ERIE COUNTY WATER AUTHORITY



INTEROFFICE MEMORANDUM May 13, 2020

To: Commissioners Schad, Carney and LaGree

From: Leonard F. Kowalski, Executive Engineer

Subject: May 2020 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 the status of capital spending.

	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									
\$43,763,057.00	\$4,017,716.00	9%	\$34,019,571.00	78%									

The same units in 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 lack of spending in 2018 and 2019 can largely be contributed to a lack of personnel in the Production and Engineering Departments to develop and manage projects. The personnel issue has been addressed over the last two years and continues to be addressed, which is why you see an uptick in projected spending for 2020.

Another contributor was the need to fully fund in our budget all projects that ECWA was seeking EFC grant funding, even though many of these projects are constructed over multiple budget years. Part of the grant application requires the applicant to show they can fund their portion of the project for the fiscal year they are applying, both design and construction. ECWA had transmission main projects fully funded in order to apply for a grant, however, design had not been completed and thus funds targeted for construction were not spent in that budget year. That is the nature of how the EFC grant application process works.

The transmission main replacement program was started in 2017 and these projects are time consuming to design and to get approvals from outside agencies (National Grid, NYSDOT, private owners, etc..). Utility corridors are heavily congested and there are a lot more conflicts and regulations to deal with compared to when the transmission mains were originally installed. For example, W-27 is currently under construction and is projected to be completed in the first quarter of 2021. The Professional Service Agreement for W-27 was approved on May 2, 2017, it will be almost 3-1/2 years from the start of the project until construction is complete, largely in part to the exhaustive utility review and approval process Now that the transmission main replacement

program has been in place for the last three years, construction of these mains will start to occur on a more consistent basis.

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.

	Table 2													
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	\$656,000.00	\$287,170.00	44%	\$552,170.00	84%									
1015 Van de Water	\$151,000.00	\$22,766.00	15%	\$72,766.00	48%									
1020 Control Operations	\$975,657.00	\$72,554.00	7%	\$578,510.00	59%									
1025 Instrumentation	\$550,400.00	\$44,402.00	8%	\$301,102.00	55%									
2510 Eng/Construction Sturgeon Point	\$930,000.00	\$10,280.00	1%	\$341,500.00	37%									
2515 Eng/Construction Van de Water	\$1,100,000.00	\$67,227.00	6%	\$568,873.00	52%									
2520 Eng/Construction Control	\$9,750,000.00	\$340,954.00	3%	\$8,369,454.00	86%									
2590 Eng/Const Distribution Mains	\$17,130,000.00	\$300,895.00	2%	\$15,056,554.00	88%									
2595 Eng/Const Transmission Mains	\$12,520,000.00	\$2,871,468.00	23%	\$8,178,642.00	65%									

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

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

Unit 1015 – funding was reallocated from smaller projects to fund the caustic feed system improvements at Sturgeon Point. Funding will be reallocated to complete these smaller projects.

Unit 1020 – spending will be dependent on equipment delivery in 2020. Contract documents for procurement of equipment are currently being developed.

Unit 1025 – spending will be dependent on equipment delivery in 2020.

Unit 2510 – material for PLC upgrades were delivered in 2019, after the 2020 budget was already developed. \$400,000 from budget item 101429 will not be spent in 2020. The award of the Sturgeon Point Filter Piping and Valving consultant project will consume a large portion of the remaining budget.

Unit 2515 – the consultant spending for the Van deWater expansion study and the Carbon project are projected to be less than what was budgeted. Both contracts are slated to be on the 5/21/2020 meeting for approval.

Unit 2520 – spending for major projects is on track. An RFP for security upgrades needs to be developed and two projects that are reliant on the hydraulic model still need to be developed. A decision on how to proceed with the current hydraulic model will be made in June after the revised

model from the OBG-13 project is reviewed. There is a need to hire an engineer that can focus 50% of their time on the hydraulic model.

Unit 2590 – spending is on track. Construction projects are just getting underway, there are no known delays currently. Timing of the betterment invoicing from LNTN could have a major impact on this unit.

Unit 2595 – spending will be less than budgeted. NC-40 was fully funded for construction and W-30 was partially funded for construction and neither will start in 2020. Both projects are anticipated to be bid in the first quarter of 2021.

Covid-19 has slowed down some of our processes, but all the departments have adjusted to working remotely and have stayed very productive working under the current circumstances. Covid-19 has not drastically curtailed any of ECWA's capital spending at this point, but there could come a time when material deliveries could be delayed which could impact our projected spending for the remainder of the year.

Attachment A provides additional detail for each budget item.

cc: R.Stoll
K.Prendergast
M.Wymer
M.Quinn
D.Patton

C.Johnson

					A	ttachm	ent A		
				Engineering	g Department	- May	2020 Capita	l Budget Update	
Budget Item Number	Project Description	Adj	usted Budget	pended and ding to Date	Percent Expended to date		ted Expended 2/31/2020	Projected Percent Expended by 12/31/2020	Comment
1010 Sturgeo	n Point					ı			
101434	CAUSTIC FEED SYSTEM PUMP/TANK	\$	131,000	\$ 122,550	94%	\$	167,550	128%	Completed. Waiting on approval of \$45k of change order work for additional improvements needed.
101469	REPLACEMENT HIGH SERVICE PUMP	\$	140,000	\$ 125,295	89%	\$	125,295	89%	Pump Ordered, all indication has pump delivery before end of 2020.
101470	CHEMICAL FEED PUMPS REPLACEMENT	\$	55,000	\$ 39,325	72%	\$	39,325	72%	Purchased and delivered.
101471	DECANT SUBMERSIBLE MIXERS	\$	105,000	\$ -	0%	\$	80,000	76%	Developing docs. Anticipate approval to Bid on 06/04/2020.
101472	DECANT PUMP REPLACEMENTS	\$	155,000	\$ -	0%	\$	120,000	77%	Developing docs. Anticipate approval to Bid on 06/04/2020
101473	LAB AUTOCLAVE REPLACEMENT	\$	15,000	\$ -	0%	\$	10,000	67%	Developing docs. Anticipate approval to Bid on 06/04/2020.
101492	ONLINE HARNESS-AKALINITY METER	\$	-	\$ -		\$	-		Budget transferred to other projects
101494	ONLINE CHLORINE ANALYZER REPLACEMENT	\$	40,000	\$ -	0%			0%	Transferring for Caustic system added improvements. Based on final \$\$\$ may be postponed next year. If \$ remains delivery would be before end of 2020.
101529	SAFETY EQUIPMENT	\$	15,000	\$ -	0%	\$	10,000	67%	Project is under development.
	Total 1010 Sturgeon Point	\$	656,000	\$ 287,170	44%	\$	552,170	84%	
1015 V	W-4								
1015 Van de 101478	COAGULANT FEED PUMPS REPLACEMENT	\$	55,000	\$ 22,766	41%	\$	22,766	41%	Purchased and delivered.
101488	ONLINE CHLORINE ANALYZERS	\$	26,000	-	0%	•		0%	Transferring for Caustic system added improvements. Based on final \$\$\$ may be postponed next year. If \$ remains delivery would be before end of 2020.
101489	CT HYDROPNUEMATIC TANK-PUMPS-PIPING	\$	25,000	\$ -	0%	\$	15,000	60%	Dependent on CT Study - estimate material purchase in 2020.
101490	ONLINE HARDNESS-ALKALINITY METER	\$	-	\$ -		************			Budget transferred to other projects.
101491	LAB AUTOCLAVE REPLACEMENT	\$	15,000	\$ -	0%	\$	10,000	67%	Developing docs. Anticipate approval to Bid on 06/04/2020.
101493	SLUDGE SLURRY TRANSFER PUMP REPLACEMENT	\$	30,000	\$ -	0%	\$	25,000	83%	Chris developing docs to purchase, all indication has pump delivered before 2020.
	Total 1015 Van de Water	\$	151,000	\$ 22,766	15%	\$	72,766	48%	
1020 Control	Operations								
101371	REPLACE P1 & P2 AT EAST AURORA PS	\$	54,667	\$ -	0%	\$	54,667	100%	Budget will be spent in 2020.
101372	REPLACE CLARK STATION P2 & P3	\$	79,140	\$ 37,851	48%	\$	79,140	100%	Budget will be spent in 2020.
101437	REPLACE P1,P2 & P3 JEWETT HOLMWOOD	\$	72,554	\$ 34,703	48%	\$	34,703	48%	Budget will be spent in 2020.
101479	CASTLE HILL PS IMPROVEMENTS	\$	77,196	\$ -	0%	\$	50,000	65%	Pump station improvements to keep station operational.
101480	PUMP STATION PUMP REPLACEMENT	\$	241,512	\$ -	0%	\$	150,000	62%	Beginning to prepare contract documents to spend this money in 2020. Delivery of pumps may push this into 2021.
101481	WATER STORAGE TANK MIXING SYSTEMS	\$	80,839	\$ -	0%			0%	Tank Circulation Pumps will be used instead of Gridbees. Look to reallocate this money.
101482	WATER STORAGE TANK TTHM REMOVAL SYSTEM	\$	83,576	\$ -	0%	\$	40,000	48%	Beginning to investigate tanks to add recirculation pumps to. Half of budget will be sper in 2020.
101484	REPLACE CHECK VALVES AT WINDOM	\$	200,000	\$ -	0%	\$	100,000	50%	Preparing contract documents for new swing check valves. Will have extra monies from this line item so we will look at other pump stations to install swing check valves and spend budget in 2020.
101485	MARILL PUMP STATION ROOF REPLACEMENT	\$	23,660	\$ -	0%	\$	20,000	85%	Brenden is working with Scott K. to prepare this contract.
101486	PINE HILL PS CAUSTIC BUILDING	\$	42,513	\$ -	0%	\$	35,000	82%	Contract has been awarded.
101530	REPLACE OVERHEAD CRANE AT WINDOM	\$	20,000	\$ -	0%	\$	15,000	75%	Brenden is working with Scott K. to prepare this contract.
	Total 1020 Control	\$	975,657	\$ 72,554	7%	\$	578,510	59%	
1025 Instrum	entation								Work complete - waiting on final invoices.

101365 HHS PUMP 1, 2, &3 VFD UPGRADE	\$ 28,141	\$:	17,643	63%	\$ 17,643	63%	Work complete - waiting on final invoices.
101366 HHS AUTOMATIC TRANSFER SWITCH	\$ 8,369	\$	8,369	100%	\$ 8,369	100%	Complete

						А	ttacl	hment A		
	11				Engineering	g Departmen	- M	ay 2020 Capita	l Budget Update	
Budget Item Number	Project Description	Ac	ljusted Budget		pended and nding to Date	Percent Expended to date		jected Expended by 12/31/2020	Projected Percent Expended by 12/31/2020	Comment
101367	AURORA PS GEN & AUTO XFER SWITCH	\$	3,490	\$	3,490	100%	\$	3,490	100%	Complete
101368	ELLIS PS GEN & AUTO XFER SWITCH	\$	-	\$	-					Complete
101460	WILLIAM ST STATION VFD UPGRADE	\$	139,260	\$	-	0%	\$	78,000	56%	Equipment purchase only in projection.
101461	WINDOM STATION VFD UPGRADE	\$	192,280	\$	-	0%	\$	104,000	54%	Equipment purchase only in projection.
101462	SERVICE CENTER UPS REPLACEMENT	\$	35,860	\$	-	0%	\$	30,000	84%	Purchase of UPS in process.
101465	VDW HIGH SERVICE VFD UPGRADE	\$	115,500	\$	14,900	13%	\$	59,600	52%	Projection based on 4 of 7 cells completed in 2020.
101466	SERVICE CENTER ELECTRIC SERVICE	\$	27,500	\$	-	0%			0%	On hold - dependent on CPL study of Service Center.
	Total 1025 Instrumentation	\$	550,400	\$	44,402	8%	\$	301,102	55%	
	nstruction Sturgeon Point	ć	460,000	¢	10 200	20/	ć	20.000	40/	Majority of equipment showed up in 2019 after the 2020 budget was created, there will
101429	PLC UPGRADES/REPLACEMENTS	\$	460,000	\$	10,280	2%	\$	20,000	4%	not be significant spending from his budget item. Contract award 5/21/2020; projection based on 100% BOD and 30% Design fees - shared
101503	CARBON SYSTEM IMPROVEMENTS	\$	250,000		-	0%	\$	40,000	16%	with Van de Water budget
101504	STUDY - LM STORAGE FACILITY	\$	60,000	\$	-	0%	\$	50,000	83%	RFP to be developed - authorization to advertise in June.
101506	FILTER GALLERY PIPING STUDY	\$	160,000	\$	-	0%	\$	231,500	145%	Contract award 6/4/2020; projection based on 50% BOD fees Tasks 1-5
	Total 2510 Eng/Constr Sturgeon Point	\$	930,000	\$	10,280	1%	\$	341,500	37%	
2515 Eng/Cor	nstruction Van de Water									
101507	CARBON SYSTEM IMPROVEMENTS	\$	250,000	\$	-	0%	\$	40,000	16%	Contract award 5/21/2020; projection based on 100% BOD and 30% Design fees - shared with Van de Water budget
101510	HVAC & ELECTRICAL STUDY	\$	90,000	\$	-	0%	\$	72,000	80%	Auth to advertise 5/21/2020; projection 80% of design fee
101526	VAN DE WATER CAPICITY EXPANSION	\$	500,000	\$	-	0%	\$	300,000	60%	Contract award 5/21/2020; projection based on 100% Task 1, 50% Task 2; 20% Task 3 fee
101537	GHD-008 VDW WTP RESIDUALS	\$	260,000	\$	67,227	26%	\$	156,873	60%	Fee is from contract; includes basis of design report and design.
	Total 2510 Eng/Constr Van de Water	\$	1,100,000	\$	67,227	6%	\$	568,873	52%	
25225 (2										
101268	nstruction Control NC-35 ELECTRICAL SUBSTATION	\$	1,120,000	Ś	63,596	6%	\$	771,712	69%	Pending \$530k invoice from National Grid for pole installation.
101357	W31 - BALL NORTH STORAGE TANK	\$	7,240,000		179,196	2%	\$	7,000,000	97%	On track to complete by 12/31/2020; 3% for 2021 closeout
101358	GHD-007 GUENTHER REHAB	\$	260,000		90,420	35%	\$	260,000	100%	All design fee should be spent in 2020, based on latest GHD project schedule.
101359	MP-80 BALL PUMP STATION STUDY	\$	20,000		7,742	39%	\$	7,742	39%	Project complete, finalizing billing.
101511	CASTLE HILL PUMP STATION DESIGN	\$	160,000	\$	-	0%	\$	50,000	31%	RFPs due 5/8/20 - realistic consultant start 8/1/2020; more accurate estimate after RFPs
101512	BALL PS - PUMPING IMPROVEMENTS	\$	210,000		-	0%	\$	100,000	48%	RFPs due 5/8/20 - realistic consultant start 8/1/2020; more accurate estimate after RFPs
	SECURITY UPGRADES - MISC SITES	Ś	250,000	\$	-	0%	Ś	100,000	40%	RFP required, must coordinate with Matt Barrett to develop scope.
101154	PINEHILL PS - TANK FLOOR	\$	90,000		-	0%	\$,	0%	Inspection indicated floor replacement not required; budget to be reallocated
101527	EASTERN SVC AREA/GENESEE COUNTY	\$	250,000		-	0%	\$	50,000	20%	RFP to be issued; timing dependent on final direction of existing OBG-13
101528	FUHRMANN BLVD INTERCONNECTION	\$	150,000		-	0%	\$	30,000	20%	RFP to be issued; timing dependent on final direction of existing OBG-13
	Total 2520 Eng/Constr Control		9,750,000		340,954	3%	\$	8,369,454	86%	
	Total 2520 Eng/Constr Control		14,113,057		845,353	6%	\$	10,784,375	76%	1
2500 5 /5		<u>,</u>	1.,113,037	7	0.3,333	570	7	20,7 04,07 0	, 5/0	
101188	nst Distribution Mains BETTERMENTS	\$	930,000	\$		0%	\$	925,638	100%	Need update from LNTN on invoicing.
101265	NC-36 WATERLINE REPLACEMENT	\$	20,000		-	0%	\$	5,880	29%	Carryover from 2019.
		_	_0,000	1				3,000	_5,0	,

	Attachment A													
	Engineering Department - May 2020 Capital Budget Update													
Budget Item Number	Project Description	Adj	usted Budget		pended and ding to Date	Percent Expended to date	Expended to Projected Expended by 12/31/2020		Projected Percent Expended by 12/31/2020	Comment				
101266	CH-9 WATERLINE REPLACEMENT	\$	20,000	\$	-	0%	\$	5,880	29%	Carryover from 2019.				
101348	GP-007 WATERLINE REPLACEMENT	\$	155,000	\$	142,626	92%	\$	150,000	97%	Carryover from 2019.				
101350	WSA-013 VALVE REPLACEMENT	\$	60,000	\$	35,739	60%	\$	50,904	85%	Carryover from 2019.				
101409	CPL-005 WATERLINE REPLACEMENT	\$	2,420,000	\$	12,618	1%	\$	3,026,597	125%	Construction expected to be completed in 2020.				
101410	NC-039 WATERLINE REPLACEMENT	\$	3,270,000	\$	33,164	1%	\$	3,165,878	97%	Construction expected to be completed in 2020.				
101411	CH-012 WATERLINE REPLACEMENT	\$	2,530,000	\$	18,549	1%	\$	2,175,163	86%	75% of construction expected to be completed in 2020.				
101412	WSA-014 WATERLINE REPLACEMENT	\$	3,100,000	\$	15,951	1%	\$	2,632,343	85%	Construction expected to be completed in 2020.				
101432	GP-008 WATERLINE REPLACEMENT	\$	3,715,000	\$	10,275	0%	\$	1,916,893	52%	50% of construction expected to be completed in 2020, project is being rebid.				
101515	WATERLINE REPLACEMENT #1 - BL-001	\$	130,000	\$	3,520	3%	\$	68,914	53%	Fee is from contract; includes survey, design and geotechnical work.				
101516	WATERLINE REPLACEMENT #2 - EA-012	\$	130,000	\$	-	0%	\$	219,083	169%	Fee is from contract; includes survey, design and geotechnical work.				
101517	WATERLINE REPLACEMENT #3 - LA-001	\$	130,000	\$	3,209	2%	\$	102,312	79%	Fee is from contract; includes survey, design and geotechnical work.				
101518	WATERLINE REPLACEMENT #4 - WSA-015	\$	130,000	\$	20,990	16%	\$	153,821	118%	Fee is from contract; includes survey, design and geotechnical work.				
101519	WATERLINE REPLACEMENT #5 - DA-010	\$	130,000	\$	-	0%	\$	152,292	117%	Fee is from contract; includes survey, design and geotechnical work.				
101520	WATERLINE REPLACEMENT #6 - CPL-007	\$	130,000	\$	4,254	3%	\$	186,161	143%	Fee is from contract; includes survey, design and geotechnical work.				
101531	WATERLINE REPLACEMENT #7 - GP-009	\$	130,000	\$	-	0%	\$	118,795	91%	Fee is from contract; includes survey, design and geotechnical work.				
	2590 Eng/Const Distribution Mains	\$	17,130,000	\$	300,895	2%	\$	15,056,554	88%					

2595 Eng/Con	595 Eng/Const Transmission Mains											
101267	W-027 TRANSMISSION MAIN REPLACEMENT	\$	5,000,000	\$	10,448	0%	\$	3,599,652	72%	Construction started in 2020, assume 75% will be completed in 2020.		
101351	CH-010 TRANSMISSIN MAIN REPLACEMENT	\$	140,000	\$	17,069	12%	\$	752,640	538%	Carryover from 2019, construction will be completed in 2020.		
101352	NC-40 TRANSMISSION MAIN REPLACEMENT	\$	2,900,000	\$	14,874	1%	\$	62,434	2%	Project is under design, no construction anticipated in 2020.		
101362	W-30 TRANSMISSION MAIN REPLACEMENT	\$	720,000	\$	-	0%	\$	88,458	12%	Project is under design, no construction anticipated in 2020.		
101413	RTE 5 TRANSMISSION MAIN REPLACEMENT	\$	1,940,000	\$	2,102,971	108%	\$	2,132,413	110%	Project was bid and awarded by NYSDOT, construction expected to be completed in 2020.		
101414	MP-081 ROUTING STUDY	\$	40,000	\$	16,371	41%	\$	55,440	139%	Project scheduled to be completed in 2020.		
101521	TRANSMISSION MAIN REPLACEMENT - MP-084	\$	150,000	\$	-		\$	146,412	98%	Project is under design, no construction anticipated in 2020.		
101522	TRANSMISSION MAIN REPLACEMENT - WSA-016	\$	150,000	\$	81,565	54%	\$	212,738	142%	Project is under design, no construction anticipated in 2020.		
101523	TRANSMISSION MAIN STUDY	\$	180,000	\$	-	0%	\$	25,000	14%	RFP needs to be developed. Plan for late June or early July for advertisement.		
101532	TRANSMISSION MAIN REPLACEMENT - CH-013	\$	150,000	\$	-	0%	\$	92,343	62%	Project is under design, no construction anticipated in 2020.		
101533	TRANSMISSION MAIN REPLACEMENT - NC-041	\$	150,000	\$	3,048	2%	\$	161,112	107%	Project is under design, no construction anticipated in 2020.		
101536	EMERGENCY TRANSMISSION MAIN REPAIR	\$	1,000,000	\$	625,122	63%	\$	850,000	85%	Emergency transmission main replacement at Ball Pump Station.		
	2595 Eng/Const Distribution Mains	\$	12,520,000	\$	2,871,468	23%	\$	8,178,642	65%			

To	otal Adjusted Budget	Expended and Pending to Date	Percent Expended to date	Projected Expended by 12/31/2020	Projected Percent Expended by 12/31/2020
\$	43,763,057	\$ 4,017,716	9%	\$ 34,019,571	78%