 0.333 0.419 5 5 0.14 2.0 4.8 1.5 22% Jun-16 0.360 0.432 0.331 0.417 7 4 0.21 1.8 6.4 1.5 22% Jun-16 0.364 0.437 0.351 0.477 7 4 0.21 1.8 6.4 1.5 23% Sep-16 0.390 0.494 <td< td=""><td></td><td>FLOW</td><td>DAILY</td><td>Flow</td><td>FLOW</td><td>DAILY</td><td>mg/l</td><td>mg/l</td><td>AVG</td><td>MAX</td><td>Total</td><td></td><td>Capacity</td></td<>		FLOW	DAILY	Flow	FLOW	DAILY	mg/l	mg/l	AVG	MAX	Total		Capacity
Feb-16 0.386 0.426 0.358 0.443 4 9 0.13 2.0 3.8 1.5 24% Mar-16 0.381 0.407 0.358 0.409 6 8 0.04 0.5 1.3 1.5 24% Apr-16 0.367 0.399 0.339 0.391 6 8 0.08 1.5 2.5 1.5 23% May-16 0.362 0.417 0.332 0.425 2 5 0.15 2.0 4.8 1.5 22% Jun-16 0.360 0.382 0.333 0.419 5 5 0.14 2.0 4.2 1.5 22% Jun-16 0.364 0.437 0.351 0.477 7 4 0.21 1.8 6.4 1.5 23% Sep-16 0.390 0.494 0.375 0.532 7 6 0.28 5.2 8.3 1.5 23% Oct-16 0.393 0.608	MONTH	MGD	MGD		MGD	MGD	AVG	AVG				MGD	Used
Mar-16 0.381 0.407 0.358 0.409 6 8 0.04 0.5 1.3 1.5 24% Apr-16 0.367 0.399 0.339 0.391 6 8 0.08 1.5 2.5 1.5 23% May-16 0.362 0.417 0.332 0.425 2 5 0.15 2.0 4.8 1.5 22% Jun-16 0.360 0.382 0.333 0.419 5 5 0.14 2.0 4.2 1.5 22% Jun-16 0.360 0.382 0.333 0.419 5 5 0.14 2.0 4.2 1.5 22% Jun-16 0.364 0.437 0.351 0.477 7 4 0.21 1.8 6.4 1.5 23% Sep-16 0.390 0.494 0.375 0.52 7 6 0.28 5.2 8.3 1.5 26% Nov-16 0.350 0.417 0	Jan-16	0.367	0.389		0.363	0.430	4	9	0.10	0.9	3.2	1.5	24%
Apr-16 0.367 0.399 0.339 0.331 6 8 0.08 1.5 2.5 1.5 23% May-16 0.362 0.417 0.332 0.425 2 5 0.15 2.0 4.8 1.5 22% Jun-16 0.360 0.382 0.333 0.419 5 5 0.14 2.0 4.2 1.5 22% Jun-16 0.342 0.358 0.312 0.387 6 6 0.08 1.1 2.4 1.5 22% Jun-16 0.342 0.358 0.312 0.387 6 6 0.08 1.1 2.4 1.5 22% Jun-16 0.342 0.358 0.312 0.387 6 6 0.08 1.1 2.4 1.5 23% Sep-16 0.390 0.494 0.375 0.532 7 6 0.28 5.2 8.3 1.5 25% Oct-16 0.393 0.608	Feb-16	0.386	0.426		0.358	0.443	4	9	0.13	2.0	3.8	1.5	24%
May-16 0.362 0.417 0.332 0.425 2 5 0.15 2.0 4.8 1.5 22% Jun-16 0.360 0.382 0.333 0.419 5 5 0.14 2.0 4.2 1.5 22% Jul-16 0.342 0.358 0.312 0.387 6 6 0.08 1.1 2.4 1.5 22% Jul-16 0.342 0.358 0.312 0.387 6 6 0.08 1.1 2.4 1.5 21% Aug-16 0.364 0.437 0.351 0.477 7 4 0.21 1.8 6.4 1.5 23% Sep-16 0.390 0.494 0.375 0.532 7 6 0.28 5.2 8.3 1.5 25% Oct-16 0.393 0.608 0.390 0.703 9 5 0.22 6.0 6.3 1.5 26% Dec-16 0.359 0.435	Mar-16	0.381	0.407		0.358	0.409	6	8	0.04	0.5	1.3	1.5	24%
Jun-16 0.360 0.382 0.333 0.419 5 5 0.14 2.0 4.2 1.5 22% Jul-16 0.342 0.358 0.312 0.387 6 6 0.08 1.1 2.4 1.5 21% Aug-16 0.364 0.437 0.351 0.477 7 4 0.21 1.8 6.4 1.5 23% Sep-16 0.390 0.494 0.375 0.532 7 6 0.28 5.2 8.3 1.5 25% Oct-16 0.393 0.608 0.390 0.703 9 5 0.22 6.0 6.3 1.5 26% Nov-16 0.367 0.417 0.393 0.458 4 4 0.01 0.2 0.2 1.5 26% Dec-16 0.359 0.435 0.408 0.503 5 6 0.11 1.4 3.4 1.5 27% Jan-17 0.363 0.380	Apr-16	0.367	0.399		0.339	0.391	6	8	0.08	1.5	2.5	1.5	23%
Jul-16 0.342 0.358 0.312 0.387 6 6 0.08 1.1 2.4 1.5 21% Aug-16 0.364 0.437 0.351 0.477 7 4 0.21 1.8 6.4 1.5 23% Sep-16 0.390 0.494 0.375 0.532 7 6 0.28 5.2 8.3 1.5 25% Oct-16 0.393 0.608 0.390 0.703 9 5 0.22 6.0 6.3 1.5 26% Nov-16 0.367 0.417 0.393 0.458 4 4 0.01 0.2 0.2 1.5 26% Dec-16 0.359 0.435 0.408 0.503 5 6 0.11 1.4 3.4 1.5 27% Jan-17 0.363 0.380 0.353 0.426 9 7 0.03 0.1 0.7 1.5 24% Mar-17 0.355 0.380	May-16	0.362	0.417		0.332	0.425	2	5	0.15	2.0	4.8	1.5	22%
Aug-16 0.364 0.437 0.351 0.477 7 4 0.21 1.8 6.4 1.5 23% Sep-16 0.390 0.494 0.375 0.532 7 6 0.28 5.2 8.3 1.5 25% Oct-16 0.393 0.608 0.390 0.703 9 5 0.22 6.0 6.3 1.5 26% Nov-16 0.367 0.417 0.393 0.458 4 4 0.01 0.2 0.2 1.5 26% Dec-16 0.359 0.435 0.408 0.503 5 6 0.11 1.4 3.4 1.5 27% Jan-17 0.363 0.408 0.503 5 6 0.14 2.6 4.4 1.5 27% Jan-17 0.363 0.380 0.503 0.426 9 7 0.03 0.1 0.7 1.5 24% Mar-17 0.354 0.416 0.355	Jun-16	0.360	0.382		0.333	0.419	5	5	0.14	2.0	4.2	1.5	22%
Sep-16 0.390 0.494 0.375 0.532 7 6 0.28 5.2 8.3 1.5 25% Oct-16 0.393 0.608 0.390 0.703 9 5 0.22 6.0 6.3 1.5 26% Nov-16 0.367 0.417 0.393 0.458 4 4 0.01 0.2 0.2 1.5 26% Dec-16 0.359 0.435 0.408 0.503 5 6 0.11 1.4 3.4 1.5 27% Jan-17 0.380 0.500 0.410 0.557 5 6 0.14 2.6 4.4 1.5 27% Jan-17 0.363 0.380 0.353 0.426 9 7 0.03 0.1 0.7 1.5 24% Mar-17 0.355 0.380 0.345 0.431 5 4 0.03 0.5 0.8 1.5 23% Apr-17 0.354 0.374	Jul-16	0.342	0.358		0.312	0.387	6	6	0.08	1.1	2.4	1.5	21%
Sep-16 0.390 0.494 0.375 0.532 7 6 0.28 5.2 8.3 1.5 25% Oct-16 0.393 0.608 0.390 0.703 9 5 0.22 6.0 6.3 1.5 26% Nov-16 0.367 0.417 0.393 0.458 4 4 0.01 0.2 0.2 1.5 26% Dec-16 0.359 0.435 0.408 0.503 5 6 0.11 1.4 3.4 1.5 27% Jan-17 0.380 0.500 0.410 0.557 5 6 0.14 2.6 4.4 1.5 27% Jan-17 0.363 0.380 0.353 0.426 9 7 0.03 0.1 0.7 1.5 24% Mar-17 0.355 0.380 0.345 0.431 5 4 0.03 0.5 0.8 1.5 23% Apr-17 0.354 0.374													
Oct-16 0.393 0.608 0.390 0.703 9 5 0.22 6.0 6.3 1.5 26% Nov-16 0.367 0.417 0.393 0.458 4 4 0.01 0.2 0.2 1.5 26% Dec-16 0.359 0.435 0.408 0.503 5 6 0.11 1.4 3.4 1.5 27% Jan-17 0.380 0.500 0.410 0.557 5 6 0.14 2.6 4.4 1.5 27% Jan-17 0.363 0.380 0.353 0.426 9 7 0.03 0.1 0.7 1.5 24% Mar-17 0.355 0.380 0.345 0.431 5 4 0.03 0.5 0.8 1.5 23% Apr-17 0.354 0.374 0.334 0.355 8 4 0.05 0.7 1.4 1.5 24% May-17 0.362 0.395	Aug-16	0.364	0.437		0.351	0.477	7	4	0.21	1.8	6.4	1.5	23%
Nov-16 0.367 0.417 0.393 0.458 4 4 0.01 0.2 0.2 1.5 26% Dec-16 0.359 0.435 0.408 0.503 5 6 0.11 1.4 3.4 1.5 27% Jan-17 0.380 0.500 0.410 0.557 5 6 0.14 2.6 4.4 1.5 27% Feb-17 0.363 0.380 0.353 0.426 9 7 0.03 0.1 0.7 1.5 24% Mar-17 0.354 0.380 0.345 0.431 5 4 0.03 0.5 0.8 1.5 23% Apr-17 0.354 0.374 0.334 0.355 8 4 0.05 0.7 1.4 1.5 22% May-17 0.362 0.395 0.354 0.417 7 3 0.17 1.6 5.2 1.5 24% Jun-17 0.413 0.417	Sep-16	0.390	0.494		0.375	0.532	7	6	0.28	5.2	8.3	1.5	25%
Dec-16 0.359 0.435 0.408 0.503 5 6 0.11 1.4 3.4 1.5 27% Jan-17 0.380 0.500 0.410 0.557 5 6 0.14 2.6 4.4 1.5 27% Feb-17 0.363 0.380 0.353 0.426 9 7 0.03 0.1 0.7 1.5 24% Mar-17 0.355 0.380 0.345 0.431 5 4 0.03 0.5 0.8 1.5 23% Apr-17 0.354 0.374 0.334 0.355 8 4 0.05 0.7 1.4 1.5 22% May-17 0.362 0.395 0.341 7 3 0.17 1.6 5.2 1.5 24% Jun-17 0.413 0.415 0.417 7 3 0.17 1.6 5.2 1.5 28% Jun-17 0.413 0.418 0.530 5 4 <td>Oct-16</td> <td>0.393</td> <td>0.608</td> <td></td> <td>0.390</td> <td>0.703</td> <td>9</td> <td>5</td> <td>0.22</td> <td>6.0</td> <td>6.3</td> <td>1.5</td> <td>26%</td>	Oct-16	0.393	0.608		0.390	0.703	9	5	0.22	6.0	6.3	1.5	26%
Jan-17 0.380 0.500 0.410 0.557 5 6 0.14 2.6 4.4 1.5 27% Feb-17 0.363 0.380 0.353 0.426 9 7 0.03 0.1 0.7 1.5 24% Mar-17 0.355 0.380 0.345 0.41 5 4 0.03 0.5 0.8 1.5 23% Apr-17 0.354 0.374 0.334 0.355 8 4 0.05 0.7 1.4 1.5 22% May-17 0.362 0.395 0.354 0.417 7 3 0.17 1.6 5.2 1.5 24% May-17 0.413 0.415 0.417 0.424 4 5 0.39 5.3 11.8 1.5 28% Jun-17 0.413 0.416 0.424 4 5 0.39 5.3 11.8 1.5 28% Jun-17 0.410 0.51 0.418	Nov-16	0.367	0.417		0.393	0.458	4	4	0.01	0.2	0.2	1.5	26%
Feb-17 0.363 0.380 0.353 0.426 9 7 0.03 0.1 0.7 1.5 24% Mar-17 0.355 0.380 0.345 0.431 5 4 0.03 0.5 0.8 1.5 23% Apr-17 0.354 0.374 0.334 0.355 8 4 0.05 0.7 1.4 1.5 22% May-17 0.362 0.395 0.354 0.417 7 3 0.17 1.6 5.2 1.5 24% May-17 0.362 0.395 0.354 0.417 7 3 0.17 1.6 5.2 1.5 24% Jun-17 0.413 0.415 0.417 0.424 4 5 0.39 5.3 11.8 1.5 28% Jul-17 0.413 0.451 0.418 0.530 5 4 0.33 1.8 10.2 1.5 28% Aug-17 0.412 0.451 0.414 0.480 4 4 0.45 1.5 7.6 1.5 28%	Dec-16	0.359	0.435		0.408	0.503	5	6	0.11	1.4	3.4	1.5	27%
Mar-17 0.355 0.380 0.345 0.431 5 4 0.03 0.5 0.8 1.5 23% Apr-17 0.354 0.374 0.334 0.355 8 4 0.05 0.7 1.4 1.5 22% May-17 0.362 0.395 0.354 0.417 7 3 0.17 1.6 5.2 1.5 24% May-17 0.413 0.415 0.417 7 3 0.17 1.6 5.2 1.5 24% Jun-17 0.413 0.415 0.417 0.424 4 5 0.39 5.3 11.8 1.5 28% Jul-17 0.410 0.511 0.418 0.530 5 4 0.33 1.8 10.2 1.5 28% Aug-17 0.410 0.511 0.414 0.480 4 4 0.45 1.5 7.6 1.5 28% Sep-17 0.410 0.489 0.400 <t< td=""><td>Jan-17</td><td>0.380</td><td>0.500</td><td></td><td>0.410</td><td>0.557</td><td>5</td><td>6</td><td>0.14</td><td>2.6</td><td>4.4</td><td>1.5</td><td>27%</td></t<>	Jan-17	0.380	0.500		0.410	0.557	5	6	0.14	2.6	4.4	1.5	27%
Apr-17 0.354 0.374 0.334 0.355 8 4 0.05 0.7 1.4 1.5 22% May-17 0.362 0.395 0.354 0.417 7 3 0.17 1.6 5.2 1.5 24% Jun-17 0.413 0.415 0.417 0.424 4 5 0.39 5.3 11.8 1.5 28% Jun-17 0.410 0.511 0.417 0.424 4 5 0.39 5.3 11.8 1.5 28% Aug-17 0.410 0.511 0.418 0.530 5 4 0.33 1.8 10.2 1.5 28% Aug-17 0.412 0.451 0.414 0.480 4 4 0.45 1.5 7.6 1.5 28% Sep-17 0.410 0.489 0.400 0.500 5 5 0.41 9.2 12.3 1.5 28% Not-17 0.393 0.434 0.413 0.463 3 7 0.13 0.8 3.9 1.5 26%	Feb-17	0.363	0.380		0.353	0.426	9	7	0.03	0.1	0.7	1.5	24%
May-17 0.362 0.395 0.354 0.417 7 3 0.17 1.6 5.2 1.5 24% Jun-17 0.413 0.415 0.417 0.424 4 5 0.395 5.3 11.8 1.5 28% Jun-17 0.413 0.415 0.417 0.424 4 5 0.39 5.3 11.8 1.5 28% Jul-17 0.410 0.511 0.418 0.530 5 4 0.33 1.8 10.2 1.5 28% Aug-17 0.412 0.451 0.414 0.480 4 4 0.455 1.5 7.6 1.5 28% Sep-17 0.410 0.489 0.400 0.500 5 5 0.41 9.2 12.3 1.5 27% Oct-17 0.393 0.434 0.413 0.463 3 7 0.13 0.8 3.9 1.5 28% Nov-17 0.386 0.433 0.385 0.439 2 6 0.066 1.1 1.7 1.5 26% <td>Mar-17</td> <td>0.355</td> <td>0.380</td> <td></td> <td>0.345</td> <td>0.431</td> <td>5</td> <td>4</td> <td>0.03</td> <td>0.5</td> <td>0.8</td> <td>1.5</td> <td>23%</td>	Mar-17	0.355	0.380		0.345	0.431	5	4	0.03	0.5	0.8	1.5	23%
Jun-17 0.413 0.415 0.417 0.424 4 5 0.399 5.3 11.8 1.5 28% Jun-17 0.410 0.511 0.418 0.530 5 4 0.33 1.8 10.2 1.5 28% Aug-17 0.410 0.511 0.418 0.530 5 4 0.33 1.8 10.2 1.5 28% Aug-17 0.412 0.451 0.414 0.480 4 4 0.455 1.5 7.6 1.5 28% Sep-17 0.410 0.489 0.400 0.500 5 5 0.41 9.2 12.3 1.5 28% Oct-17 0.393 0.434 0.413 0.463 3 7 0.13 0.8 3.9 1.5 28% Nov-17 0.386 0.433 0.385 0.439 2 6 0.066 1.1 1.7 1.5 26% Dec-17 - - -	Apr-17	0.354	0.374		0.334	0.355	8	4	0.05	0.7	1.4	1.5	22%
Jul-17 0.410 0.511 0.418 0.530 5 4 0.33 1.8 10.2 1.5 28% Aug-17 0.412 0.451 0.414 0.480 4 4 0.45 1.5 7.6 1.5 28% Sep-17 0.410 0.489 0.400 0.500 5 5 0.41 9.2 12.3 1.5 28% Oct-17 0.393 0.434 0.413 0.463 3 7 0.13 0.8 3.9 1.5 28% Nov-17 0.386 0.433 0.385 0.439 2 6 0.06 1.1 1.7 1.5 26% Dec-17 -<	May-17	0.362	0.395		0.354	0.417	7	3	0.17	1.6	5.2	1.5	24%
Jul-17 0.410 0.511 0.418 0.530 5 4 0.33 1.8 10.2 1.5 28% Aug-17 0.412 0.451 0.414 0.480 4 4 0.45 1.5 7.6 1.5 28% Sep-17 0.410 0.489 0.400 0.500 5 5 0.41 9.2 12.3 1.5 28% Oct-17 0.393 0.434 0.413 0.463 3 7 0.13 0.8 3.9 1.5 28% Nov-17 0.386 0.433 0.385 0.439 2 6 0.06 1.1 1.7 1.5 26% Dec-17 -<													
Jul-17 0.410 0.511 0.418 0.530 5 4 0.33 1.8 10.2 1.5 28% Aug-17 0.412 0.451 0.414 0.480 4 4 0.45 1.5 7.6 1.5 28% Sep-17 0.410 0.489 0.400 0.500 5 5 0.41 9.2 12.3 1.5 28% Oct-17 0.393 0.434 0.413 0.463 3 7 0.13 0.8 3.9 1.5 28% Nov-17 0.386 0.433 0.385 0.439 2 6 0.06 1.1 1.7 1.5 26% Dec-17 -<	Jun-17	0.413	0.415		0.417	0.424	4	5	0.39	5.3	11.8	1.5	28%
Aug-17 0.412 0.451 0.414 0.480 4 4 0.455 1.5 7.6 1.5 28% Sep-17 0.410 0.489 0.400 0.500 5 5 0.41 9.2 12.3 1.5 27% Oct-17 0.393 0.434 0.413 0.463 3 7 0.13 0.8 3.9 1.5 28% Nov-17 0.386 0.433 0.385 0.439 2 6 0.06 1.1 1.7 1.5 26% Dec-17 .<													
Sep-17 0.410 0.489 0.400 0.500 5 5 0.41 9.2 12.3 1.5 27% Oct-17 0.393 0.434 0.413 0.463 3 7 0.13 0.8 3.9 1.5 28% Nov-17 0.386 0.433 0.385 0.439 2 6 0.06 1.1 1.7 1.5 26% Dec-17 26% 26% Dec-17 26% MAX 0.432 0.372 0.461 5 6 0.16 2.2 4.6 25% MAX 0.413 0.608 0.418 0.703 9 9 0.455 9.2 12.3 28%								4					
Oct-17 0.393 0.434 0.413 0.463 3 7 0.13 0.8 3.9 1.5 28% Nov-17 0.386 0.433 0.385 0.439 2 6 0.06 1.1 1.7 1.5 26% Dec-17	-						5	5					
Nov-17 0.386 0.433 0.385 0.439 2 6 0.06 1.1 1.7 1.5 26% Dec-17													
Dec-17 Image: Constraint of the state of th													
AVG 0.377 0.432 0.372 0.461 5 6 0.16 2.2 4.6 25% MAX 0.413 0.608 0.418 0.703 9 9 0.45 9.2 12.3 28%													
MAX 0.413 0.608 0.418 0.703 9 9 0.45 9.2 12.3 28%		0.377	0.432		0.372	0.461	5	6	0.16	2.2	4.6		25%
	MIN		0.358		0.312	0.355	2	3	0.01	0.1	0.2		21%

Brunswick-Glynn County JWSC Balance Sheet June 30, 2017 and November 30, 2017

	June 30	0, 2017	November	30, 2017
CURRENT ASSETS	1 500 500		708,762	
Cash and Cash Equivalents	1,532,592		1,910,893	
Bond Sinking Fund	325,722		2,848,683	
Accounts Receivable	3,116,187		1,429,505	
Unbilled Revenue	1,429,505 326,388		288,084	
Prepaid Expenses Inventory	1,260,881		1,406,289	
Total Current Assets	1,200,001	7,991,275		8,592,216
RESTRICTED CASH ACCOUNTS				
JWSC Reserves	13,918,813		14,147,780	
Capital Reserves	4,531,724		4,803,848	
SPLOST Account	368,575		1,890,292	
Trustee Held Funds	4,727,020		3,937,477	
Customer Deposit Reserve	2,862,055		3,110,721	
Total Restricted Cash		26,408,187		27,890,118
CAPITAL ASSETS			100 700 015	
Fixed Assets Net of Depreciation	126,489,686		126,763,945	
Construction In Progress	5,131,259	404 000 045	7,302,489	404.000.404
Total Capital Assets		131,620,945		134,066,434
OTHER ASSETS		240.040		222 201
Bond Issue Costs Net of Amortization		240,049		233,381
DEFERRED PENSION OUTFLOWS Total Deferred Pension Outlows		806,242		806,242
Total Deletted Felision Outlows	-	000,242		
TOTAL ASSETS	•	167,066,698		171,588,391
CURRENT LIABILITIES			0.40 500	
Accounts Payable	1,906,014		912,582	
Accrued Salaries and Vacation	615,672		615,672	
Accrued Liabilities	47,099		47,075	
Retainage Payable	309,528		318,776	
Interest Payable	157,220		848,211	
Short-Term Portion of Debt	2,511,510		2,455,737	
Total Current Liabilities		5,547,043		5,198,053
LONG-TERM DEBT Long-Term Portion of Bond Payable	35,415,000		35,415,000	
o	1,961,484		1,666,749	
Long-Term Portion of Capital Leases Total Long-Term Debt	1,901,404	37,376,484	1,000,743	37,081,749
OTHER LIABILITIES				
Customer Deposits Payable	3,090,574		3,160,472	
Bond Premium Net of Amortization	1,164,306		1,107,174	
Total Other Liabilities		4,254,880		4,267,647
NET PENSION LIABILITY				
Net Pension Liability		2,448,763		2,448,763
TOTAL LIABILITIES	:	49,627,170	=	48,996,212
FUND BALANCES				
Contributed Capital	97,751,477		99,222,642	
Capital Tap Fees	9,668,938		9,970,431	
Unrestricted	10,019,113		13,399,107	100
TOTAL FUND BALANCES	:	117,439,528	_	122,592,180

	2016 Actual	2017 Actual	2018 Budget	YTD Budget	YTD Actual	Purch. Orders	Total
Sewer Revenues	11,578,296	13,593,385	13,872,350	5,780,146	6,874,954	0	6,874,954
Water Revenues	4,905,722	6,086,550	6,231,200	2,596,333	2,753,245	0	2,753,245
Debt Charges	3,831,963	3,740,289	3,877,200	1,615,500	1,607,876	0	1,607,876
Administrative Fees	2,764,916	3,619,087	4,458,500	1,857,708	1,874,795	0	1,874,795
Planning & Construction Fees	0	5,000	1,000,000	416,667	0	0	0
Other Income	1,513,696	2,570,710	2,046,600	696,500	1,255,893	0	1,255,893
OPERATING REVENUES	24,594,593	29,615,022	31,485,850	12,962,854	14,366,763	0	14,366,763
Governing Body Expenses	354,941	340,164	477,850	215,146	141,814	0	141,814
Personnel Expenses	8,517,466	9,703,905	10,878,600	4,532,750	4,815,701	0	4,815,701
Operating Expenses	9,110,272	11,049,014	10,927,700	4,601,514	3,774,890	1,605,636	5,380,526
Capital Costs	0	17,227	424,500	290,333	84,339	50,395	134,733
OPERATING EXPENSES	17,982,680	21,110,309	22,708,650	9,639,743	8,816,743	1,656,030	10,472,773
Net Operating Revenue	6,611,913	8,504,713	8,777,200	3,323,111	5,550,020	(1,656,030)	3,893,989
Bad Debt Expense	598,033	1,102,104	600,000	250,000	1,124,751	0	1,124,751
Interest Expense	1,726,666	1,674,910	1,857,200	773,833	724,331	0	724,331
Debt Principal	1,939,992	2,019,996	2,020,000	841,667	841,667	0	841,667
Reserve Transfers	3,300,000	3,799,992	4,300,000	1,791,667	1,791,660	0	1,791,660
Net Revenue (Loss) Before Capital Fees And SPLOST	(952,777)	(92,288)	0	(334,056)	1,067,611	(1,656,030)	(588,420)
Capital Improvement Fees	1,201,888	3,706,279	0	0	301,492	0	301,492
SPLOST Revenues	0	1,126,447	0	0	1,080,077	0	1,080,077
Contributed Capital & Grant Income	0	0	0	0	19,680	0	19,680
Net Revenues	249,110	4,740,438	0	(334,056)	2,468,860	(1,656,030)	812,830

Brunswick-Glynn County JWSC Project Report 2017-18 November 30, 2017

		Funding		Costs To	Current YR	Current	Total	Balance To
Project #	Project Name	Source*	Budget	6/30/17	Expenditures	Encumbrance	To Date	Complete
NW WWT	NM WWTP NPDES PERMIT		On Hold	140,724			140,724	
SR-99 W/	SR-99 WATER MAIN EXTENSIONS	100% NM CIF	1,843,000	1,167,854	114,875	560,173	1,842,902	96
SSI VILLA	SSI VILLAGE AREA WATER IMPR		On Hold	182,752			182,752	
URBANA	JRBANA PROJECT		2,100,000	1,861,444	1,541	212,002	2,074,988	25,012
RIDGEW	RIDGEWOOD WATER PRODUCTION FACILITY		On Hold	65,943			65,943	
SOUTHP	SOUTHPORT WATER PRODUCTION FACILITY		On Hold	57,621			57,621	
MANSFIE	MANSFIELD STREET PROJECT		1,115,000	586,600		513,354	1,099,954	15,046
LOW PRE	LOW PRESSURE SEWER DESIGN - COMMUNITY RD		On Hold	14,657		5,701	20,357	
LOW PRE	LOW PRESSURE SEWER DESIGN - EPWORTH ACRES		On Hold	8,723		55,278	64,000	
ALDER C	ALDER CIRCLE FIRE LINE		242,218	21,000		16,860	37,860	204,358
CANAL C	CANAL CROSSING WATER & SEWER IMPROVEMENTS	50% NM CIF	840,000	578,518		259,318	837,836	2,164
HOLLY STREET	rreet		497,691	41,963		4,737	46,700	450,991
PS 4048	PS 4048 FORCE MAIN IMPROVEMENTS		2,300,000	307,030	789,176	1,156,769	2,252,975	47,025
NORTH N	NORTH MAINLAND SEWER BASIN REROUTE	SPLOST/Debt	11,700,000	36,091	988,197	2,483,706	3,507,994	8,192,006
PS 4003	PS 4003 DECOMMISSION AND GRAVITY SEWER	SPLOST/Debt	6,800,000	0	3,615		3,615	6,796,385
CANAL R	CANAL ROAD TO GLYNCO 12" WATERMAIN LOOP	100% NM CIF	1,000,000	0	48,000		48,000	952,000
HAUTAL ⁴	HAUTALA TO OLD JESUP WATERMAIN LOOP		110,000	0			0	110,000
DUNBAR	DUNBAR CREEK WWTP PROJECT EVALUATION		20,000	14,104	5,892	4	20,000	
ACADEM	ACADEMY CREEK WWTP PROJECT EVALUATION		75,000	26,240	5,760	35,000	67,000	8,000
ACADEM	ACADEMY CREEK WWTP ODOR CONTROL		50,000	19,996	3,176	16,824	39,996	10,004
MAINLAN	MAINLAND SEWER TRANSMISSION SYSTEM CAPACITY	100% NM CIF	20,000	0			0	20,000
LIFT STA	LIFT STATION 2002 UPGRADES			0			0	0
ACADEM	ACADEMY CREEK IMPROVEMENTS		200,000	0	3,043	30,865	33,908	166,092
VT SCADA	4	SP&M Operations **			48,459	92,912	141,371	
SANITAR	SANITARY SEWER FLOW MONITORING		311,800			311,800	311,800	0
MAGNOL	MAGNOLIA WATER IMPROVEMENT		1,150,000					1,150,000
L STREE	STREET WATER IMPROVMENTS		650,000					650,000
			31,024,709	5,131,259	2,011,735	5,755,302	12,898,296	18,799,181

* Funding from R&R Reserve if not otherwise identified. ** VT SCADA is named as a project for tracking purposes only

2,400,000 520,563 (3, 463, 909)0 Proceeds to 6/30 Balance 6/30/18 3,007,336 9,564,083 3,636,184 Anticipated 2,333,333 1,899,300 0 175,000 0 0 4,407,633 12,793,476 Anticipated 2,225,000 520,563 (596,449) 0 (16,257,385) 3,007,336 5,156,449 Available Funds (2,837,611) (973,180) (3,810,791) (14,988,391) Balance To Complete (2,488,852) (3,178,684) (2,483,706) (689,832) Encumbrances 2,225,000 520,563 4,730,013 0 4,670,348 12,145,924 1,214,712 Current Funds (808,589) (162,875) (991,812) (971,463) Expenditures 1,608 (804,735) 1,666,667 804,735 301,492 125,000 1,837,949 2,094,767 Deposits 2,100,000 520,563 3,067,200 368,575 4,531,730 803,127 11,022,620 Balance 6/30/17 CAPITAL IMPROVEMENT FUND RESERVES REPAIR AND REPLACEMENT RESERVE Funds Transfer BOND CONSTRUCTION FUND Funds Transfer CAPITAL RESERVE EXPANSION RESERVE **RESERVE BALANCES** Bond Refinancing SPLOST

Brunswick-Glynn County JWSC Overtime Report November 30, 2017

	2012 Actual 2013 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Budget	YTD Budget	YTD Actual
Office of the Director	7,088	6,215	9,499	10,789	25,222	19,425	6,000	2,000	11,510
Administrative Services	0	0	0	0	0	0	5,000	1,667	11,755
Finance	36,092	37,909	40,699	44,471	55,697	50,655	35,000	11,667	25,324
Purchasing	0	0	0	305	1,399	593	2,000	667	52
Planning & Construction	2,644	893	1,114	1,256	8,682	4,378	8,000	2,667	1,720
Facilities Maintenance	0	0	0	0	0	16,258	10,000	3,333	3,283
Systems Pumping & Maintenance	233,470	234,976	231,980	154,637	183,333	249,393	200,000	66,667	65,518
Wastewater Treatment	206,912	202,199	234,093	250,376	229,652	238,333	240,000	80,000	84,328
Water Production	0	31,165	26,768	30,493	36,056	37,054	25,000	8,333	10,474
Water Distribution	99,798	78,154	76,242	94,967	118,068	139,105	100,000	33,333	33,488
	586,004	591,512	620,396	587,294	658,108	755,195	631,000	210,333	247,452 *

* Net of overtime during hurricane