



ERIE COUNTY WATER AUTHORITY

INTEROFFICE MEMORANDUM

May 5, 2021

To: Jerome D. Schad, Chairman
Peggy A. LaGree, Vice Chair
Michele Iannello - Ward, Treasurer

Cc: Terrence D. McCracken, Secretary
Margaret A. Murphy, General Counsel
Karen A. Prendergast, Chief Financial Officer
Russell J. Stoll, Chief Operating Officer

From: Leonard F. Kowalski, Executive Engineer

Subject: May 2021 Capital Budget Update

Each Unit in the Production and Engineering Departments were reviewed for capital spending to date and projected spending for the remainder of the year. Table 1 summarizes this data.

Table 1				
Adjusted Budget	Expended and Pending to Date	Percent Expended to date	Projected Expended by 12/31/2020	Projected Percent Expended by 12/31/2020
\$48,974,228.00	\$3,654,879.00	7%	\$40,457,890.00	83%

This is offering a snapshot in time and the projections are based on the information we have on hand and engineering judgment.

The same units in 2020 had a total budget of \$43,763,057, actual expended was \$33,790,418 (77%). 2019 had a total budget of \$33,560,397, actual expended was \$14,205,829 (42%). 2018 had a total budget of \$26,338,954, actual expended was \$16,919,212 (64%). The increased staffing levels within the Engineering and Production Departments made over the last couple of years have provided the greatest impact on our ability to develop and manage projects. Every employee in these two departments is aware of the importance of achieving the goals that were developed during the budget process.

Unit 2590 Eng/Const Distribution Mains accounts for nearly 60% of the funds budgeted for in 2021. As discussed during the budget work sessions, there was a concern if the local contracting community could handle the amount of work that the Authority would be bidding this year. There was also a concern that the bid prices would be higher than anticipated based on the volume of work that was being bid and so far, neither issue has been a concern. One project carried over from 2020 and six contracts were awarded in 2021 with one contract remaining to bid. All the

bids were extremely competitive.

One thing to keep in mind is that the contracts were all bid and awarded in a timely manner, which was a team effort between the Engineering Department, Engineering Consultants and Legal Department. This allowed the contractors to take advantage of the mild weather during the first quarter in 2021. Our construction seasons are heavily dependent on the weather and the Authority was well positioned to take advantage of the mild winter. As far as spending goes, these are unit price contracts and distribution main replacement jobs typically do not exceed the contract award amount. As an example, NC-039 finished at 93% of the contract award amount, so overall spending can be less than anticipated if the contracts finish below the contract award amount.

Easement and property issues have plagued Unit 2595 Eng/Const Transmission Mains for several years now. The addition of Harris Beach to help identify the problems and map out how to resolve the issues has been very helpful, but the issues still take time to resolve. Spending within this Unit is heavily dependent on several easement and property line issues that need to be resolved across several projects. Our projected expenditures for this Unit are conservative based on the current status of projects, but if a few issues get resolved on one or two projects, spending could increase to where we originally projected during budget development. There was also a significant amount of money budgeted for W-027 in 2021, unexpectedly it was completed in 2020 after the 2021 budget was developed, which is a good thing. The Engineering Department recognized this issue and have been utilizing the excess funds from W-027 to start other design projects earlier than planned, including two significant projects for the Sturgeon Point WTP.

One notable thing to mention from Unit 2520 Eng/Construction Control is the award of GHD-007, which is the rehabilitation project at Guenther Pump Station. The contract award amount is approximately \$9.6M, we anticipated spending around \$3.7M in 2021. This is a multi-year project and there is an opportunity to spend additional funds on this project in 2021 if the contractor can procure materials in a timely manner. This project is just getting started, once we receive a schedule from the contractor, we will have a better handle on cash flow for the remainder of the year.

Table 2 lists each unit with its associated budget amount, the amount expended to date and the amount projected for the remainder of the year. The 10XX units are capital projects that are handled internally by ECWA forces and the 25XX units are projects that involve an outside consultant and private contractor.

Unit	Adjusted Budget	Expended and Pending to Date	Percent Expended to date	Projected Expended by 12/31/2020	Projected Percent Expended by 12/31/2020
1010 Sturgeon Point	\$385,000.00	\$147,447.00	38%	\$293,152.00	76%
1015 Van de Water	\$40,000.00	\$13,822.00	35%	\$13,822.00	35%
1020 Control Operations	\$816,000.00	\$125,164.00	15%	\$818,818.00	100%
1025 Instrumentation	\$605,228.00	\$381,785.00	63%	\$497,043.00	82%
2510 Eng/Construction Sturgeon Point	\$1,888,000.00	\$170,612.00	9%	\$1,260,000.00	67%
2515 Eng/Construction Van de Water	\$3,870,000.00	\$203,169.00	5%	\$3,154,000.00	81%
2520 Eng/Construction Control	\$5,320,000.00	\$104,458.00	2%	\$5,116,655.00	96%
2590 Eng/Const Distribution Mains	\$28,684,000.00	\$2,013,148.00	7%	\$27,322,400.00	95%
2595 Eng/Const Transmission Mains	\$7,366,000.00	\$495,274.00	7%	\$1,982,000.00	27%

Listed below is a brief description of the status for each unit.

Unit 1010 – spending is on track, no adjustments required.

Unit 1015 – spending is on track, no adjustments required.

Unit 1020 – spending is on track, no adjustments required.

Unit 1025 –The recent change in the threshold for a formal contract from \$10,000 to \$5,000 could delay procuring the equipment for the Veterans Park VFD upgrade project. Besides that, project spending in on track.

Unit 2510 – It was originally anticipated that an outside consultant would be required to complete the PLC Upgrades/Replacements, but with the addition of recent staff, the work can be handled inhouse. A large portion of this funding will be utilized to move forward on software upgrades for the SCADA systems that serve the Treatment Plants and Control which was originally scheduled for 2022. It was originally anticipated that the Sedimentation Basin Effluent Valves would possibly go into construction in 2021, that is not likely based on the timing of the consultant contract. The project will most likely be bid in late 2021 or early 2022. Some of this funding can be shifted to the Carbon System Improvements which are on track to go to construction earlier than expected.

Unit 2515 – Two projects, the HVAC & Electrical Study and the GHD-008 VDW WTP residuals are the largest budgeted items in the Unit. The design of the HVAC upgrades at VanDeWater are currently underway and it is anticipated to be bid in the 4th quarter of 2021, with construction possibly starting in 2021. GHD-008 is currently out to bid and we will have a better handle on cash flow for the remainder of the year once the contract is awarded and a schedule is provided by the contractor.

Unit 2520 – the money budgeted for GHD-007, which is the Guenther Pump Station rehabilitation project is the bulk of the funds within this Unit. We are projecting \$3.7M in spending on this project in 2021 and it could be higher if the contractor is able to procure materials quicker than originally anticipated. Once a schedule is provided by the contractor, this estimate will be revisited.

Unit 2590 – spending is on track.

Unit 2595 – this Unit was discussed above.

Covid-19 has not drastically curtailed any of ECWA’s capital spending at this point. Steel prices are starting to trend higher, and some materials are becoming difficult to get. Supply chain issues have not been a major issue for the Authority to this point, but there are rumblings from vendors about the availability of certain items.

Attachment A provides additional detail for each budget item.

Attachment A

Engineering Department - May 2021 Capital Budget Update

Budget Item Number	Project Description	Adjusted Budget	Expended and Pending to Date	Percent Expended to date	Projected Expended by 12/31/2021	Projected Percent Expended by 12/31/2021	Comment
1010 Sturgeon Point							
101471	DECANT SUBMERSIBLE MIXERS	\$ 100,000	\$ -	0%	\$ 51,324	51%	Projected expended by 12/31/2021 reflects full bid price; balance available to transfer.
101472	DECANT PUMP REPLACEMENTS	\$ 130,000	\$ -	0%	\$ 94,381	73%	Projected expended by 12/31/2021 reflects full bid price; balance available to transfer.
101543	HIGH SERVICE PUMP NO. 3	\$ 140,000	\$ 133,625	95%	\$ 133,625	95%	Pump delivery anticipated before 12/31/2021; need Purchasing approval of pump as sole source.
101603	LABORATORY DI WATER SYSTEM	\$ 15,000	\$ 13,822	92%	\$ 13,822	92%	Delivery April; invoice paid by end of year.
Total 1010 Sturgeon Point		\$ 385,000	\$ 147,447	38%	\$ 293,152	76%	

1015 Van de Water							
101489	CT HYDROPNUEMATIC TANK-PUMPS-PIPING	\$ 25,000	\$ -	0%	\$ -	0%	Dependent on CT study (to be completed this summer); funds likely available for transfer.
101604	LABORATORY DI WATER SYSTEM	\$ 15,000	\$ 13,822	92%	\$ 13,822	92%	Delivery April; invoice paid by end of year.
Total 1015 Van de Water		\$ 40,000	\$ 13,822	35%	\$ 13,822	35%	

1020 Control Operations							
101480	PUMP STATION PUMP REPLACEMENT	\$ 266,000	\$ 118,681	45%	\$ 190,888	72%	Projected to award Contract at 5/13 Board Meeting.
101484	REPLACE CHECK AND BUTTERFLY VALVES	\$ 105,000	\$ -	0%	\$ 96,780	92%	Contract awarded and awaiting valve delivery.
101530	REPLACE OVERHEAD CRANE AT WINDOM	\$ 5,000	\$ -	0%	\$ -	0%	Contract has been pulled; will not use monies.
101578	WINDOM PS AUTOMATED GATE	\$ 110,000	\$ 6,483	6%	\$ 105,000	95%	CJ to write contract, targeting July Board meeting for advertisement.
101579	WATER STORAGE TANK MIXING SYSTEMS	\$ 50,000	\$ -	0%	\$ 30,000	60%	To be used in Summer 2021.
101580	WATER STORAGE TANK TTHM REMOVAL SYS	\$ 40,000	\$ -	0%	\$ 20,000	50%	To be used in Summer 2021.
101582	PUMP STATION ROOF REPLACEMENTS	\$ 200,000	\$ -	0%	\$ 356,150	178%	Projected to award Contract at 5/13 Board Meeting. Budget transfer at 5/13 Board meeting.
101583	PUMP STATION CHLORINE BOOSTING	\$ 40,000	\$ -	0%	\$ 20,000	50%	To be used in Summer 2021.
Total 1020 Control		\$ 816,000	\$ 125,164	15%	\$ 818,818	100%	

1025 Instrumentation							
101460	WILLIAM ST STATION VFD UPGRADE	\$ 35,310	\$ 17,989	51%	\$ 35,310	100%	Complete. In process of paying final invoices. Excess money to be transferred to 101461.
101461	WINDOM STATION VFD UPGRADE	\$ 67,320	\$ 37,664	56%	\$ 67,320	100%	1 of 4 retrofits complete. All 4 drives should be complete in Fall 2021.
101465	VDW HIGH SERVICE VFD UPGRADE	\$ 49,500	\$ 29,719	60%	\$ 45,000	91%	Dependent on utilizing Toshiba to perform this work. If we can use Toshiba, the work will be complete in 2021. Being discussed with procurement.
101544	VETERAN'S PARK VFD UPGRADE	\$ 100,650	\$ -	0%	\$ 53,000	53%	This project was to be completed in 2022 per original budget input. Purchase material and start retrofit in 2021. Complete in 2022... Ability to purchase material could be adversely impacted by new purchasing rules, as each 200HP Altivar 630 VFD is about \$10,000.
101547	STP GENERATOR SWITCHGEAR CONTROLS	\$ 352,448	\$ 296,413	84%	\$ 296,413	84%	Excess \$ to be transferred to 101461 as required.
Total 1025 Instrumentation		\$ 605,228	\$ 381,785	63%	\$ 497,043	82%	

2510 Eng/Construction Sturgeon Point							
101429	PLC UPGRADES/REPLACEMENTS	\$ 108,000	\$ -	0%	\$ 20,000	19%	Project has been ongoing for several years and is near completion, additional equipment may be required to complete the project. Current ECWA personnel can complete the work internally.
101503	CARBON SYSTEM IMPROVEMENTS	\$ 160,000	\$ 34,587	22%	\$ 150,000	94%	On target to spend consultant design fee in 2021. On target for bidding in June/July.
101504	STUDY - LM STORAGE FACILITY	\$ 80,000	\$ -	0%	\$ 80,000	100%	RFP - May 2021; May require budget transfer to accommodate additional scope. Schedule not developed yet.
101506	FILTER GALLERY PIPING STUDY	\$ 610,000	\$ 136,025	22%	\$ 610,000	100%	On target to spend consultant design fee in 2021. Additional scope of work being developed to take full advantage of WIFIA funding. Budget transfer will be required to fund additional work.
101586	SEDIMENTATION BASIN EFFLUENT VALVE	\$ 530,000	\$ -	0%	\$ 100,000	19%	Based on GHD fee and cashflow schedule - funds likely available for transfer.
101608	WASHWATER TANK REPLACEMENT	\$ 200,000	\$ -	0%	\$ 150,000	75%	Est based on fees/schedules in proposals received 3/26/2021.
101609	RAW WATER INTAKE IMPROVEMENTS	\$ 200,000	\$ -	0%	\$ 150,000	75%	RFP - May 2021; to include schedule to complete the design in 6 months.
Total 2510 Eng/Constr Sturgeon Point		\$ 1,888,000	\$ 170,612	9%	\$ 1,260,000	67%	

2515 Eng/Construction Van de Water							
101507	CARBON SYSTEM IMPROVEMENTS	\$ 160,000	\$ 55,506	35%	\$ 150,000	94%	On target to spend consultant design fee in 2021. On target for bidding in June/July.
101510	HVAC & ELECTRICAL STUDY	\$ 670,000	\$ 23,118	3%	\$ 400,000	60%	Design 60% complete. Bid/award schedule to be developed. Anticipate NTP in fall 2021
101526	VAN DE WATER CAPACITY EXPANSION	\$ 420,000	\$ 122,660	29%	\$ 420,000	100%	On target to use 2021 budget.
101537	GHD-008 VDW WTP RESIDUALS	\$ 2,290,000	\$ 1,885	0%	\$ 2,000,000	87%	Bids to be received 5/11/2021; prediction based on \$6M engineers estimate and GHD schedule
101587	VAN DE WATER PUMPING IMPROVEMENTS	\$ 180,000	\$ -	0%	\$ 69,000	38%	On target to spend consultant design fee in 2021. (proposal amount \$69,000)
101588	VDW RAW WATER SECURITY LIGHTING	\$ 50,000	\$ -	0%	\$ 40,000	80%	Work will be completed utilizing ECWA contracts.
101610	RAW WATER INTAKE IMPROVEMENTS	\$ 100,000	\$ -	0%	\$ 75,000	75%	RFP - May 2021; to include schedule to complete the design in 6 months.
Total 2510 Eng/Constr Van de Water		\$ 3,870,000	\$ 203,169	5%	\$ 3,154,000	81%	

2520 Eng/Construction Control							
101357	W31 - BALL NORTH STORAGE TANK	\$ 350,000	\$ 12,316	4%	\$ 350,000	100%	Anticipate project completion July 2021
101358	GHD-007 GUENTHER REHAB	\$ 3,710,000	\$ 7,336	0%	\$ 3,724,500	100%	Waiting for cash flow from contractor, strong possibility to spend additional funds this year. Spending will be highly dependent on material delivery.
101511	CASTLE HILL PUMP STATION DESIGN	\$ 250,000	\$ 29,161	12%	\$ 228,120	91%	On target to spend consultant design fee in 2021.
101512	BALL PS - PUMPING IMPROVEMENTS	\$ 620,000	\$ 50,000	8%	\$ 665,000	107%	On target to spend consultant design fee in 2021.
101513	SECURITY IMPROVEMENTS	\$ 240,000	\$ -	0%	\$ -	0%	RFP needs to be developed, target July Board meeting.
101589	NEWSTEAD PS IMPROVEMENTS	\$ 150,000	\$ 5,645	4%	\$ 149,035	99%	On target to spend consultant design fee in 2021.
Total 2520 Eng/Constr Control		\$ 5,320,000	\$ 104,458	2%	\$ 5,116,655	96%	
Total - Production		\$ 12,924,228	\$ 1,146,457	9%	\$ 11,153,490	86%	

2590 Eng/Const Distribution Mains							
101188	BETTERMENTS	\$ 1,660,000	\$ -	0%	\$ 1,500,000	90%	Center Street - Lackawanna (Estimate)
101409	CPL-005 WATERLINE REPLACEMENT	\$ 330,000	\$ 194,984	59%	\$ 700,000	212%	Includes budget transfer that occurred 4/15/2021
101410	NC-039 WATERLINE REPLACEMENT	\$ 8,500	\$ 5,026	59%	\$ 10,000	118%	Finalizing paperwork to closeout project.
101411	CH-012 WATERLINE REPLACEMENT	\$ 650,000	\$ 180,300	28%	\$ 650,000	100%	On target to spend consultant design fee in 2021.
101412	WSA-014 WATERLINE REPLACEMENT	\$ 23,000	\$ 24,789	108%	\$ 23,000	100%	Finalizing paperwork to closeout project.
101432	GP-008 WATERLINE REPLACEMENT	\$ 1,420,000	\$ 204,390	14%	\$ 1,420,000	100%	Project started in 2020, will be completed in 2021.
101515	BL-001 WATERLINE REPLACEMENT	\$ 2,340,000	\$ 5,111	0%	\$ 2,250,000	96%	Construction Bid \$1,859,680 plus CA/RI
101516	EA-012 WATERLINE REPLACEMENT	\$ 3,970,000	\$ 34,085	1%	\$ 3,943,000	99%	Construction Bid \$3,304,930 plus CA/RI
101517	LA-001 WATERLINE REPLACEMENT	\$ 2,800,000	\$ 932	0%	\$ 2,737,000	98%	Construction Bid \$2,286,961 plus CA/RI
101518	WSA-015 WATERLINE REPLACEMENT	\$ 4,541,500	\$ 5,499	0%	\$ 3,500,000	77%	Start of construction will be 3rd quarter of 2021, cash flow prediction was provided by consultant.
101519	DA-010 WATERLINE REPLACEMENT	\$ 2,235,500	\$ 1,326,515	59%	\$ 2,449,000	110%	Construction Bid \$2,008,652 plus CA/RI
101520	CPL-007 WATERLINE REPLACEMENT	\$ 3,890,000	\$ 4,274	0%	\$ 3,789,000	97%	Construction Bid \$3,163,630 plus CA/RI
101531	GP-09 WATERLINE REPLACEMENT	\$ 3,705,500	\$ 13,931	0%	\$ 3,241,400	87%	Construction Bid \$2,674,460 plus CA/RI
101590	LA-005 WATERLINE REPLACEMENT	\$ 224,000	\$ -	0%	\$ 224,000	100%	On target to spend consultant design fee in 2021.
101591	CH-014 WATERLINE REPLACEMENT	\$ 190,000	\$ -	0%	\$ 190,000	100%	On target to spend consultant design fee in 2021.
101592	BL-002 WATERLINE REPLACEMENT	\$ 162,000	\$ -	0%	\$ 162,000	100%	On target to spend consultant design fee in 2021.
101593	WSA-017 WATERLINE REPLACEMENT	\$ 130,000	\$ 13,312	10%	\$ 130,000	100%	On target to spend consultant design fee in 2021.
101594	DA-011 WATERLINE REPLACEMENT	\$ 144,000	\$ -	0%	\$ 144,000	100%	On target to spend consultant design fee in 2021.
101595	W-033 WATERLINE REPLACEMENT	\$ 130,000	\$ -	0%	\$ 130,000	100%	On target to spend consultant design fee in 2021.
101596	DIST MAIN REPLACEMENT G	\$ 130,000	\$ -	0%	\$ 130,000	100%	RFP will be advertised after 5/13/2021 Board Meeting.
2590 Eng/Const Distribution Mains		\$ 28,684,000	\$ 2,013,148	7%	\$ 27,322,400	95%	

Attachment A

Engineering Department - May 2021 Capital Budget Update

Budget Item Number	Project Description	Adjusted Budget	Expended and Pending to Date	Percent Expended to date	Projected Expended by 12/31/2021	Projected Percent Expended by 12/31/2021	Comment
2595 Eng/Const Transmission Mains							
101267	W-027 TRANSMISSION MAIN REPLACEMENT	\$ 860,000	\$ -	0%	\$ -	0%	Based on contractor production during the 3rd quarter of 2020, it was anticipated that this project would spill into 2021. It was actually completed in 2020 but after the budget process had already taken place. Funds have been removed from this budget line to fund other projects.
101351	CH-010 TRANSMISSION MAIN REPLACEMENT	\$ 23,000	\$ 6,061	26%	\$ 23,000	100%	Finalizing paperwork to closeout project.
101352	NC-40 TRANSMISSION MAIN REPLACEMENT	\$ 70,000	\$ 9,939	14%	\$ 70,000	100%	Design expected to continue throughout 2021.
101362	W-30 TRANSMISSION MAIN REPLACEMENT	\$ 1,540,000	\$ 95	0%	\$ 30,000	2%	Easement issues and property boundaries are still a concern, strong possibility this project will not be bid in 2021.
101413	RTE 5 TRANSMISSION MAIN REPLACEMENT	\$ 400,000	\$ 373,325	93%		0%	Construction to be completed in 2021.
101414	MP-081 ROUTING STUDY	\$ 190,000	\$ 3,216	2%	\$ 10,000	5%	Waiting on comments from National Grid, once we receive comments, we can move forward with an RFP for design services.
101521	MP-084 TRANS MAIN REPLACEMENT	\$ 190,000	\$ 45,536	24%	\$ 190,000	100%	On target to spend consultant design fee in 2021. Can possibly be bid in 2021, small amount of construction could take place in 2021.
101522	WSA-016 TRANS MAIN REPLACEMENT	\$ 1,180,000	\$ 23,524		\$ 30,000	3%	Bidding to be put on hold pending outcome of transmission main assessment.
101532	CH-013 TRANS LINE REPLACEMENT	\$ 170,000	\$ 3,271	2%	\$ 170,000	100%	On target to spend consultant design fee in 2021. Can possibly be bid in 2021, small amount of construction could take place in 2021.
101533	NC-041 TRANS MAIN REPLACEMENT	\$ 1,380,000	\$ 16,840	1%	\$ 600,000	43%	Easement issues are being resolved, strong possibility of bidding project in 2021.
101598	NC-42 TRANSMISSION MAIN REPLACEMENT	\$ 217,000	\$ 11,213	5%	\$ 217,000	100%	On target to spend consultant design fee in 2021.
101599	GP-10 TRANSMISSION MAIN REPLACEMENT	\$ 272,000	\$ 2,254	1%	\$ 250,000	92%	On target to spend consultant design fee in 2021.
101600	EA-13 TRANSMISSION MAIN REPLACEMENT	\$ 374,000	\$ -	0%	\$ 392,000	105%	On target to spend consultant design fee in 2021.
101611	42" & 48" TRANSMISSION ASSESSMENT	\$ 250,000	\$ -	0%	\$ -	0%	RFP is currently being advertised.
101612	CROSSING ASSESSMENTS/ACTION PLAN	\$ 250,000	\$ -	0%	\$ -	0%	RFP is currently being advertised.
	2595 Eng/Const Distribution Mains	\$ 7,366,000	\$ 495,274	7%	\$ 1,982,000	27%	

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Total Adjusted Budget	Expended and Pending to Date	Percent Expended to date	Projected Expended by 12/31/2021	Projected Percent Expended by 12/31/2021
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