



## AGENDA

January 25, 2022  
7:30 p.m.

### LOCATION:

This meeting will be held **virtually**. Any member of the public interested in participating in the meeting should email the Township at [authority@upperuwchlan-pa.gov](mailto:authority@upperuwchlan-pa.gov) for a link and a password to join in the meeting. If you require special accommodation, please call the Township office at 610-458-9400.

		Packet Page #
I.	Call to Order	
II.	2022 Reorganization	2
III.	Approval of Minutes: December 28, 2021	3
IV.	Approval of Payments: January 2022	5
V.	Treasurer's Report	12
VI.	Authority Administration Reports	
	A. Clean Water, Inc. Monthly Report	18
	B. ARRO Consulting Monthly Report	20
	C. Authority Administrator's Report	46
	D. Public Works Department Report	47
VII.	2022 Operating, Capital Budgets ~ Consider Approval	51
VIII.	Open Session	
IX.	Next Meeting Date: February 22, 2022 ~ 7:30 p.m.	
X.	Adjournment	



TO: Municipal Authority  
G. Matthew Brown, Authority Administrator

FROM: Gwen Jonik, Township Secretary

RE: Reorganization 2022

DATE: January 20, 2022

---

The Authority is requested to conduct their reorganization for 2022 as follows:

- 2021 Chairperson, Bob Watts, calls the meeting to order and requests that Matt Brown conduct the election of Chairperson for 2022.
- Newly elected Chairperson then completes the reorganization:
  - Vice Chairperson for 2022
  - Authority Administrator – Matt Brown
  - Authority Solicitor – Christopher Frantz (\$215/hour, no increase)
  - Authority Engineer – ARRO Consulting (\$1-\$4/hour increases all positions except Executives)
  - Authority Operator – Clean Water Inc. (2% rate increase)

According to past practices, it is suggested that:

Lou Schack would become Chairman

Bill Quinn would become Vice-Chairman



MEETING MINUTES  
December 28, 2021  
7:30 PM  
**DRAFT**

In attendance via video teleconference: B. Watts, Chairman; H. Harper, Vice-Chairman, D. Carlson, Member, L. Schack, member, W. Quinn, member, G. Matthew Brown, P.E., DEE, Authority Administrator; Christopher E. Frantz, Esq., Authority Solicitor and David Schlott, Jr, P.E., ARRO Consulting, Inc.

**Call to Order**

B. Watts, Chairman, called the meeting to order at 7:30 PM.

**Approval of Minutes**

Draft minutes of the November 23, 2021, meeting were presented. D. Carlson made two suggested modifications to the minutes. H. Harper made a motion to approve the minutes with the noted modifications. D. Carlson seconded. It was so moved.

**Approval of Payments**

Following a brief discussion and questions, a motion was made by D. Carlson to approve the payments for December 2021. H. Harper seconded. It was so moved. Following a brief discussion and questions D. Carlson moved to accept the balance sheet and the statement of revenue and expenses as submitted in good faith by the Township Treasurer. W. Quinn seconded. It was so moved.

**Authority Administration Reports**

M. Brown called the Board's attention to the amendment to the McKee development agreement that was forwarded to each member. He said it was the final product as negotiated between McKee's representatives and the Authority's Solicitor and Administrator. He also noted that the Township Solicitor had reviewed the document and had no noted concerns. C. Frantz, the Authority Solicitor, then reviewed and summarized the need for the amendment. Following a brief discussion, L. Schack made a motion to adopt the amendment and authorize the Chairman to execute it on behalf of the Authority. D. Carlson seconded. It was so moved.

M. Brown noted that all facilities were operating well and within permit.

M. Brown provided a monthly update on land available for disposal. He noted no change in the status of any of the proposed sites they were reviewing.

M. Brown advised that there had been no update on the proposed Toll Brothers project at 100 Greenridge Road other than the Conditional Use Hearing for the Township was scheduled for continuation until January 18, 2022. He noted he would be in

attendance. He also noted the on-site meeting with several residents to provide a tour of disposal facilities had taken place during the preceding month.

M. Brown shared that the Byers Road project had run into another challenge relative to a traffic signal wire that was not marked. He said the repair was completed after a few hours and did not require the road to be shut down.

M. Brown advised that he had received no further odor complaints regarding the Stonehedge septic tank since it had been pumped and cleaned. Staff was hopeful that resolved the issue.

M. Brown noted that he had received several comments on the published Draft Act 537 Plan. Several comments were made in support of public sewer and a group of comments were made against providing public sewers to the Bordeaux Estates area. He noted many good questions were posed and noted there was some misinformation on the funding of public sewers. He explained that the plan was merely a roadmap and that much further study was required before any specific projects were undertaken. And no project listed in the plan could be undertaken for at least four or five years. Several of the homeowners who were objecting to public sewers in Bordeaux Estates were present and B. Watts permitted them to pose questions and offer their formal objections at this time. M. Brown noted that all written objections would be incorporated as part of the plan to the Township and to PADEP.

Following several additional questions and a brief discussion on the reports, W. Quinn then moved to accept the Authority Administrators Reports as submitted. D. Carlson seconded. It was so moved.

### **Presentation of 2022 Draft Operating and Capital Budgets**

M. Brown introduced the draft budgets for 2022. He noted there was a change in how the Township Treasurer illustrated the capital expenditures. Those figures were no longer being presented in the operating budget. He noted segmenting the two budgets should provide more clarity during review.

M. Brown asked the Authority Board to review the budgets and noted he would be available for any questions they might have over the next month. He noted he would be asking the Board to adopt the budgets at the January 2022 regular meeting.

### **Open Session**

Several members of the public in attendance offered additional comments and questions on the Draft Act 537 Plan. M. Brown noted that all written questions that residents desired to submit should be submitted to the Township Secretary, Gwen Jonik, who would advise the Township Manager and the Authority Administrator. One member asked a question on the 100 Greenridge Road project.

### **Next Meeting Date: January 25, 2022 - 7:30 PM**

B. Watts noted the date and time of the next meeting of the Authority. M. Brown noted that the meetings would continue to be virtual at the Authority's discretion.

### **Adjournment**

There being no further business to be brought before the Authority, L. Schack moved, seconded by D. Carlson to adjourn the meeting at 8:20 PM.

Respectfully submitted,

G. Matthew Brown, P.E., DEE  
Authority Administrator

January 24, 2022  
11:35 AM

Upper Uwchlan Township  
Check Register By Check Id

Page No: 1

Range of Checking Accts: MA MERIDIAN to MA MERIDIAN Range of Check Ids: 2723 to 2753  
Report Type: All Checks Report Format: Super Condensed Check Type: Computer: Y Manual: Y Dir Deposit: Y

Check #	Check Date	Vendor	Amount Paid	Reconciled/Void	Ref Num
2723	12/27/21	LOWES020 LOWES BUSINESS ACCOUNT	155.18	12/31/21	2561
2724	01/24/22	LOWES020 LOWES BUSINESS ACCOUNT	45.46		2562
2725	01/25/22	ALSGROUP ALS GROUP USA, CORP	1,028.10		2563
2726	01/25/22	AQUAP010 AQUA PA	1,897.07		2563
2727	01/25/22	AQUAPA AQUA PA	75.00		2563
2728	01/25/22	ARROC010 ARRO CONSULTING, INC.	46,564.43		2563
2729	01/25/22	ATTMOBIL AT & T MOBILITY	99.02		2563
2730	01/25/22	BUCKL010 BUCKLEY, BRION, MCGUIRE, MORRI	143.50		2563
2731	01/25/22	CHARLHIG CHARLES A HIGGINS & SONS	1,162.46		2563
2732	01/25/22	CHRISFRA FRANTZ, CHRISTOPHER	1,524.84		2563
2733	01/25/22	CLEANWAT CLEAN WATER, INC.	11,550.00		2563
2734	01/25/22	COMMO015 COMMONWEALTH OF PENNSYLVANIA	500.00		2563
2735	01/25/22	COMMO015 COMMONWEALTH OF PENNSYLVANIA	4,500.00		2563
2736	01/25/22	DECKM010 DECKMAN MOTOR & PUMP, INC	16,265.00		2563
2737	01/25/22	HIGHW010 HIGHWAY MATERIALS, INC.	483.26		2563
2738	01/25/22	INKS0010 INK'S DISPOSAL SERVICE, INC.	2,250.00		2563
2739	01/25/22	KAPPEASS KAPPE ASSOCIATES, INC	890.00		2563
2740	01/25/22	MCGOV020 MCGOVERN ENVIRONMENTAL, LLC	10,329.63		2563
2741	01/25/22	MJREIDER M. J. REIDER ASSOCIATES, INC.	497.00		2563
2742	01/25/22	MULLS010 MULL'S ELECTRIC, INC.	380.00		2563
2743	01/25/22	NAPA0010 NAPA AUTO PARTS	55.75		2563
2744	01/25/22	PADEP035 PA DEPT. OF ENVIRONMENTAL PROT	50.00		2563
2745	01/25/22	PADEP035 PA DEPT. OF ENVIRONMENTAL PROT	50.00		2563
2746	01/25/22	PADEP035 PA DEPT. OF ENVIRONMENTAL PROT	50.00		2563
2747	01/25/22	PECO PECO ENERGY COMPANY	24,510.02		2563
2748	01/25/22	PENNS080 PENNSYLVANIA ONE CALL	146.65		2563
2749	01/25/22	PRED0010 PREDOC	1,985.78		2563
2750	01/25/22	UPPER070 UPPER UWCHLAN TOWNSHIP	60,577.35		2563
2751	01/25/22	VERIZFIO VERIZON	1,194.04		2563
2752	01/25/22	WGMALDEN W. G. MALDEN	2,043.00		2563
2753	01/25/22	WIN911 WIN-911 SOFTWARE	660.00		2563

Report Totals	Paid	Void	Amount Paid	Amount Void
Checks:	31	0	191,662.54	0.00
Direct Deposit:	0	0	0.00	0.00
Total:	31	0	191,662.54	0.00

January 24, 2022  
11:35 AM

Upper Uwchlan Township  
Check Register By Check Id

Page No: 1

Range of Checking Accts: MA MERIDIAN to MA MERIDIAN Range of Check Ids: 2723 to 2753  
Report Type: All Checks Report Format: Detail Check Type: Computer: Y Manual: Y Dir Deposit: Y

Check #	Check Date	Vendor	Amount Paid	Charge Account	Account Type	Reconciled/Void	Ref Num	Ref Seq	Acct
PO #	Item	Description							
2723	12/27/21	LOWES020 LOWES BUSINESS ACCOUNT					12/31/21		2561
22-00114	1	ma - lowes	108.18	06-420-000-020 Supplies	Expenditure			1	1
22-00114	2	ma - lowes	47.00	06-420-000-020 Supplies	Expenditure			2	1
				155.18					
2724	01/24/22	LOWES020 LOWES BUSINESS ACCOUNT					2562		
22-00130	1	ma - orange snowpoles	45.46	06-420-000-020 Supplies	Expenditure			1	1
2725	01/25/22	ALSGROUP ALS GROUP USA, CORP					2563		
22-00116	1	route 100 wells	316.60	06-420-000-030 Testing	Expenditure			14	1
22-00116	2	eagle hunt wells	158.30	06-420-000-030 Testing	Expenditure			15	1
22-00116	3	ewing tract wells	553.20	06-420-000-030 Testing	Expenditure			16	1
			1,028.10						
2726	01/25/22	AQUAP010 AQUA PA					2563		
22-00115	1	119 prescott drive	19.59	06-409-000-037 Water	Expenditure			1	1
22-00115	2	439 prescott drive	19.59	06-409-000-037 Water	Expenditure			2	1
22-00115	3	100 prescott drive	19.59	06-409-000-037 Water	Expenditure			3	1
22-00115	4	meadow creek lane	19.59	06-409-000-037 Water	Expenditure			4	1
22-00115	5	308 flagstone road	26.13	06-409-000-037 Water	Expenditure			5	1
22-00115	6	1 prospect hill blvd	57.14	06-409-000-037 Water	Expenditure			6	1
22-00115	7	325 fellowship road	1,540.24	06-409-000-037 Water	Expenditure			7	1
22-00115	8	658 collingwood terrace	57.14	06-409-000-037 Water	Expenditure			8	1
22-00115	9	241 fellowship road	19.59	06-409-000-037 Water	Expenditure			9	1
22-00115	10	29 yarmouth lane	22.15	06-409-000-037 Water	Expenditure			10	1
22-00115	11	425 hemlock lane	57.14	06-409-000-037 Water	Expenditure			11	1
22-00115	12	2680 primrose court	19.59	06-409-000-037 Water	Expenditure			12	1
22-00115	13	1120 sunderland ave	19.59	06-409-000-037 Water	Expenditure			13	1
			1,897.07						

January 24, 2022  
11:35 AM

Upper Uwchlan Township  
Check Register By Check Id

Page No: 2

Check #	Check Date	Vendor	Amount Paid Charge Account			Reconciled/Void	Ref Num
PO #	Item	Description	Account Type	Contract	Ref Seq	Acct	
2727	01/25/22	AQUAPA AQUA PA					2563
22-00117	1	2021 quarter 4 reads	75.00	06-406-000-100 Utility Billing Costs	Expenditure		17 1
2728	01/25/22	ARROC010 ARRO CONSULTING, INC.					2563
22-00119	1	project 9310.32 ww sys admin	11,006.25	06-400-000-002 Authority Administrator	Expenditure		19 1
22-00119	2	project 17000.00 consulting	7,963.00	06-408-000-000 Engineering Fees	Expenditure		20 1
22-00119	3	project 10270.48 byers road	17,947.22	06-408-000-000 Engineering Fees	Expenditure		21 1
22-00119	4	project 10270.56 route 100	997.50	06-408-000-000 Engineering Fees	Expenditure		22 1
22-00119	5	project 10270.64 milford farms	981.00	06-408-000-000 Engineering Fees	Expenditure		23 1
22-00119	6	project 10270.71 act 537	1,017.71	06-408-000-000 Engineering Fees	Expenditure		24 1
22-00119	7	project 10270.72 meadow creek	6,057.50	06-408-000-000 Engineering Fees	Expenditure		25 1
22-00119	8	project 10270.75 upland farms	594.25	06-408-000-000 Engineering Fees	Expenditure		26 1
			46,564.43				
2729	01/25/22	ATTMOBIL AT & T MOBILITY					2563
22-00118	1	ma - telephone	99.02	06-409-000-032 Telephone	Expenditure		18 1
2730	01/25/22	BUCKL010 BUCKLEY, BRION, MCGUIRE, MORRI					2563
22-00120	1	december services	143.50	06-404-000-000 Legal Fees	Expenditure		27 1
22-00121	1	CHARLHIG CHARLES A HIGGINS & SONS ma-byers road sewer extension	146.80	06-420-000-025 Maintenance & Repair	Expenditure		28 1
22-00121	2	ma-byers road sewer extension	1,015.66	06-420-000-025 Maintenance & Repair	Expenditure		29 1
			1,162.46				
2732	01/25/22	CHRISFRA FRANTZ, CHRISTOPHER					2563
22-00124	1	december services	1,524.84	06-404-000-000 Legal Fees	Expenditure		32 1
2733	01/25/22	CLEANWAT CLEAN WATER, INC.					2563
22-00123	1	monthly operations	11,550.00	06-420-000-045 Contracted Services	Expenditure		31 1
2734	01/25/22	COMM0015 COMMONWEALTH OF PENNSYLVANIA					2563
22-00122	1	permit PA0036374 - EAGLEPOINTE	500.00	06-420-000-035 Permits	Expenditure		30 1
22-00125	1	permit - increase - saybrooke	4,500.00	06-420-000-035 Permits	Expenditure		33 1

January 24, 2022  
11:35 AM

Upper Uwchlan Township  
Check Register By Check Id

Page No: 3

Check #	Check Date	Vendor	Amount Paid	Charge Account	Reconciled/Void	Ref	Ref Num	Acct
PO #	Item	Description			Account Type	Contract	Ref Seq	
2736	01/25/22	DECKM010 DECKMAN MOTOR & PUMP, INC					2563	
22-00126	1	new - flygt pump	16,265.00	06-420-000-025 Maintenance & Repair	Expenditure		34	1
2737	01/25/22	HIGHW010 HIGHWAY MATERIALS, INC.					2563	
22-00127	1	ma - material	175.46	06-420-000-020 Supplies	Expenditure		35	1
22-00127	2	ma - material	307.80	06-420-000-020 Supplies	Expenditure		36	1
			483.26					
2738	01/25/22	INKS0010 INK'S DISPOSAL SERVICE, INC.					2563	
22-00128	1	cleaned filters	2,250.00	06-420-000-025 Maintenance & Repair	Expenditure		37	1
2739	01/25/22	KAPPEASS KAPPE ASSOCIATES, INC					2563	
22-00129	1	byers sewage pumps station	890.00	06-420-000-025 Maintenance & Repair	Expenditure		38	1
2740	01/25/22	MCGOV020 MCGOVERN ENVIRONMENTAL, LLC					2563	
22-00131	1	route 100	1,053.53	06-420-000-031 Pump & Haul	Expenditure		39	1
22-00131	2	route 100	3,160.58	06-420-000-031 Pump & Haul	Expenditure		40	1
22-00131	3	eaglepointe	404.69	06-420-000-031 Pump & Haul	Expenditure		41	1
22-00131	4	eaglepointe	351.90	06-420-000-031 Pump & Haul	Expenditure		42	1
22-00131	5	eaglepointe	395.89	06-420-000-031 Pump & Haul	Expenditure		43	1
22-00131	6	eaglepointe	263.93	06-420-000-031 Pump & Haul	Expenditure		44	1
22-00131	7	eaglepointe	21.99	06-420-000-031 Pump & Haul	Expenditure		45	1
22-00131	8	byers station	1,850.06	06-420-000-031 Pump & Haul	Expenditure		46	1
22-00131	9	windsor ridge	947.03	06-420-000-031 Pump & Haul	Expenditure		47	1
22-00131	10	takeridge	884.93	06-420-000-031 Pump & Haul	Expenditure		48	1
22-00131	11	marsh harbor/larkins bridge	995.10	06-420-000-031 Pump & Haul	Expenditure		49	1
			10,329.63					
2741	01/25/22	MJREIDER M. J. REIDER ASSOCIATES, INC.					2563	
22-00132	1	rt 100 wwt	77.00	06-420-000-030 Testing	Expenditure		50	1
22-00132	2	st. andrews brae	108.50	06-420-000-030 Testing	Expenditure		51	1
22-00132	3	saybrooke	73.50	06-420-000-030 Testing	Expenditure		52	1
22-00132	4	reserve,eagle hunt,byers,ewing	56.00	06-420-000-030 Testing	Expenditure		53	1

January 24, 2022  
11:35 AM

Upper Uwchlan Township  
Check Register By Check Id

Page No: 4

Check #	Check Date	Vendor	Amount	Paid	Charge Account	Reconciled/Void	Ref	Ref Num	Acct
PO #		Item Description				Account Type	Contract	Ref Seq	
2741	M. J. REIDER ASSOCIATES, INC. Continued								
22-00132	5 eaglepointe		150.50		06-420-000-030 Testing	Expenditure		54	1
22-00132	6 greenridge		31.50		06-420-000-030 Testing	Expenditure		55	1
			497.00						
2742	01/25/22	MULLS010 MULL'S ELECTRIC, INC.						2563	
22-00133	1 route 100 plant		380.00		06-420-000-025 Maintenance & Repair	Expenditure		56	1
2743	01/25/22	NAPA0010 NAPA AUTO PARTS						2563	
22-00134	1 ma - serp/blt		55.75		06-420-000-020 Supplies	Expenditure		57	1
2744	01/25/22	PADEP035 PA DEPT. OF ENVIRONMENTAL PROT						2563	
22-00135	1 byers station lagoon		50.00		06-420-000-035 Permits	Expenditure		58	1
2745	01/25/22	PADEP035 PA DEPT. OF ENVIRONMENTAL PROT						2563	
22-00136	1 facility # 15-39464		50.00		06-420-000-035 Permits	Expenditure		59	1
2746	01/25/22	PADEP035 PA DEPT. OF ENVIRONMENTAL PROT						2563	
22-00137	1 facility #15-33238		50.00		06-420-000-035 Permits	Expenditure		60	1
2747	01/25/22	PECO PECO ENERGY COMPANY						2563	
22-00144	1 304 fellowship road		282.30		06-409-000-037 Water	Expenditure		69	1
22-00144	2 2500 eagle farms rd		1,007.74		06-409-000-037 Water	Expenditure		70	1
22-00144	3 seabury lane		35.15		06-409-000-037 Water	Expenditure		71	1
22-00144	4 primrose court		414.31		06-409-000-037 Water	Expenditure		72	1
22-00144	5 314 prescott drive		386.36		06-409-000-037 Water	Expenditure		73	1
22-00144	6 meadow creek lane		39.05		06-409-000-037 Water	Expenditure		74	1
22-00144	7 301 pottstown pike		1,513.73		06-409-000-037 Water	Expenditure		75	1
22-00144	8 kristines/milford		127.59		06-409-000-037 Water	Expenditure		76	1
22-00144	9 711 dorian road		635.31		06-409-000-037 Water	Expenditure		77	1
22-00144	10 111 dorothy lane		108.68		06-409-000-037 Water	Expenditure		78	1
22-00144	11 dorlan drive		1,942.95		06-409-000-037 Water	Expenditure		79	1
22-00144	12 381 lcr		332.01		06-409-000-037 Water	Expenditure		80	1

January 24, 2022  
11:35 AM

Upper Uwchlan Township  
Check Register By Check Id

Page No: 5

Check #	Check Date	Vendor	Reconciled/Void	Ref Num		
PO #	Item	Description	Account Type	Contract	Ref Seq	Acct
2747	PECO ENERGY COMPANY	Continued				
22-00144	13	milford road	29.44	06-409-000-037 Water	Expenditure	81 1
22-00144	14	st. andrews road	36.68	06-409-000-037 Water	Expenditure	82 1
22-00144	15	park road	1,975.51	06-409-000-037 Water	Expenditure	83 1
22-00144	16	55 pottstown pike	646.64	06-409-000-037 Water	Expenditure	84 1
22-00144	17	yarmouth lane	546.94	06-409-000-037 Water	Expenditure	85 1
22-00144	18	sunderland ave	1,917.57	06-409-000-037 Water	Expenditure	86 1
22-00144	19	kiloran wynd drive	182.41	06-409-000-037 Water	Expenditure	87 1
22-00144	20	flagstone road	1,148.27	06-409-000-037 Water	Expenditure	88 1
22-00144	21	yarmouth lane	37.94	06-409-000-037 Water	Expenditure	89 1
22-00144	22	140 pottstown pike	350.07	06-409-000-037 Water	Expenditure	90 1
22-00144	23	275 fellowship road	8,464.65	06-409-000-037 Water	Expenditure	91 1
22-00144	24	heron hill drive	267.63	06-409-000-037 Water	Expenditure	92 1
22-00144	25	indian springs drive	122.42	06-409-000-037 Water	Expenditure	93 1
22-00144	26	yarmouth lane	81.78	06-409-000-037 Water	Expenditure	94 1
22-00144	27	hemlock lane	285.90	06-409-000-037 Water	Expenditure	95 1
22-00144	28	fellowship road	1,590.99	06-409-000-037 Water	Expenditure	96 1
			24,510.02			
2748	01/25/22	PENNS080 PENNSYLVANIA ONE CALL				2563
22-00139	1	monthly activity	146.65	06-420-000-329 PA One Call	Expenditure	63 1
2749	01/25/22	PRED0010 PREDOC				2563
22-00138	1	lakeridge wtp	1,023.28	06-420-000-025 Maintenance & Repair	Expenditure	61 1
22-00138	2	439 prescott drive	962.50	06-420-000-025 Maintenance & Repair	Expenditure	62 1
			1,985.78			
2750	01/25/22	UPPER070 UPPER UWCHLAN TOWNSHIP				2563
22-00140	1	q4 admin fees due to UUT	60,577.35	06-400-000-001 Administration	Expenditure	64 1
2751	01/25/22	VERIZFIO VERIZON				2563
22-00141	1	internet	132.40	06-409-000-032 Telephone	Expenditure	65 1

January 24, 2022  
11:35 AM

Upper Uwchlan Township  
Check Register By Check Id

Page No: 6

Check #	Check Date	Vendor	Amount Paid	Charge Account	Reconciled/Void	Ref Num		
PO #	Item	Description			Account Type	Contract	Ref Seq	Acct
2751	VERIZON							
22-00141	2	january 2022	Continued					
			1,061.64	06-409-000-032		Expenditure	66	1
				Telephone				
			1,194.04					
2752	01/25/22	WGMALDEN W. G. MALDEN					2563	
22-00142	1	calibrate meter		2,043.00	06-420-000-045		Expenditure	67
				Contracted Services				1
2753	01/25/22	WIN911 WIN-911 SOFTWARE					2563	
22-00143	1	annual renewal		660.00	06-420-000-045		Expenditure	68
				Contracted Services				1
<hr/>								
<b>Report Totals</b>								
			<u>Paid</u>	<u>Void</u>	<u>Amount Paid</u>	<u>Amount Void</u>		
	Checks:		31	0	191,662.54	0.00		
	Direct Deposit:		0	0	0.00	0.00		
	Total:		<u>31</u>	<u>0</u>	<u>191,662.54</u>	<u>0.00</u>		

**Upper Uwchlan Township Municipal Authority**  
**Balance Sheet**  
**As of December 31, 2021**

**ASSETS**

	<u>Cash</u>	
06-100-000-010	General Checking - Fulton Bank	\$ 155,264.03
06-100-000-015	General Checking - Meridian Bank	145,459.12
06-100-000-020	General Checking - WIPP	284,551.25
06-106-000-002	Connection Fee Account	702,828.19
06-110-000-100	Fulton Bank Bond Proceeds - ICS	-
06-110-000-200	Fulton Bank Bond Proceeds - MMDA	<u>5,362,648.04</u>
	<b>Total Cash</b>	<b>6,650,750.63</b>
	<u>PSDLAF Investments:</u>	
06-109-000-003	CD Program	-
06-109-000-004	Full Flex	<u>188.21</u>
	<b>Total Investments</b>	<b>188.21</b>
	<u>Accounts Receivable</u>	
06-145-000-001	Usage Fees Receivable	285,988.16
06-145-000-002	Capital Assessment Receivable	-
06-147-000-000	Misc Accounts Receivable	<u>546.00</u>
	<b>Total Accounts Receivable</b>	<b>286,534.16</b>
	<u>Other Current Assets</u>	
06-130-000-001	Due from MA Capital Fund	-
06-130-000-002	Due from UUT General Fund	8,955.60
06-130-000-003	Due from UUT Capital Fund	-
06-130-000-004	Due from Solid Waste Fund	<u>10,423.83</u>
06-130-000-005	Due from Stormwater Fund	-
06-130-000-006	Due from Sewer Fund	-
06-152-000-000	Undeposited Funds	-
06-155-000-000	Pre-Paid Expenses	-
06-155-000-010	Pre-Paid Attorney Fees	<u>-</u>
	<b>Total Other Current Assets</b>	<b>19,379.43</b>
	<u>Fixed Assets</u>	
06-162-000-001	Fixed Assets	2,538,084.22
06-162-000-050	Accumulated Depreciation	(629,995.36)
06-163-000-100	Phase II Construction Project (CIP)	<u>191,298.51</u>
	<b>Total Fixed Assets</b>	<b>2,099,387.37</b>
	<u>Other Long Term Assets</u>	
06-162-000-002	Excess Treatment Capacity	<u>1,649,293.24</u>
	<b>Total Other Long Term Assets</b>	<b>1,649,293.24</b>
	<b>Total Assets</b>	<b>\$ 10,705,533.04</b>

**Upper Uwchlan Township Municipal Authority**  
**Balance Sheet**  
**As of December 31, 2021**

**LIABILITIES AND FUND BALANCE**

<u>Current Liabilities</u>		
06-200-000-020	Accounts Payable	-
06-230-000-010	Due to UUT General Fund	69,532.95
06-230-000-020	Due to UUT Capital Fund	-
06-230-000-021	Due to MA Capital Fund	-
06-230-000-030	Due to Solid Waste Fund	21,640.54
06-230-000-040	Due to Water Resource Protection Fund	-
06-230-000-050	Due to Sewer Fund	-
06-230-000-060	Due to Developer's Escrow Fund	-
06-230-000-070	Due to UUT Sewer Fund - 2019 Bonds	5,205,556.07
06-240-000-000	Accrued Expenses	81,773.75
06-241-000-100	Retainage on Phase II Construction Project	-
06-245-000-000	Due to Customers	275.00
	<b>Total Current Liabilities</b>	<b>5,378,778.31</b>
<u>Equity</u>		
06-272-000-001	Opening Bal Equity	753,500.35
06-272-000-002	Retained Earnings	4,256,486.92
	Current Period Net Income (Loss)	316,767.46
	<b>Total Equity</b>	<b>5,326,754.73</b>
	Total Fund Balance	5,326,754.73
	<b>Total Liabilities &amp; Fund Balance</b>	<b>\$ 10,705,533.04</b>

**Upper Uwchlan Township Municipal Authority**  
**Statement of Revenues and Expenditures**

**For the Period Ended December 31, 2021**

	Actual 2021 YTD	Budget 2021	% of Budget	Actual 2020 <i>(audited)</i>	Budget 2020
<b>REVENUES</b>					
06-340-000-000 Interest Income	\$ 4,580.74	\$ 43,500.00	10.5%	\$ 36,969.00	\$ 80,000.00
06-365-000-000 Usage Fees Residential	2,368,526.15	2,250,000.00	105.3%	2,276,275.00	2,293,851.00
06-365-000-001 Usage Fees Commercial	96,223.04	100,000.00	96.2%	97,168.00	-
06-365-000-010 Connection Fees	301,828.22	4,677,750.00	6.5%	51,571.00	1,622,250.00
06-365-000-015 Sewer - resident refunds	-	-	#DIV/0!	(88.00)	-
06-354-000-020 Grant revenue - State	11,630.00	465,000.00	2.5%	11,471.00	-
06-370-000-000 Misc revenue	-	1,000.00	0.0%	-	1,000.00
<b>TOTAL REVENUES</b>	<b>\$ 2,782,788.15</b>	<b>\$ 7,537,250.00</b>	<b>36.9%</b>	<b>\$ 2,473,366.00</b>	<b>\$ 3,997,101.00</b>
<b>EXPENDITURES</b>					
<u>General:</u>					
06-400-000-001 Administration	273,411.49	264,736.00	103.3%	245,253.00	273,821.00
06-400-000-002 Authority Administrator	122,801.85	120,000.00	102.3%	124,394.00	120,000.00
06-400-000-003 Professional Fees	-	5,000.00	0.0%	-	12,000.00
06-400-000-200 Admin Supplies	520.00	1,000.00	52.0%	299.00	1,000.00
06-400-000-341 Advertising	154.78	3,000.00	5.2%	2,928.00	5,000.00
06-400-000-352 Insurance - Liability	5,157.80	5,370.00	96.0%	4,112.00	5,370.00
06-400-000-355 Bank Fees	127.00	650.00	19.5%	97.00	650.00
06-402-000-450 Audit Fees	6,050.00	7,500.00	80.7%	5,800.00	5,450.00
06-404-000-000 Legal Fees	14,487.19	25,000.00	57.9%	5,460.00	25,000.00
06-406-000-100 Utility Billing Costs	7,523.36	13,000.00	57.9%	12,608.00	12,000.00
06-408-000-000 Engineering Fees	359,406.40	150,000.00	239.6%	410,263.00	175,000.00
06-408-000-100 Reimbursable Engineering Fees	-	-	#DIV/0!	-	-
	789,639.87	595,256.00	132.7%	811,214.00	635,291.00
<u>Building Expenses:</u>					
06-409-000-031 Lawn Care	-	5,000.00	0.0%	-	5,000.00
06-409-000-032 Telephone	16,286.97	15,000.00	108.6%	15,305.00	15,000.00
06-409-000-035 Insurance	10,892.20	15,000.00	72.6%	12,336.00	11,078.00
06-409-000-036 Electric	225,868.29	250,000.00	90.3%	194,595.00	250,000.00
06-409-000-037 Water	31,938.83	20,000.00	159.7%	11,921.00	20,000.00
06-409-000-052 Bldg Maint & Repair	-	10,000.00	0.0%	-	10,000.00
06-409-000-260 Building Supplies & Small Tools	-	15,000.00	0.0%	-	15,000.00
06-409-000-427 Waste Disposal	-	-	#DIV/0!	-	-
	284,986.29	330,000.00	86.4%	234,157.00	326,078.00
<u>Operations:</u>					
06-420-000-020 Supplies	20,869.89	50,000.00	41.7%	25,453.00	50,000.00
06-420-000-022 Chemicals	13,195.59	15,000.00	88.0%	8,096.00	15,000.00
06-420-000-023 Propane and Fuel Oil	-	5,000.00	0.0%	2,991.00	5,000.00
06-420-000-025 Maintenance & Repair	170,967.64	120,000.00	142.5%	158,210.00	120,000.00
06-420-000-030 Testing	37,959.86	35,000.00	108.5%	36,203.00	35,000.00
06-420-000-031 Pump & Haul	103,583.94	60,000.00	172.6%	100,218.00	50,000.00
06-420-000-032 Vegetation Management	9,648.86	20,000.00	48.2%	5,895.00	20,000.00
06-420-000-035 Permits	3,602.00	5,000.00	72.0%	2,878.00	5,000.00
06-420-000-042 Dues and Memberships	-	-	#DIV/0!	75.00	-
06-420-000-045 Contracted Services	134,070.00	150,000.00	89.4%	161,528.00	150,000.00
06-420-000-048 Misc expenses	4,514.57	10,000.00	45.1%	284.00	10,000.00
06-420-000-235 Vehicle Maintenance	372.87	2,000.00	18.6%	-	2,000.00
06-420-000-329 PA One Call	1,602.79	2,500.00	64.1%	1,875.00	2,500.00
	500,388.01	474,500.00	105.5%	503,706.00	464,500.00

**Upper Uwchlan Township Municipal Authority**  
**Statement of Revenues and Expenditures**

**For the Period Ended December 31, 2021**

*(Continued)*

		Actual 2021 YTD	Budget 2021	% of Budget	Actual 2020 <i>(Unaudited)</i>	Budget 2020
	<u>Capital:</u>					
06-483-000-000	Capital Repair	42,624.45	100,000.00	42.6%	-	50,000.00
06-483-000-100	Capital Construction	275,442.34	2,700,000.00	10.2%	-	1,500,000.00
06-493-000-083	Depreciation	-	100,000.00	0.0%	126,102.00	100,000.00
		<b>318,066.79</b>	<b>2,900,000.00</b>	<b>11.0%</b>	<b>126,102.00</b>	<b>1,650,000.00</b>
	<b>Total Expenditures before Operations Agreement and Transfers</b>	<b>\$ 1,893,080.96</b>	<b>\$ 4,299,756.00</b>	<b>44.0%</b>	<b>\$ 1,675,179.00</b>	<b>\$ 3,075,869.00</b>
	<b>Net Income before Operations Agreement and Transfers</b>	<b>\$ 889,707.19</b>	<b>\$ 3,237,494.00</b>	<b>27.5%</b>	<b>798,187.00</b>	<b>921,232.00</b>
	<u>Other:</u>					
06-471-000-010	Operations Agreement Fee to UUT-2014 Bonds	-	-	0.0%	-	-
06-471-000-020	Operations Agreement Fee to UUT-2019 Bonds	236,741.36	236,744.00	100.0%	237,408.00	237,494.00
06-471-000-030	Operations Agreement Fee to UUT-2019A Bonds	336,198.37	336,200.00	100.0%	335,280.00	335,300.00
		<b>572,939.73</b>	<b>572,944.00</b>	<b>100.0%</b>	<b>572,688.00</b>	<b>572,794.00</b>
06-492-000-010	Transfer to Sewer Fund	-	-	#DIV/0!	-	-
06-492-000-020	Transfer to Water Resource Protection Fund	-	-	#DIV/0!	-	-
06-492-000-030	Transfer to UUT Capital Fund	-	-	#DIV/0!	-	-
		<b>-</b>	<b>-</b>	<b>#DIV/0!</b>	<b>-</b>	<b>-</b>
	<b>TOTAL EXPENDITURES</b>	<b>\$ 2,466,020.69</b>	<b>\$ 4,872,700.00</b>	<b>50.6%</b>	<b>\$ 2,247,867.00</b>	<b>\$ 3,648,663.00</b>
	<b>OPERATING INCOME</b>	<b>\$ 316,767.46</b>	<b>\$ 2,664,550.00</b>	<b>11.9%</b>	<b>\$ 225,499.00</b>	<b>\$ 348,438.00</b>

**Upper Uwchlan Township Municipal Authority**  
**Sewer Billings**

*Month to Month Change in Receivables and Collections*

	December 2021	November 2021	Change
Beginning Receivable Balance	289,022.06	289,022.06	-
<u>Billings:</u>			
Calculated charges billed	2,349,556.27	2,349,009.86	546.41
Billing adjustments			-
Late payment penalty	115,679.23	93,031.38	22,647.85
Adjustments	(8,974.51)	(8,097.54)	(876.97)
	2,745,283.05	2,722,965.76	22,317.29
<u>Less:</u>			
<b>Collections*</b>	<b>2,464,559.19</b>	<b>2,330,199.83</b>	<b>(134,359.36)</b>
<b>Receivable balance, month end</b>	<b>280,723.86</b>	<b>392,765.93</b>	<b>(112,042.07)</b>

This report includes all sewer billings, not just delinquent accounts.

Upper Uwchlan Township Municipal Authority  
Sewer Billings

*Month to Month Change in Delinquent Accounts*  
(accounts that have had a balance in excess of \$380 for 2 or more quarters)

	12/31/2020	12/31/2021	11/30/2021	10/31/2021	9/30/2021	8/31/2021	7/31/2021
Number of delinquent accounts	143	141	183	122	139	177	109
Total delinquent balance	\$ 237,326	\$ 156,695	\$ 170,454	\$ 122,921	\$ 149,547	\$ 220,952	\$ 210,043

<u>2021 Payment Schedule</u>	<u>Bills Mailed</u>	<u>Payment Due</u>
First quarter	1/31/2021	3/1/2021
Second quarter	4/30/2021	5/31/2021
Third quarter	7/31/2021	8/31/2021
Fourth quarter	10/31/2021	11/30/2021

# Clean Water, Inc.

170 Dallas St.  
Box 475  
Atglen, Pa. 19310

---

Phone 610-593-5710  
Fax 610-593-6311

Upper Uwchlan Township Municipal Authority  
140 Pottstown Pike  
Chester Springs, PA 19425

January 21, 2022

RE: Report for the January meeting

Dear Authority,

Enclosed please find the monthly report that was submitted to the DEP on your behalf. The reports are for November, informational items are current.

## **Route 100**

Recent cold spell has limited disposal. The three storage tank blowers have been turned on as a result of the cold weather. It seems there is a problem with the Verizon phone line box at Byers. Public Works will be having them out to investigate. The Upland Farms drip panel VFDs control was repaired by Mulls Electric. This place has been like an old house. Every repair reveals another layer of faults. Now an out put card is no longer working. If the Fetters disposal tie in involves a replacement drip panel, I would suggest we wait till then. I just am not sure of the scope. Sludge was removed at the Route 100 plant as usual.

## **Eaglepointe**

Plant is performing fine. We have had a recent spell of elevated flows during weekends. I have been doing extra hauling of the influent water to limit effect. The cold weather has also caused a filter to freeze over.

## **Marsh Harbour**

Plant is running fine. Spray has obviously been reduced during the cold weather.

## **Lakeridge**

Plant is running fine. Predoc continues cleaning the dosing beds as their schedule and conditions allow. They also pulled and cleaned one of the screens on a dosing pump. They discovered a damaged power cord and repaired in the field. The other pump has not been scheduled, but will be as conditions allow.

**Saybrooke**

Plant is doing fine. Predoc flushed and cleaned the beds. This is done semi-annually.

**Greenridge**

Drip continues. The new flow meter and isolation valve have not been installed yet. Been a bit problematic getting lagoon levels down to a point where the water in lagoon doesn't come back into meter vault given application rates. We continue to use historical averages.

**St. Andrews**

Plant is running fine. Sludge was removed. We also are fighting frozen filters here due to extreme cold and relative low flows.

**Additional Info**

The generators were all topped off with fuel by Reilly and Sons. We will be submitting Chapter 94 reports for review and signatures shortly.

That is all for now. Please call with any questions.

Respectfully,

Brian Norris



321 N. Furnace Street  
Suite 200  
Birdsboro, PA 19508  
T 610.374.5285

---

## MEMORANDUM

---

TO: Upper Uwchlan Township Municipal Authority

FROM: G. Matthew Brown, P.E., DEE

RE: Project Status Report

PROJECT NO.: 17000.00

DATE: January 20, 2022

---

The following is the status of current wastewater projects within the Township:

### **Byers Station**

**Village at Byers Station (5C), Lot #1 Townhouse Parcel:** The Village at Byers Station (Parcel 5C) pre-construction meeting was held on October 18, 2017. Construction is expected to start within three weeks. The Village at Byers Station (Parcel 5C) site contractor, by email dated November 14, 2017, started submitting its sanitary sewer shop drawing submittals. ARRO reviewed and commented on the submittals. Brubacher Excavating started sanitary sewer installation work on January 4, 2018. The Village of Byers Station (5C) sanitary sewer installation work continues through February 2018, approximately 40% of the sewer mains and laterals have been installed. Sanitary sewer installation work continues through March 2018. As of mid-April 2018, all sanitary sewer mains and laterals have been installed and air tested, while 75 percent of the sewer mains have also passed deflection testing. As of mid-May 2018, all sanitary sewer mains have passed pressure and deflection testing and only manhole vacuum testing remains to be done after base paving is completed. Vacuum testing of each sanitary sewer manhole on the site was completed on July 11, 2018. ARRO approved escrow release No. 1 in the amount of \$302,330.01 by letter dated September 6, 2018. Installation of the gravity house service line to each new townhouse began on September 13, 2018. ARRO reviewed the sanitary sewer videos submitted by Toll Brothers on October 19, 2018. The pipe is in good condition with only minor debris in a few runs that need to be flushed and cleaned. ARRO emailed Toll Brothers on November 2, 2018 with a list of the runs that needed cleaned. Installation of the last four house service lines to new townhouses was completed on March 3, 2021. ARRO received an August 10, 2021 email from Toll Brothers requesting ARRO observe the current condition of the sanitary sewer and prepare a list of items to complete ahead of sanitary sewer system dedication. ARRO will conduct the work the week of August 23, 2021. ARRO completed its observations of the current condition of the sanitary sewer installed as part of Lot #1 (and through Lot #2A) and prepare a list of items to complete. ARRO prepared a September 16, 2021 letter to Toll Brothers including the sanitary sewer list of items that Toll needs to complete for dedication. ARRO completed its observations of two additional manholes that were previously inaccessible and on October 11, 2021 sent Toll Brothers an email with further items that need to be completed at each manhole.

Nothing new to report.

**Village at Byers Station (5C), Lot #2 Residential / Commercial Parcel:** ARRO reviewed the Village of Byers Station (5C) – Lot #2 Commercial Parcel's Sewage Facilities Planning Module

(SFPM) package. The Developer's engineer submitted a 9,025 gpd sanitary sewer capacity request at the Route 100 WWTP facility. ARRO reviewed the Amended Final PRD Plans submitted by Bohler Engineering and prepared a February 27, 2018 letter to the Township with comments to the Plans. Sewage Facilities Planning Modules were sent to PADEP on April 18, 2018. ARRO reviewed Amended Final PRD Plans, last revised May 7, 2018, and submitted a May 30, 2018 letter to the Township containing comments to the Plans. Additional revised Plans were submitted on July 12, 2018 and are currently under review. The PADEP SFPM approval letter, dated June 27, 2018, was received by the Township. Vacuum testing of each sanitary sewer manhole on the site was completed on July 11, 2018. By email dated July 4, 2018, ARRO requested of Toll Brothers that they submit an agreement document between Toll and BPG Partners, Ltd. stipulating that after BPG has the binder course paving completed each manhole will again be vacuum tested and BPG will repair any manhole that fails its vacuum re-test. ARRO submitted a July 19, 2018 sanitary sewer comments letter to the Township regarding the additional revised Plans submitted by Bohler Engineering on July 12, 2018. Toll Brothers submitted a July 30, 2018 letter acknowledging it will be responsible to ensure that the sanitary manholes in 5C Commercial will be tested after construction of the commercial portion of the subdivision. Toll requests the Authority require the testing to be a component of the financial security agreement as it relates to the commercial site work. ARRO prepared an August 31, 2018 letter to the Township with comments to the latest Final PRD Plans, last revised August 30, 2018. Eight buildings with various uses are proposed with a sewer capacity of 9,025 gallons per day. On March 18, 2019, ARRO received the draft of a revised land development drawing from Bohler Engineering presenting a new layout arrangement consisting of 67 townhome units, a coffee shop, retail store and a daycare center, and also a revised sanitary sewer capacity request of 15,195 gpd. On July 9, 2019, ARRO received from Bohler Engineering Revision 1 to the Lot #2 land development drawings. The drawings now show 55 townhome units, a 1-½ story retail building and a 2-story mixed-use commercial building. There is a revised sanitary sewer capacity request of 12,872 gpd. ARRO is reviewing the sanitary sewer portion of the drawings. ARRO prepared a July 24, 2019 comments letter to the Revision 1 land development drawings. On August 20, 2019, ARRO received revised Bohler Engineering Lot #2 land development drawings, Revision 2, dated August 16, 2019. ARRO is reviewing the sanitary sewer portion of the drawings. ARRO prepared a September 3, 2019 comments letter to the sanitary sewer portion of Bohler Engineering Lot #2 land development drawings, Revision 2, dated August 16, 2019. At the October 14, 2019 UUT Board of Supervisors' meeting, it was approved to send the revised Lot #2 Commercial Parcel SFPM package to PADEP. ARRO is assisting Bohler Engineering in preparing responses to comments contained in PADEP's October 31, 2019 review letter regarding the revised Lot #2 Commercial Parcel SFPM package. The Authority Administrator sent a December 9, 2019 letter to PADEP with responses to comments contained in the October 31, 2019 review letter regarding the revised Lot #2 Commercial Parcel SFPM package. Bohler Engineering reported to PADEP on January 3, 2020 that the Authority Administrator pronounced Upper Uwchlan will own the sanitary sewer main that will run within a dedicated easement through Lot 2 and connect to the sewer in Station Boulevard. A May 22, 2020 letter to Toll Brothers was prepared under Authority letterhead stating 12,872 gpd of capacity must be purchased by Toll from the Authority for the Lot #2 residential and commercial portions of the project. ARRO received revised land development plans, dated October 8, 2020. ARRO reviewed the plans and had no additional comments to the sanitary sewer portions of the plans. ARRO reviewed the sanitary sewer escrow submitted on October 12, 2020 by Toll Brothers. ARRO prepared an October 13, 2020 letter to the Township stating it had no comments to the \$147,396.00 sanitary sewer escrow estimate. The project's preconstruction meeting was held on October 21, 2020. Work to clear and rough grade the site is expected to start at the beginning of November 2020. Sanitary sewer installation is not expected to start until February 2021. Toll Brothers submitted the project's site sanitary sewer construction bond to the Township. ARRO reviewed and commented on sanitary sewer shop drawings submitted by the site contractor, Lyons & Hohl. Toll Brothers' 55 townhomes (Lot 2A, Residential), rated at 185 gpd each, has a total sewage flow of 10,175 gpd. Toll submitted certification to ARRO documenting the repurchase of 6,560 gpd Toll originally sold to Byers Retail Acquisition Limited Partnership for the previously proposed commercial improvements of the

parcel. Toll will purchase the remaining 3,615 gpd it needs at \$70 per gallon for treatment and disposal. The total amount due from Toll to Upper Uwchlan Township Municipal Authority being \$253,050 as a single, upfront payment to the Authority. According to the Township Finance Department, Toll Brothers has paid the Township the \$253,050.00 for the 55 townhomes (Lot 2A, Residential) treatment and disposal costs. Installation of sanitary sewer is tentatively scheduled to start on January 25, 2021. Sanitary sewer construction started on January 26, 2021. Sanitary sewer construction continues. Toll Brothers submitted sewer escrow release request No. 1 in the amount of \$119,330.00. ARRO reviewed the quantities and prepared an April 12, 2021 letter to the Township recommending release of the requested amount. All sanitary sewer is installed, but not been completely tested. Sanitary sewer manholes installed as part of Lot #1, but within Lot #2, remain to be vacuum tested now that paving has been placed around their manhole frames. Installation of the gravity house service line to each new townhome started in May 2021. Through November 4, 2021 fourteen house service lines have been installed and tested.

Installation of the gravity house service line to each new home continues as required.

**Byers Station (6C), Vantage Point–Chester Springs:** The Developer's engineer submitted a request for 43 EDUs (9,500 gpd) of sanitary sewer capacity at the Route 100 WWTP facility. The Authority Administrator sent a February 20, 2018 letter to D. L. Howell stating there is sufficient capacity at the Route 100 WWTP facility for the proposed 9500 gpd from the project. ARRO reviewed the project's Sewage Facilities Planning Module (SFPM). The module shows a request for 45 EDUs (10,000 gpd) of sanitary sewer capacity. SFPM Component 3 Section G and J were signed. The Pennsylvania Historical and Museum Commission clearance letter and Aqua water service letter have been received for the Sewage Facilities Planning Module (SFPM). On April 18, 2018, the Township forwarded SFPM Components 4B and 4C to the Chester County Planning Commission and Health Department. ARRO reviewed Land Development Plans, plotted April 6, 2018, and submitted an April 30, 2018 letter to the Township containing comments to the Plans. The SFPM is complete and a resolution to accept the document was placed on the Board of Supervisors' August 20, 2018 agenda. The SFPM application package was submitted to PADEP. ARRO prepared a September 6, 2018 sanitary sewer review letter to the latest Land Development Plans submitted by D.L. Howell, last revised August 13, 2018. ARRO received on December 5, 2018 the latest Land Development Plans, last revised November 30. ARRO will submit a sanitary sewer review letter the week of December 10. ARRO prepared and sent to the Township a December 14, 2018 sanitary sewer review letter to the December 5, 2018 Land Development Plans. ARRO received and reviewed the sanitary sewer portion of land development plans Revision No. 3, dated June 21, 2019. The plans show a dedicated sanitary sewer manhole in Byers Road to be installed when the Byers Road sewer extension project is constructed. ARRO prepared and sent a July 5, 2019 review comments letter to the Township. PADEP issued a July 23, 2019 with three (3) items missing from the submitted SFPM. The Authority sent PADEP an August 23, 2019 letter in response to PADEP's July 23, 2019 letter containing three comments to the project's SFPM. The UUT Board of Supervisors at its September 16, 2019 meeting executed the amended Tentative Approval Decision to permit Parcel 6C to be developed as a senior living facility. PADEP issued a November 7, 2019 letter approving the Official Plan revision for the construction of the 101-unit retirement living apartment unit at 10,100 gpd sewage volume. ARRO reviewed the latest revision to the Vantage Point Retirement Living land development plans, dated December 6, 2019. ARRO issued a January 6, 2020 review comments letter to the Township. ARRO is reviewing the latest revision to the Vantage Point Retirement Living land development plans, dated February 3, 2020. ARRO prepared a March 6, 2020 review comments letter regarding the latest revision to the Vantage Point Retirement Living land development plans, dated February 3, 2020.

Nothing new to report.

**Eagle Hunt**

Nothing new to report.

**Eaglepointe**

**Wastewater Treatment Plant:** ARRO is working on a plan to convert the Eaglepointe WWTP into a pretreatment facility before sending the effluent on to the Route 100 Regional WWTP for final treatment. It is proposed to design and construct an effluent pump station for a 2-inch force main. ARRO has laid out a preliminary force main route from the Eaglepointe WWTP to the proposed Byers Road sanitary sewer extension across Route 100.

Nothing new to report.

**Dilibero - Go-Wireless, Eagle Car Wash and Enterprise Rent-A-Car Sanitary Sewer Connection:** ARRO is conducting an evaluation of the wastewater treatment capacity and feasibility for connecting these three businesses to the Eaglepointe WWTP sanitary sewer system. ARRO completed the evaluation, including a piping layout and cost estimate, and it is now under internal review. On April 20, 2018 ARRO transmitted its sanitary sewer evaluation to Dilibero. ARRO has been responding to sanitary sewer related questions from Dilibero's sewer contractor. On March 7, 2019 ARRO transmitted the Authority's Eaglepointe sanitary sewer and easement drawings to Dilibero's engineer for use in preparing their sanitary sewer extension plans. Eagle Service Center is unwilling to consent to a sanitary sewer easement across its property. ARRO has prepared an alternative to an entirely gravity sewer design with a preliminary low-pressure force main design that crosses through the CarSense property in order to avoid the Eagle Service Center property. ARRO has communicated with the property owner's counsel and is preparing alternative sanitary sewer connection sketch designs for consideration. ARRO prepared an alternative sanitary sewer connection sketch design and on October 2, 2020 transmitted the sketch to the property owner and its counsel for consideration. On June 4, 2021 the Authority Administrator and ARRO met with the owner regarding this project. ARRO prepared an exhibit drawing showing proposed temporary and permanent sanitary sewer easements across both the Citadel Bank and Eagle Service Center lots. The exhibits were sent to the property owners for review. If the exhibits are accepted easement agreements will be prepared. ARRO attended a July 29, 2021 meeting with Eagle Retail Associates and the prospective future owner of Eaglepointe to discuss the proposed Dilibero sanitary sewer that will cross through the Eaglepointe lot containing Citadel Credit Union. ARRO prepared exhibit drawings showing temporary and permanent sanitary sewer easements across both the Citadel Credit Union and Eagle Service Center lots. Based on initial discussions some revisions were made and easement agreements will be drafted. At ARRO direction, surveyors will be conducting boundary survey the week of September 20, 2021 for both the Citadel Credit Union and Eagle Service Center lots. Temporary and permanent easement plans and descriptions will be prepared by the surveyors for future easement agreements. Surveyors completed the boundary survey for both Citadel Credit Union and Eagle Service Center lots. Easement plans and descriptions were submitted to ARRO on October 7, 2021 for review. ARRO prepared comments to the documents and submitted them to the surveyors on October 20, 2021. Surveyors revised the easement documents and resubmitted them to ARRO. ARRO reviewed and forwarded the documents to the Authority solicitor on November 10, 2021 with a request to prepare a Deed for Sewer Easement for each the Citadel Credit Union and Eagle Service Center lots. The Authority solicitor prepared a Deed for

Sewer Easement for both the Citadel Credit Union and Eagle Service Center lots. The documents are being reviewed by the property owners.

A Deed for Sewer Easement for both the Citadel Credit Union and Eagle Service Center lots as prepared by the Authority solicitor was approved by each property owner and recorded in the Chester County Courthouse. Recorded documents were sent to each property owner by the solicitor on January 19, 2022.

ARRO informed Dilibero to prepare the required planning modules and design for the extension.

### **Ewing Tract**

Nothing new to report.

### **Fetter Farm Tract (Preserve at Marsh Creek)**

ARRO received a request from a developer engineer for information on available treatment capacity to serve the Tract and met with the Township Manager and developer engineer on September 18, 2012, to discuss treatment capacity and conveyance to the Route 100 WWTP. On August 5, 2014 a meeting with held at the Township Building with The McKee Group to discuss the active adult community proposed by the Developer for the property. A subsequent meeting was held at the Township Building on August 14, 2014 with the Township, Developer and Authority Administrator to discuss sewage flows and disposal. ARRO reviewed a Conditional Use Plan for Fetters Property prepared for McKee-Milford Associates, LP, dated October 12, 2016. ARRO prepared a review letter to the Township, dated November 8, 2016. The Developer is proposing 375 Housing Units, which will produce 62,675 gallons per day of sanitary sewer flow. The Developer is proposing participation in upgrades to the Route 100 Regional WWTP facility that will trigger the Phase 3 expansion of the WWTP. A review of the capacity within the downstream collection and conveyance system is required to determine the extent of improvements necessary to accept the proposed sewage flow. Preliminary Subdivision/Land Development Plans were submitted to ARRO and are currently under review. The Plans call for 375 mixed Single Family, Twin and Triple units and a Community Center to be built in the subdivision. The subdivision will connect to the Reserve at Eagle by way of Prescott Drive and to the Reserve at Chester Springs by way of Radek Court. The sanitary sewer disposal requirements are calculated to be 62,675 gpd. On-site drip disposal capacity is calculated to be 42,643 gpd, and the off-site sewage disposal requirement is 20,032 gpd. The combination gravity and low-pressure sanitary sewer systems will be directed to the Reserve at Eagle Pump Station No. 1 off Prescott Drive. Preliminary Subdivision/Land Development Plans were submitted and reviewed by ARRO. ARRO comments were submitted in an April 10, 2017 letter to the Township. ARRO is in the process of reviewing the June 15, 2017 resubmission of the Preliminary Subdivision/Land Development Application. ARRO reviewed the June 15, 2017 resubmission of the Preliminary Subdivision/Land Development Plan and submitted comments to the plan in a July 10, 2017 letter to the Township. ARRO also reviewed the subdivision's low-pressure sewer system design calculations and submitted comments to the design in a July 12, 2017 letter to the Township. ARRO reviewed an August 1, 2017 revision to the low-pressure sewer system design calculations and drawings and submitted an August 16, 2017 letter to the Township with comments to the revision materials. ARRO has started an evaluation of the Reserve at Eagle Pump Station No. 1 to ascertain its capability to accept the Fetter Tract design sanitary sewer disposal requirements. ARRO received revised Preliminary Subdivision/Land Development Plans on September 14, 2017. ARRO reviewed the Plans and sent an October 3, 2017 review comments letter to the Township. ARRO continues an evaluation of the Reserve at Eagle Pump Station No. 1 to ascertain its capability to accept the Fetter Tract design sanitary sewer disposal requirements. The evaluation is substantially complete with the exception of emergency generator assessment. ARRO continues an evaluation of Upland Farms drip disposal to ascertain the facility's capability to store and dispose the Fetter Tract effluent. ARRO reviewed the Sewage Facilities Planning Module (SFPN) and is working on the sanitary sewer review. The Authority Administrator signed the SFPN Component 3 Sections G and

J. The Board of Supervisors approved the SFPM resolution at the April 16, 2018 meeting. The developer's engineer stated in an April 17 email to the Authority Administrator that the SFMP is close to being submitted to PADEP for review. The Sewage Facilities Planning Module was sent to PADEP on April 18, 2018. Ebert Engineering requested Authority assistance in preparation of a response to comments received from PADEP on the Sewage Facilities Planning Module. ARRO is working on a response. ARRO assisted Ebert Engineering in preparation of letter responses to comments received from PADEP to the Sewage Facilities Planning Module. ARRO transmitted its responses to Ebert Engineering on November 1, 2018. ARRO in association with Ebert Engineering prepared a December 13, 2018 letter to PADEP in response to PADEP Sewage Facilities Planning Module comments. ARRO reviewed the Water Quality Management Part II Permit application, dated July 23, 2019 as submitted by Ebert Engineering on July 26, 2019, along with the supporting design reports for the low-pressure sewer system and the upgrades to the Reserve at Eagle Pump Station No.1. ARRO sent comments to Ebert Engineering by email dated August 13, 2019. Ebert subsequently revised its documents based on ARRO comments and resubmitted the documents. ARRO is currently reviewing the revised documents. ARRO reviewed the latest revised Water Quality Management Part II Permit application package received August 21, 2019 from Ebert Engineering. ARRO has no further comments to Ebert's permit application, only ARRO comments remain to be addressed on E. B. Walsh's land development drawings regarding the lining of low-pressure force main discharge manholes. Ebert Engineering sent to PADEP the WQM Part II Permit Application package by transmittal letter dated October 3, 2019. On October 15, 2019 ARRO received from E. B. Walsh the latest Subdivision and Land Development Plan drawings entitled "The Preserve at Marsh Creek" along with a response letter to previous plan review comments. ARRO will review and comment on the sanitary sewer portion of the latest drawings. ARRO reviewed and on November 1, 2019 issued comments to the Phases 1 and 1A sanitary sewer escrow calculations as submitted by the McKee Group. McKee Group issued revised escrow calculations on November 15, 2019 in response to ARRO comments. The Preserve at Marsh Creek preconstruction meeting was held on December 4, 2019. Site survey and erosion control measures work will be starting within two weeks. ARRO has requested a schedule of sanitary sewer installation work from the site contractor. PADEP issued the WQM permit, dated November 25, 2019, for the low-pressure sanitary sewer with individual grinder pumps and for the upgrade to the Reserve at Eagle Pump Station No. 1 required as part of the project. McKee Group held a February 5, 2020 meeting with its engineers and contractor. Discussions included forthcoming designs for the piping between the Preserve drip fields and Upland Farms pump station, revisions to gravity sanitary sewer around Reserve at Eagle PS #1, and the Route 100 Regional WWTP Phase III expansion. McKee expects submission of the Phase III expansion design around May 2020, not March 2020 as stipulated in the Agreement for Expansion of the Route 100 Central WWTP. ARRO had a February 12, 2020 meeting with Keystone Engineering at the Reserve at Eagle PS #1 to discuss electrical revisions to the station in support of the upgrade necessary to carry McKee flows. ARRO continues reviewing the project's sanitary sewer materials shop drawings. Site contractor construction schedule shows start of sanitary sewer installation as the last week of February 2020. Site contractor started sanitary sewer installation on March 4, 2020. Site contractor suspended sanitary sewer installation work due to coronavirus restrictions. On May 1, 2020 Ebert Engineering submitted initial plans for the Reserve at Eagle Pump Station Upgrade. ARRO transmitted a May 12, 2020 email to Ebert Engineering with review comments to Reserve at Eagle Pump Station Upgrade plans. ARRO received an email from Ebert Engineering that the initial submission of the Upland Farms drip pump station upgrade and Fetter's site drip field design would be submitted during the week of May 25. On June 12, 2020 ARRO received from Ebert Engineering the initial submission of the Fetter's Tract Drip Disposal System Part II WQM Permit Application, Design Engineer's Report and Drip Disposal System design drawings issued for WQM review. ARRO is in the process of reviewing the documents. ARRO reviewed E. B. Walsh Utility Coordination drawings and Ebert Engineering revised low pressure sewer system drawings and issued June 17, 2020 comments to each drawing set. On June 25, 2020 Ebert Engineering submitted to ARRO for review and comments a revised Fetter Drip Disposal System design that removed the Drip Filter Building, along with a revised WQM Part 2 Permit Application and Design Engineers Report. ARRO transmitted comments on the documents to Ebert Engineering by email dated July 2, 2020. On

July 15, 2020 E. B. Walsh submitted a revised Utility Coordination plan set to address previous ARRO comments. The plan set was primarily developed to coordinate information contained on various plans prepared by Ebert Engineering and the E. B. Walsh offices. ARRO is in the process of reviewing the revised plan set. On July 21, 2020 Ebert Engineering submitted revised plans for the Reserve at Eagle Pump Station Upgrade. ARRO is in the process of reviewing the revised plans. Gravity sanitary sewer installation continues, while low pressure sewer system shop drawings were submitted and reviewed in early August 2020. On July 24, 2020 Ebert Engineering submitted to ARRO for review and comments a revised Fetter Drip Disposal System design along with a revised WQM Part 2 Permit Application and Design Engineers Report. ARRO is in the process of reviewing the revised documents. On July 21, 2020 Ebert Engineering submitted revised plans for the Reserve at Eagle Pump Station Upgrade. ARRO reviewed the revised plans. ARRO transmitted an August 19, 2020 email to Ebert Engineering stating it had no further comments to the plans. ARRO transmitted a September 4, 2020 email to Ebert Engineering with review comments to the revised Fetter Drip Disposal System design along with the revised WQM Part 2 Permit Application and Design Engineers Report. ARRO submitted September 2, 2020 comments to the Ebert Engineering drawings of the rerouted Reserve at Eagle PS #1 force main around existing Manhole #500 necessary to facilitate the installation of new gravity sewer between the manhole and the pump station wetwell. The drawings were subsequently revised and approved by ARRO. Sanitary sewer and force main work at the Reserve at Eagle PS #1 was completed and tested. All sanitary sewer was completed and tested between the Reserve at Eagle PS #1 and the Toll/McKee model homes. House service lines at the four McKee model homes and the two Toll Brothers model homes were completed and tested. ARRO reviewed the revised Fetter Drip Disposal WQM application, design engineer's report and drawings submitted by Ebert Engineering on November 8, 2020 and has no further comments to the documents. On January 8, 2021 the Authority Administrator signed the Fetter Tract Drip Disposal WQM permit application on behalf of the Authority. Ebert Engineering will electronically submit the permit application documents to PADEP the week of January 18, 2021. Ebert Engineering submitted the WQM permit application documents to PADEP by transmittal letter dated January 25, 2021. ARRO reviewed Phase 1 sanitary sewer escrow release No. 1 and prepared a February 24, 2021 letter to the Township approving the quantities and the escrow release's requested amount of \$669,462.83. Work continues on installation and testing of gravity and low-pressure sewer system mains. On July 1, 2021, McKee transmitted Phase 1 sanitary sewer escrow release No. 2 request to ARRO. ARRO is in the process of reviewing the request. After reviewing McKee's Phase 1 sanitary sewer escrow release No. 2 request, ARRO prepared a list of items to complete based on ARRO RPR records. ARRO also prepared an August 17, 2021 letter to the Township recommending withholding \$19,721.85 to cover the costs to complete the work items in the list and finding acceptable the release of \$207,270.85 to McKee. A pre-construction meeting for Phase 2 and Phase 3 was conducted on December 6, 2021. The sanitary sewer systems in both phases are low pressure sewer. The contractor has started to submit the sanitary sewer component shop drawings.

Installation of the gravity house service line to each new home continues as required.

The contractor continues to submit sanitary sewer shop drawings for Phase 2 and Phase 3.

### **Greenridge**

**Open Community Adaptive Reuse Development (OCARD):** On August 1, 2017 a meeting with the Developer was held at the Township to discuss the sanitary sewer options for the redevelopment of the former Upattina School parcel (Open Community Adaptive Reuse Development, a.k.a OCARD). ARRO is reviewing a revised Section H of the Sewage Facilities Planning Module submitted by the Developer on August 8, 2017. ARRO reviewed a revised Sewage Facilities Planning Module Section H submitted by the Open Community Developer. The Sewage Facilities Planning Module (SFPM) now includes the revised Section H, and the Component 4 submissions have been forwarded to Chester County's Planning Commission and Heath Department. ARRO conducted a site visit to a property which utilizes an Ecoflow unit similar to that proposed for on-site wastewater pre-treatment

at the Open Community project. Chester County Planning Commission and Heath Department returned the Open Community Components 4A, 4B and 4C. Component 3 Sections G and J were completed. The Township authorized sending the SPPM package to PADEP for review. The Authority Administrator prepared a March 14, 2018 letter to Warwick Land Development stating the Authority continues to lack sufficient information from Warwick before the Authority could agree to operate the pretreatment facility proposed for the Open Community Adaptive Reuse Development. On behalf of the Open Community Developer, on November 13, 2018 Boucher & James submitted sewer connection plans for review. ARRO is in the process of reviewing the plans and will issue comments in a separate letter. ARRO completed its review of the November 13, 2018 Boucher & James sewer connection plans and issued a November 28, 2018 comments letter to the Township. Subsequently, Boucher & James submitted to ARRO a response email on December 3, 2018 along with revised plans, last dated December 3, 2018. ARRO is reviewing the email responses and the latest revised plans. On February 25, 2019 PADEP released the WQM permit for the Open Community Adaptive Reuse Project. On March 12, 2019 the Township received a sewer permit application from the Developer. ARRO is setting up a pre-construction meeting for the Open Community Adaptive Reuse Project. On April 25, 2019 ARRO conducted a pre-construction meeting for the Open Community project. The Developer will attempt to use the existing lateral connection installed during the original Greenridge sanitary sewer installation work done in 2005. The Developer excavated a test hole at the existing Greenridge subdivision lateral connection. ARRO was informed by the Developer that elevations were taken and submitted to Boucher & James. The lateral will be used. New plans for connection to the existing lateral will be prepared and submitted to the Authority and ARRO for review. ARRO sent a September 17, 2019 email to the Developer requesting a project update for the sanitary sewer portion of the Open Community Adaptive Reuse Project. On October 15, 2019 ARRO received an email from the Developer with a project update stating bids have been awarded for the sanitary sewer portion of the Open Community Adaptive Reuse Project. Developer also indicated construction is tentatively scheduled for mid-December 2019. ARRO reviewed the latest sanitary sewer connection plan drawings, dated December 19, 2019. ARRO also reviewed some project sanitary sewer shop drawings. On January 16, 2020 ARRO submitted to the Developer comments to both items. ARRO is reviewing the latest revision to the OCARD land development plans, dated February 14, 2020, and additional shop drawings. ARRO completed reviewing the latest revision to the OCARD land development plans, dated February 14, 2020. ARRO sent an April 2, 2020 email to the Developer's engineer stating it had no further comments to the plans. By letter dated June 15, 2020 the Developer's engineer submitted final sanitary sewer system drawings. Construction of the onsite sewer piping started the week of June 15, 2020. ARRO prepared a June 19, 2020 letter accepting the final sanitary sewer design. The developer sent a July 21, 2020 email to ARRO stating they have submitted building construction permit applications for Greenridge Hall units and are awaiting permit issuance before continuing sanitary sewer installation. The email also said sanitary tanks and treatment units have been ordered. On August 19, 2020 ARRO requested the developer submit an updated project construction schedule. On September 16, 2020 ARRO again requested the developer submit an updated project construction schedule. On September 16, 2020 ARRO again requested the developer submit an updated project construction schedule.

On September 17, 2020 ARRO received an email from the developer's counsel in reply to the ARRO request for a construction schedule. Counsel wrote it would discuss the matter with the developer and one would return a response, which has yet to be received as of January 20, 2022.

**Meadow Creek Sewer Extension to Greenridge WWTP:** At the request of the Authority Administrator ARRO prepared March 16, 2020 sketch plans and opinions of probable construction costs to extend Meadow Creek sanitary sewer to the Greenridge WWTP. ARRO is studying the retirement of the Meadow Creek WWTP by starting a study to determine what upgrades are needed at Greenridge WWTP in order to accept flow from Meadow Creek. ARRO also initiated a preliminary design for a pump station and force main system to convey Meadow Creek flow to Greenridge WWTP. ARRO continues the plans for decommissioning the Meadow Creek WWTP, continues

preliminary pump station and force main design to convey sewage to the Greenridge WWTP, and continues the study of the Greenridge WWTP to determine what upgrades are needed to accept Meadow Creek flow. ARRO received a proposal from its surveyor to prepare initial survey for the sewer extension and is evaluating the proposal.

ARRO continues the plans for decommissioning the Meadow Creek WWTP, continues preliminary pump station and force main design to convey sewage to the Greenridge WWTP, and continues the study of the Greenridge WWTP to determine what upgrades are needed to accept Meadow Creek flow.

ARRO reviewed the surveyor proposal to prepare initial survey for the sewer extension and recommended its approval to the Authority Administrator.

### **Jankowski (Chester Springs Crossing)**

ARRO issued a May 5, 2017 review letter to the Township with comments to the September 13, 2016 Conditional Use Plan for the Jankowski Tract. On February 2, 2018, the Developer's engineer submitted for review subdivision plans of a 55 Single Family Housing unit community. ARRO is working on a review of the sanitary sewer portion of the subdivision plans. ARRO completed its review of the Preliminary/Final Subdivision-Land Development Plan submitted by E. B. Walsh and prepared a February 26, 2018 letter to the Township with comments to the Plans. ARRO responded to Toll Brothers regarding the Windsor Ridge Pump Station capacity to receive Jankowski estimated sanitary flow. ARRO reviewed the Preliminary/Final Subdivision-Land Development Plan, last revised May 18, 2018, and prepared June 11, 2018 comments to the Township. Sewage Facilities Planning Module Components 4A, 4B and 4C were received. Presently the project is in the 30-day Public Notice periods, which upon completion the Township can submit the components to PADEP. The Authority Administrator sent an August 14, 2018 letter to Chester County Health Department (CCHD) regarding CCHD's Component 4C comment about malfunctions along Surrey Lane, Font Road and Carriage Drive. The Administrator stated the Authority will be evaluating future extensions in these areas. Subsequently, ARRO conducted a small conceptual planning study to sewer these areas. ARRO presented three sewer extension options and cost opinions to the Authority Administrator for review and comment. The first gravity and low-pressure sewer concept sends all flow through the Jankowski tract, the second all-gravity sewer concept sends some flow through Jankowski and the remainder to Reserve at Eagle, while the third all gravity sewer concept sends all flow to the Reserve at Eagle. ARRO is reviewing the latest Preliminary/Final Subdivision Land Development Plan transmitted by E.B. Walsh letter, dated August 10, 2018. SFPM Components 4A, 4B and 4C were received, but the bog turtle clearance letter from PA Fish & Wildlife is still outstanding. The UUT Board of Supervisors authorized the resolution needed for the Sewage Facilities Planning Module at their October 15, 2018 meeting but are holding it until the clearance letter is issued. ARRO prepared an August 30, 2018 sanitary sewer review letter to the latest Preliminary/Final Subdivision-Land Development Plan transmitted by E.B. Walsh letter, dated August 10, 2018. On February 4, 2019, ARRO received the preliminary sanitary sewer escrow calculations from Toll Brothers. ARRO reviewed the calculations and returned comments to Toll. Revised calculations were received and after review were accepted by ARRO. ARRO prepared and sent a letter to the Township recommending acceptance of the sanitary escrow in the amount of \$425,955.60. On February 27, 2019 ARRO received from E. B. Walsh updated Preliminary/Final Subdivision Land Development Plans. ARRO reviewed the sanitary sewer portion of the drawings and transmitted comments to E. B. Walsh by letter dated March 11, 2019. On March 18, 2019 ARRO received from E. B. Walsh updated Preliminary/Final Subdivision Land Development Plans. ARRO reviewed the sanitary sewer portion of the drawings and transmitted comments to E. B. Walsh by email dated April 1, 2019. On April 2, 2019 ARRO received from Toll Brothers a revised sanitary sewer escrow calculation based on the latest E. B. Walsh drawings. ARRO prepared an April 2 letter to the Township recommending accepting the revised escrow amount. ARRO received a May 22, 2019 email from Toll Brothers stating Jankowski construction might start in July 2019. A pre-construction meeting for the project has been scheduled for July 24, 2019. ARRO

attended the July 24, 2019 pre-construction meeting and the August 21, 2019 PennDOT HOP site meeting. Sanitary sewer installation for the project is set to begin on August 26, 2019 starting offsite in Windsor Ridge's Garrison Drive. Sanitary sewer installation for the project began on August 26, 2019 starting offsite in Windsor Ridge's Garrison Drive. Garrison Drive sanitary sewer installation is almost complete and the contractor intends to continue its work in the Jankowski site. The boring for the sanitary sewer casing under Route 100 linking Jankowski and Windsor Ridge will take place sometime in October 2019. The sanitary sewer casing boring under Route 100 linking Jankowski and Windsor Ridge is scheduled for the week of October 28, 2019. The boring and casing work under Route 100 was completed the week of November 18, 2019. In order to correct a sewer misalignment through the casing Toll Brothers agreed to install two new manholes, one upstream and one downstream of the casing, and also relocate a recently installed manhole to achieve minimum sewer slope required by PADEP. Sanitary sewer installation continues within the site. Over the weeks of January 6 through January 13, 2020 two new manholes, one upstream and one downstream of the casing, were installed and one existing manhole in Garrison Drive was relocated to achieve minimum sewer slope required by PADEP. Sanitary sewer installation still continues within the site. Testing of sanitary sewer through Milford Road Extension, across Route 100 and in Windsor Ridge's Garrison Drive started the last week of January 2020 and continued into early February; all testing was positive. Installation of the gravity house service line to each new home has resumed the week of May 18, 2020. Testing of the onsite sanitary sewer continued the week of June 15, 2020. Testing of all onsite sanitary sewer was completed. Sanitary sewer televising was completed and submitted to ARRO for review and comment. ARRO reviewed the sanitary sewer televising submitted by the contractor and is preparing comments. Installation of the last gravity house service line to a new home was completed on December 8, 2021.

In a January 17, 2022, email, Toll Brothers requested ARRO prepare a punchlist of work after reviewing the installed sanitary sewer. ARRO responded that first Toll needs to submit its sanitary sewer system record drawings since there were significant changes to the sewer during the course of its installation.

### **Lakeridge**

ARRO is preparing an evaluation of the wastewater plant and sanitary sewer to assess the feasibility of connecting six (6) homes along Moore Road to the sanitary sewer system. ARRO completed its evaluation of the wastewater plant and sanitary sewer. The wastewater plant has sufficient capacity, but an extension to the existing Moore Road sanitary sewer will need to be constructed. Ivystone subdivision sanitary sewer cleaning and televising will be done on Monday, January 25, 2021 to check the condition of the sewers. The Ivystone subdivision sanitary sewer cleaning and televising was done on Monday, January 25, 2021. Two sections of sewer where the paving surface above the sewer trench has dished did show a few areas of sag in the piping, but the sags were minor in nature and not considered to have caused the paving irregularity. ARRO requested a proposal from its surveyor to prepare the initial survey for the Moore Road and Ivystone Drive sanitary sewer extension design. ARRO received a proposal from its surveyor for the initial survey of Moore Road and Ivystone Drive in support of the sanitary sewer extension design. After negotiation ARRO agreed on a \$7200 price, which was approved by the Authority Administrator.

Nothing new to report.

### **Marsh Harbour**

ARRO is preparing the 2021 annual groundwater monitoring report.

### **Reserve at Eagle**

Nothing new to report.

**Route 100 WWTP**

ARRO conducted a study to search for new disposal sites within and near the Township. Mapping was developed for the study and ARRO conducted a preliminary assessment of a potential stream discharge for the WWTP. ARRO presented its findings regarding potential disposal sites at the December 2016 Board meeting. ARRO has prepared a draft of the Route 100 Regional WWTP disposal fields study for the potential to rerate the fields for additional capacity. ARRO engaged a sub-consultant to review the existing disposal field design records, the Route 100 WWTP SBR discharge limits and ARRO study findings. ARRO received the sub-consultant's report and is reviewing the findings. ARRO prepared a revised Route 100 Regional WWTP allocated treatment and disposal capacity summary. Based on an ARRO search and mapping study conducted in late 2016 for new disposal sites within and near the Township ARRO is evaluating a parcel on South Chester Springs Road to propose how the land could be subdivided and will be preparing an estimate of disposal capacity that would be available in the subdivided areas. ARRO evaluated a parcel on South Chester Springs Road to propose how the land could be subdivided and prepared an estimate of disposal capacity that would be available in the subdivided areas. ARRO found two potential 18-acre drip field areas on the parcel each with an average estimated capacity of 100,000 gallons per day. ARRO has initiated preliminary layout design for two potential 18-acre drip fields on the South Chester Springs Road parcel (the Bennett property).

Nothing new to report.

ARRO submitted the Act 537 Planning Grant Application to the Pennsylvania Department of Community and Economic Development on May 23, 2019. ARRO received correspondence from the Pennsylvania Department of Community and Economic Development that they will consider the UUT Act 537 Planning Grant Application at their September 17, 2019 Commonwealth Financing Authority (CFA) Board meeting. The CFA posted its September 17, 2019 meeting grant award list and Upper Uwchlan Township was awarded the \$32,610 grant as requested on the Act 537 Planning Grant application. The UUTMA Act 537 Planning Project is awaiting the grant award documentation and agreement from CFA, which needs to be processed and signed before ARRO can move ahead with the planning. The UUTMA Act 537 Planning Project grant award documentation and agreement from CFA was signed. ARRO has started some basic planning work by reviewing past 537 Planning documents and township demographics. ARRO submitted the 2020 Route 100 Regional WWTP groundwater monitoring report to PADEP on June 19, 2020. The Authority Administrator and ARRO met on January 20, 2021 to discuss various alternatives in connection with ARRO's Act 537 planning work. The Authority Administrator and ARRO met on January 20, 2021 to discuss various alternatives in connection with ARRO's Act 537 planning work. As a follow-up to the January 20, 2021 meeting, ARRO is completing planning level studies of the various discussed alternatives, which will then be incorporated into the final planning document. At the Authority's March 2021 meeting ARRO is preparing to do a short presentation of the Act 537 planning Executive Summary. At the March 2021 Authority meeting ARRO provided the Authority with hard and electronic copies of the draft Act 537 Plan for review and ARRO is now awaiting comments from the Authority. The Act 537 Plan is ready to be sent to Chester County. ARRO went to the August 2021 Township Planning Commission meeting and received comments from the Commission to the Act 537 Plan. ARRO is in the process of preparing responses to these comments and revising the Plan based on the comments. ARRO has yet to receive comments to the Plan from the Chester County Planning Commission and the Chester County Health Department. ARRO prepared and submitted responses to the Township Planning Commission comments. ARRO will meet with the Township Planning Commission at its October meeting. The Chester County Planning Commission submitted a letter to ARRO that the draft Plan was consistent with the County's Comprehensive Plan. The Chester County Health Department has yet to provide a review letter or comments to the draft Plan. ARRO completed drive-by field confirmations of the returned OLDS surveys, but continues to place a hold on completing the in-person field verifications due to COVID-19 concerns. ARRO met with the Township Planning Commission at its October 2021 meeting, reviewed their comments on the Act 537 Plan, and provided further description relative to

ARRO responses to the Commission's comments. Chester County Health Department submitted a review letter with one comment, primarily for minor verbiage clarification. The next step will be to prepare the Plan for public review and comment. Also, at the end of September 2021, ARRO submitted the Plan's quarterly status update to PADEP. ARRO prepared the Plan for public review and comment. ARRO is in the process of preparing the public notice for advertisement of the Plan for the 30 day public comment period. ARRO will coordinate with the Township to place the Notice in the newspaper within the next couple of weeks. A hard copy of the Plan will be provided to the Township to keep at the Township Office front desk for any Township resident who wish to stop by and look at it. An electronic copy will also be provided to the Township to post on their website. ARRO prepared the public notice for advertisement of the Act 537 Plan's 30-day public comment period. On December 6, 2021 ARRO transmitted the notice to the Township who will place the advertisement and an electronic version of the Plan to the Township for placement on the Township's website. ARRO also brought a hard copy of the Plan to the Township Building for public review, too.

Based on Township Bordeaux Estates residents' comments to the Plan, and at the direction of the Authority Administrator, ARRO revised the Plan to delete the Bordeaux Estates subdivision's future sanitary sewer. Only the Edgefield and Highview/Waterview neighborhoods will be included in the Plan for future sanitary sewer service.

### **Route 100 WWTP – Phase III**

ARRO is reviewing the Route 100 Regional WWTP pad-mounted transformer's capacity in planning for the Phase III of the WWTP expansion. On February 12, 2018, ARRO met with a PECO representative at the WWTP to inspect the capacity of the WWTP's existing transformer and review the Phase III project. After ARRO reviewed the transformer data provided by PECO along with additional anticipated Phase III loadings ARRO concluded that the existing transformer will need to be upgraded. On May 3, 2018 ARRO completed a preliminary cost opinion for the Phase III construction. ARRO responded to February 28, 2020 questions from Ebert Engineering regarding the design of the Phase III precast tanks and the SBR treatment system. ARRO reviewed the initial Aqua-Aerobics Phase III Process Design Report and submitted April 3, 2020 comments to Ebert Engineering on the report. Subsequently Ebert Engineering submitted an updated Process Design Report to ARRO, which ARRO is in the process of reviewing. ARRO received a June 9 email from Ebert Engineering that the initial submission of Route 100 Regional WWTP Phase III design documents would be submitted the week of June 22. ARRO received a July 17, 2002 email from Ebert Engineering that Dutchland is proposing to use the common wall design for the two new SBR basins. On July 24, 2020 ARRO received from Ebert Engineering a WQM Part 2 permit application and upgrade design drawings for the Route 100 Regional WWTP Phase III project. ARRO is in the process of reviewing the documents. On August 20, 2020 ARRO transmitted to Ebert Engineering comments to the Route 100 Regional WWTP Phase III WQM Part 2 permit application and upgrade design drawings. ARRO completed review of Ebert Engineering's revised Route 100 Regional WWTP Phase III WQM Part 2 permit application with revised upgrade design drawings transmitted November 4, 2020. On December 16, 2020 ARRO transmitted comments on the documents to Ebert Engineering. ARRO completed a review of Ebert Engineering's further revised Route 100 Regional WWTP Phase III WQM permit application design documents and had no further comments to the application. On January 8, 2021 the Authority Administrator signed the permit application on behalf of the Authority. Ebert Engineering will electronically submit the permit application documents to PADEP the week of January 18, 2021. Ebert Engineering submitted the WQM permit application documents to PADEP by transmittal letter dated January 25, 2021. Keystone Engineering has started the Route 100 Regional WWTP Phase III electrical design. ARRO met a Keystone electrical engineer at the WWTP to review the existing electrical equipment. On April 21, 2021 ARRO was informed by Ebert Engineering that the Route 100 Regional WWTP Phase III electrical design will be submitted for review and comment the week of April 26, 2021. On May 11, 2021, ARRO received from Ebert Engineering the Route 100 Regional WWTP Phase III electrical design. ARRO has started a review of the design. On June 14, 2021, ARRO received the draft Phase III final design technical specifications and drawings from Ebert Engineering for review and comment. ARRO

reviewed the draft Phase III final design technical specifications and drawings and on July 21, 2021 transmitted to Ebert Engineering review comments to the documents. The Authority Administrator submitted an August 2, 2021 letter to PADEP committing to use planning-based flow numbers in the draft Act 537 Plan and expand the Plan to address new land disposal capacity. The Authority Administrator and Ebert Engineering had a September 1, 2021 email exchange with PADEP regarding the WQM permit for the Route 100 Regional WWTP Phase III project. PADEP said it would not issue the WQM permit for the full 0.800 MGD, but would limit the WQM permit to 0.600 MGD. However, PADEP could issue the permit to allow construction of the final two SBR tanks with the caveat that only three of the four SBRs can be operational at any one time. A draft copy of the permit was received by Ebert Engineering the week of September 13, 2021 and was forwarded to the Authority Administrator for review by ARRO. ARRO reviewed the draft copy of the Phase III WQM permit and prepared comments to the Authority Administrator. The ARRO comments were incorporated into a draft letter on Authority letterhead. The letter was submitted to PADEP for use as the basis for discussion in a September 29, 2021 video conference with the Authority Administrator, PADEP, Ebert Engineering and ARRO in an effort to expedite the issuance of a final permit. PADEP issued the final Phase III WQM permit under transmittal letter dated November 15, 2021. ARRO received on October 22, 2021 Ebert Engineering's first revision to the draft Route 100 Regional WWTP Phase III construction drawings and technical specifications. ARRO prepared comments to the documents and submitted them to Ebert Engineering on November 8, 2021. ARRO prepared and submitted on November 16, 2021 further comments to the electrical design. On December 6, 2021 Ebert Engineering submitted the second revision to the draft Route 100 Regional WWTP Phase III construction drawings and technical specifications. ARRO prepared comments to the documents and submitted them to Ebert Engineering on December 20, 2021.

Ebert Engineering is preparing revised plans for the installation of the 3<sup>rd</sup> and 4<sup>th</sup> effluent pumps planned under Phase 1 and Phase 2 and plans for the inclusion of an emergency generator to power two effluent pumps during power outages.

### **Saybrooke**

ARRO prepared the 2021 annual groundwater monitoring report and on June 28 transmitted the document to PADEP. ARRO has started to prepare the 5-Year Comprehensive Groundwater Monitoring Report, which will be included with the 2021 WQM permit renewal application being prepared by Clean Water. ARRO completed preparation of the 5-Year Comprehensive Groundwater Monitoring Report for the 2021 WQM permit renewal application prepared by Clean Water.

Nothing new to report.

### **St. Andrews Brae**

Nothing new to report.

### **Upland Farms**

ARRO is preparing plans and specifications for a low-pressure grinder pump and force main for the Barn Renovation project. ARRO estimated the purchase of 1 EDU would be required for the barn's intended uses. ARRO is attempting to obtain from PADEP a planning module exemption for the proposed barn sewer connection. ARRO received a November 19, 2020 letter from PADEP stating no planning modules need to be submitted for the proposed barn sewer connection. ARRO is working with the Township's project manager (Boyle Construction) for the sanitary sewer portion of the project. The Upland Farms Barn Renovation Sanitary Sewer Connection project is out for bids. A pre-bid meeting is scheduled for March 22, 2021 with bids due April 1, 2021. The Upland Farms Barn Renovation Sanitary Sewer Connection project bids were received. The Township is handling the project. A survey was completed and stakes set along the boundary line between the Waynebrook subdivision and Upland Farms Drip Fields "A" and "B". The site contractor has completed the installation of the barn and farm house site sanitary sewer piping. The grinder pump and its force main

are installed. The contractor is waiting on the barn's new electrical system to be completed and energized in order to conduct the grinder pump start-up testing. The contractor has tentatively scheduled the grinder pump station start-up testing for Wednesday, November 24, 2021. Start-up testing of the grinder pump station on Wednesday, November 24, 2021 was successful.

Nothing new to report.

### **Waynebrook**

Nothing new to report.

### **Windsor Ridge**

Nothing new to report.

### **Miscellaneous**

**Active Adult Community, 100 Greenridge Road** – On January 7, 2021 the Authority Administrator and ARRO met with a developer to discuss the sanitary aspects for a potential 78 ea. lot active adult community situated over a 58.94-acre total site area at 100 Greenridge Road. A sketch of the proposed site and a ChescoViews satellite image of the site is attached to the January 20, 2021 Project Status Report. On June 4, 2021 the Authority Administrator and ARRO met with Toll Brothers regarding this project. ARRO reviewed the project's conditional use application and prepared a September 7, 2021 letter to the Township. The Developer is proposing 64 single-family lots with a required sanitary sewer capacity of 14,400 gallons per day. The proposed subdivision will be serviced by the Route 100 Regional WWTP with drip field irrigation disposal to be offered for dedication to the Township. ARRO reviewed the project's revised conditional use plans, dated October 4, 2021, and submitted an October 27, 2021 comments letter to the Township.

Nothing new to report.

### **Village of Eagle**

**Byers Road Sanitary Sewer Extension** - ARRO preliminary planning for sanitary sewer along Byers Road between Pottstown Pike and Senn Drive was submitted to the Authority Administrator for review and comment. ARRO is preparing the Sewage Facilities Planning Module Component 3M for the sanitary sewer along Byers Road between Pottstown Pike and Senn Drive. ARRO received a completed Component 4A from the Township on October 19, 2017. At the request of the Chester County Health Department, on January 9, 2018, ARRO sent another Sewage Facilities Planning Module Component 3M letter to CCHD for the sanitary sewer extension along Byers Road between Pottstown Pike and Senn Drive. In February 2018 letters were sent to the property owners who will be connected to the new Byers Road sanitary sewer informing them that the project's survey will be commencing. ARRO is continuing to prepare drawings and construction specifications for the sanitary sewer extension. The project's survey work was completed in early March 2018. ARRO has the survey information for inclusion in the plans. ARRO has the design plans and specifications in the final stage of completion. ARRO submitted the highway occupancy permit to PennDOT on April 16, 2018. There were no public comments to the sewage facilities planning module (SFPM) and the Board of Supervisors passed a resolution approving the submission of the SFPM to PADEP. ARRO submitted the Sewage Facilities Planning Module to PADEP on April 27, 2018. Comments from PADEP are expected within sixty (60) days. PennDOT has approved the highway occupancy permit plans and requires payment of \$810 for inspection observation prior to release of the permit. PADEP transmitted its comments to the Sewage Facilities Planning Module by letter dated June 21, 2018. ARRO

is in the process of addressing each of the PADEP comments. The PennDOT Highway Occupancy Permit for the project has been received. ARRO submitted an August 6, 2018 letter to PADEP addressing each PADEP comment from its Sewage Facilities Planning Module review letter, dated June 21, 2018. PADEP transmitted a September 5, 2018 letter with additional comments to Sewage Facilities Planning Module. ARRO submitted a response letter addressing each concern on October 17, 2018. PADEP transmitted a November 14, 2018 letter with additional comments to the Sewage Facilities Planning Module. ARRO is reviewing the letter and will address each comment in a future letter. The Authority Administrator sent a December 20, 2018 letter to PADEP containing responses to PADEP's November 14, 2018 comments to the Sewage Facilities Planning Module. ARRO sent an email to PADEP on January 31, 2019 requesting approval of the Byers Road Sanitary Sewer Extension Sewage Facilities Planning Module. As of March 20, 2019, no response has been forthcoming from PADEP. ARRO is proceeding with preparation of finishing plans and specifications for the bidding of the project. Regarding the Byers Road Sanitary Sewer Extension SFPM and the December 20, 2018 letter sent by the Authority to PADEP, PADEP responded with an April 5, 2019 letter to the Township. PADEP said the December letter did not sufficiently address all of PADEP's concerns with sewage disposal needs identification in the project area. PADEP wants the needs identification submitted by September 3, 2019. ARRO prepared letters that were delivered to property owners in the Byers Road sewer area inviting them to the April 23, 2019 Authority meeting to be held at the Pickering Valley Elementary School. ARRO submitted documents to PennDOT to extend the Byers Road HOP to July 10, 2020 and was granted the extension by PennDOT. At the request of PADEP, on September 26, 2019 ARRO submitted to PADEP a study and \$522,000 cost opinion for potentially providing sewer service to an additional sixteen (16) lots east of the proposed Byers Road Sanitary Sewer Extension terminal manhole. PADEP responded that they will review the study information. ARRO has started preparing a sanitary sewer grant application under the Pennsylvania Department of Community & Economic Development (DCED) H2O PA grant program for the Byers Road Sanitary Sewer Extension project. By letter dated November 7, 2019 PADEP issued Byers Road Sanitary Sewer Extension SFPM approval. ARRO is continuing to prepare and will submit a sanitary sewer grant application under the DCED H2O PA grant program for the Byers Road Sanitary Sewer Extension project. The Byers Road grant application was submitted on December 12, 2019. Action on the application is not expected until May or June 2020. ARRO received a June 12, 2020 email from DCED that the grant application will not be reviewed until September 2020; however, they wanted a timeline for the project after September, which ARRO prepared and submitted. ARRO prepared a PennDOT HOP permit extension for the project. Under Authority letterhead ARRO prepared a July 2020 communication to property owners to be connected to the proposed sanitary sewer extension notifying them of the tentative project schedule. DCED awarded a \$463,000 grant for the Byers Road Sanitary Sewer Extension project. On July 28, 2020 the Township mailed letters to property owners to be connected to the proposed sanitary sewer extension notifying them of the tentative project schedule. ARRO is in communication with DCED regarding proceeding to the bid phase of the project. The DCED grant agreement has been signed. ARRO contacted DCED and they have no issues with bidding the Route 100 sewer crossing as an alternate. Project bid advertising is tentatively set for December 2020 with a January 2021 bid opening. The Byers Road Sanitary Sewer Extension project was first advertised on December 14, 2020 with a second advertisement set for December 21, 2020. A pre-bid meeting is scheduled for January 5, 2021 and bids are due January 15, 2021. Six bids for the Byers Road Sanitary

Sewer Extension project were submitted on January 15, 2021. The apparent low bidder is Highway Materials, Inc. with a Total Extended bid of \$637,504.30, which includes the cost of the Alternate "A" - Sewer Extension Across Route 100. ARRO is in the process of reviewing the bids. As DCED grant funding is involved approvals are subject to DCED concurrent approval. The notice of intent to award and other contract documents have been sent to Highway Materials for execution. ARRO is awaiting return of the executed documents along with bonds and insurance. ARRO reviewed and approved the bonds and insurance documents submitted by the contractor. ARRO recommends the Authority execute the Agreement, after which ARRO will schedule the project preconstruction meeting. ARRO reviewed a land development plan for 164 Byers Road., which specifies a connection to the Byers Road Sanitary Sewer Extension, but will set up Pump & Haul until the sewer extension is complete. By letter dated April 19, 2021 ARRO issued the Notice to Proceed to Highway Materials. Start of Contract Time will be May 12, 2021 with the project to be substantially completed by September 9, 2021. ARRO will schedule the project preconstruction meeting in early May 2021. On May 13, 2021, ARRO conducted the project preconstruction meeting with Highway Materials. Highway Materials has started to submit its shop drawings to ARRO for review and approval. ARRO prepared a letter informing affected property owners of the upcoming work. ARRO also prepared a letter informing affected property owners of a stake placed in each yard identifying the design location of the property lateral and stating the stake may be relocated by the property owner if desired. Construction is anticipated to start on July 2021. On August 10, 2021, Highway Materials indicated to ARRO that it is having issues obtaining SDR-35 PVC pipe for the project, which is currently in limited supply and its cost has risen substantially. Highway Materials asked if the Authority would accept a not-to-exceed \$7500 change order as half of the increased pipe costs. If the change order is acceptable, they could obtain pipe and start construction in early September 2021. Highway Materials initiated construction the week of September 7th. Much of the trench saw-cutting has been completed and Highway Materials is currently installing sewer and manholes in the area of Eagle Farms Road. Highway Materials has completed approximately 75 percent of the sewer within Eagle Farms Road. Portions of the existing 42-inch CMP storm sewer pipe within Eagle Farms Road needed to be exposed for the sanitary sewer main installation; however, the pipe was so badly deteriorated it could not be safely supported during the sanitary sewer main installation, nor could the pipe be removed and replaced after sewer main installation due to its condition. Replacement of the existing 42-inch CMP with 36-inch RCP is proposed. The 36-inch RCP will allow similar flow capacity to the 42-inch CMP and will permit reuse of the existing storm sewer precast concrete structures. The additional cost for replacing 256 LF of storm sewer pipe is \$117,604 or \$459.39/LF. ARRO anticipates this cost will be eligible for 50% funding reimbursement and intends to submit the cost to DCED at the appropriate time. ARRO recommends a change order be granted for the storm sewer work. Additionally, ARRO recommends approving a time extension to late November for substantial completion, with final paving likely delayed until Spring 2022. A detour plan was required by PennDOT for the work east of Graphite Mine Road. ARRO prepared the detour plan and submitted it to PennDOT. PennDOT approved the plan and Highway Materials restarted sanitary sewer installation in Byers Road on November 15, 2021.

Highway Materials completed sanitary sewer installation in Byers Road on January 19, 2022 with the exception of testing. Eagle Farms Road sanitary and storm sewer work is expected to be complete within the next two weeks.

ARRO is studying the feasibility of a sewer extension across Route 100 near Byers Road to pick up commercial business on the west side of Route 100. ARRO is proceeding with the design of the

sewer extension across Route 100 near Byers Road to pick up commercial business on the west side of Route 100. ARRO is continuing work on a plan to extend the proposed Byers Road sewer across Route 100 to the Eaglepointe shopping center entrance. The sewer extension across Route 100 is included as an alternate to the Byers Road Sanitary Sewer Extension project. The amount bid for the Alternate "A" - Sewer Extension Across Route 100 as submitted by the Byers Road Sanitary Sewer Extension project apparent low bidder, Highway Materials, Inc., was \$89,474.00. ARRO is amending the HOP for the Route 100 crossing. Survey has been completed for the Route 100 crossing. Surveyors are preparing the legal description and drawing(s) for the temporary and permanent sanitary sewer easements within Eaglepointe's Simpson Drive. Surveyors prepared the legal description and drawing for the temporary and permanent sanitary sewer easements within Eaglepointe's Simpson Drive. The Authority's counsel prepared a draft Deed of Dedication for Sanitary Sewer Easement. ARRO reviewed the draft Deed and in May 2021 transmitted it to J. Loew Property Management for approval. Authority Administrator has discussed the easement situation with J Loew after finding out they are selling Eaglepointe. On July 13, 2021, Highway Materials submitted to ARRO a 52-calendar day contract time extension request due to the inability to procure PVC pipe for the project because of a nationwide PVC resin shortage. The request would revise the Byers Road project substantial completion date from September 9, 2021 to October 31, 2021. ARRO recommends the time extension be approved. ARRO attended a July 29, 2021 meeting with Eagle Retail Associates and the prospective owner of Eaglepointe to discuss the proposed Simpson Drive sanitary sewer easement. Subsequently, on August 2, 2021, Eagle Retail Associates submitted revisions to the Deed of Dedication for Sanitary Sewer Easement prepared by the Authority counsel. The requested revisions are being reviewed and comments prepared. On September 14, 2021 sanitary sewer easement agreement with Eagle Retail Associates was finalized and recorded. Highway Materials started excavation in the easement for the boring under Route 100. The work associate with the boring should be to be completed by the end of the September 2021. Highway Materials has completed excavation in the Eaglepointe easement and the boring under Route 100.

Nothing new to report.

**Milford Farms** – ARRO had survey completed on Surrey Lane and Carriage Drive, and on portions of Font Road and Milford Road, as preliminary to the sanitary sewer design for residential homes along these roads. Survey indicated Milford Road gravity sewers would be untenable due to existing grades. ARRO completed a preliminary design for gravity sewer within Surrey Lane, Carriage Drive and the portion of Font Road between Surrey and Carriage. A small wastewater pump station will be needed. The pump station is proposed to be located at the intersection of Font Road and Milford Road and its force main would be connected to an existing force main located in Font Road serving three homes on the Milford Road dead-end. ARRO prepared presentation graphics of the proposed sewer for the Authority Administrator. ARRO prepared letters that were delivered to property owners in the Milford Farms sewer area inviting them to the April 23, 2019 Authority meeting to be held at the Pickering Valley Elementary School. ARRO is proceeding with the preparation of the sanitary sewer design drawings and specifications for project's submission to PADEP. ARRO is creating Milford Road and Byers Road sanitary sewer informational documents for the Township's website. ARRO is reviewing the planning module application and getting it ready for Authority and Township signatures before its submission to PADEP. ARRO submitted the planning module application to PADEP on May 10, 2020. Under Authority letterhead ARRO prepared a July 2020 communication to property owners to be connected to the proposed sanitary sewer extension notifying them of the tentative project schedule. On July 28, 2020 the Township mailed letters to property owners to be connected to the proposed sanitary sewer extension notifying them of the tentative project schedule. ARRO is working on completing the design drawings and specifications for the project. On September 18, 2020 planning module approval was received from PADEP. ARRO is continuing to prepare the WQM Part 2 permit for the proposed pump station as well as the plans and specifications. ARRO intends to soon submit the WQM Part II permit application package to PADEP. A \$500 fee to the Commonwealth of Pennsylvania is required as part of the permit application. ARRO submitted the

WQM Part II permit application to PADEP on February 15, 2021. ARRO received the WQM Part II permit from PADEP via email on June 4, 2021.

Nothing new to report.

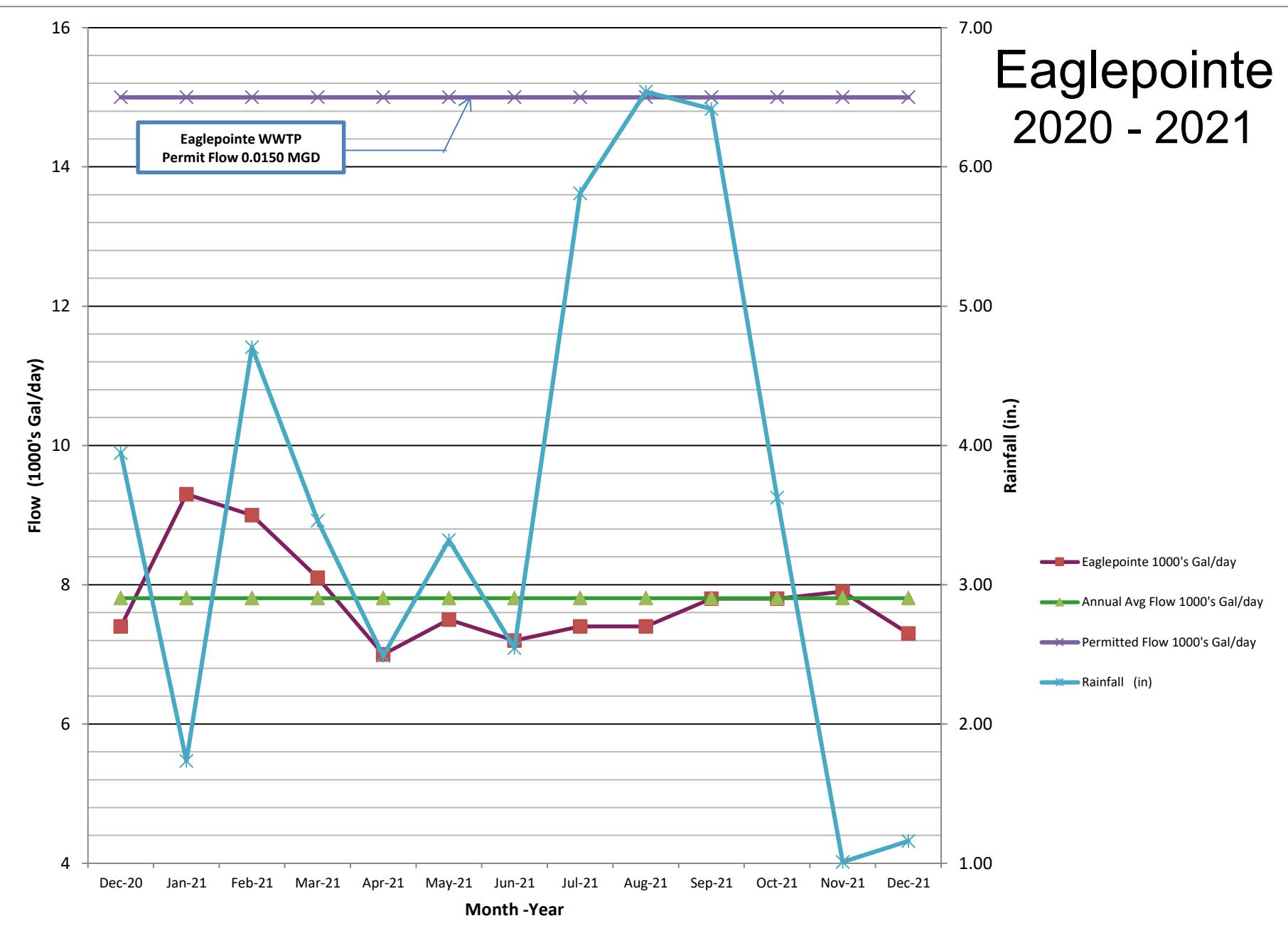
**Township Wastewater Treatment Plant's Monthly Average Flow Charts** – Please see the attached.

**UPPER UWCHLAN MUNICIPAL AUTHORITY**  
**WASTEWATER TREATMENT PLANTS**

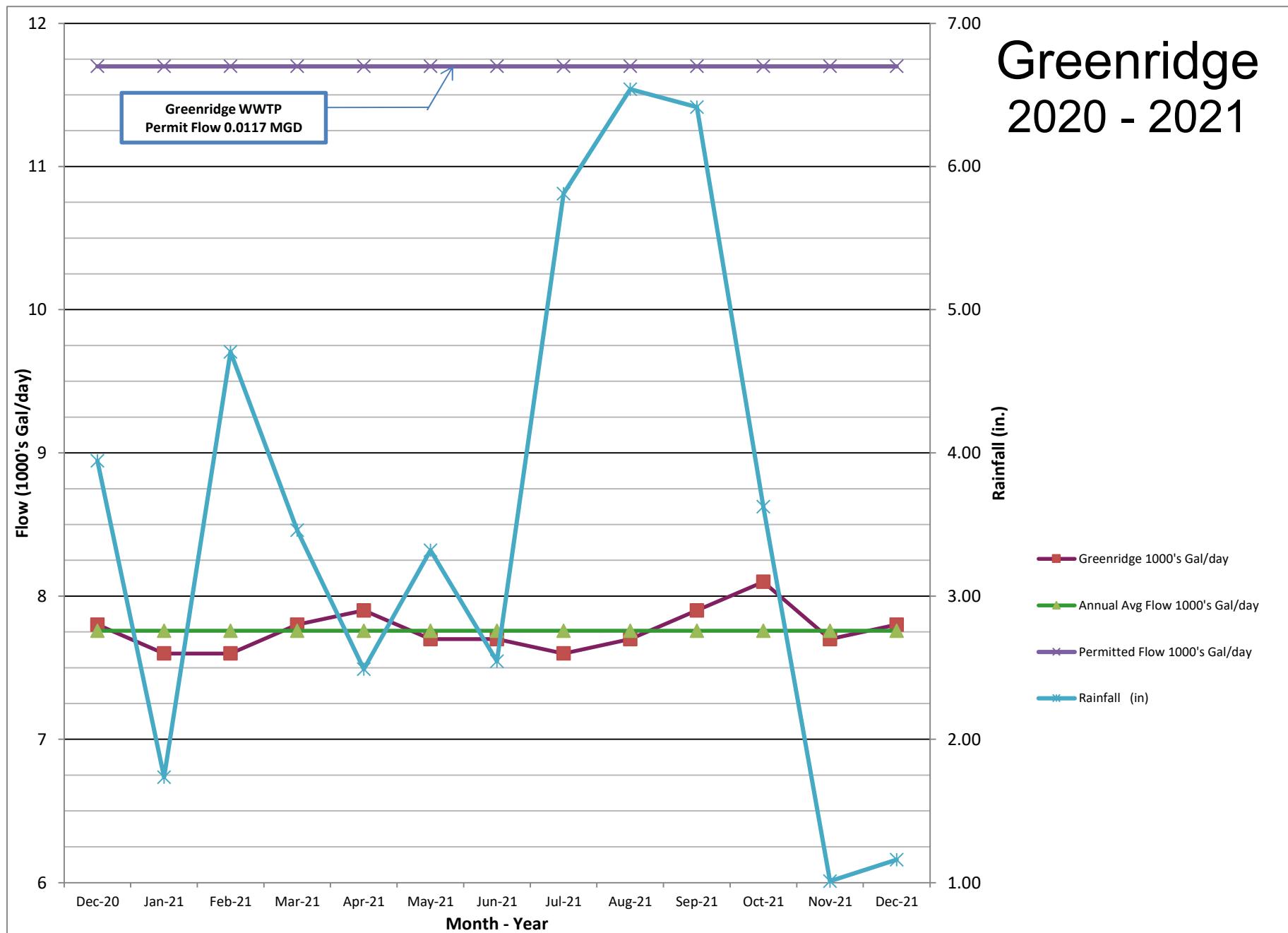
**MONTHLY AVERAGE DAILY FLOWS**

Month - Year		Average Daily Flow (MGD)							Rainfall (in)
		Eaglepointe	Greenridge	Lakeridge	Marsh Harbour	Route 100	Saybrooke	St. Andrews	
Dec-20		0.00740	0.00780	0.02930	0.04500	0.40180	0.00750	0.00250	3.95
Jan-21		0.00930	0.00760	0.02660	0.04460	0.39120	0.00730	0.00260	1.74
Feb-21		0.00900	0.00760	0.02560	0.04190	0.40970	0.00790	0.00280	4.71
Mar-21		0.00810	0.00780	0.02750	0.04270	0.40250	0.00810	0.00270	3.46
Apr-21		0.00700	0.00790	0.02420	0.04040	0.38520	0.00770	0.00250	2.49
May-21		0.00750	0.00770	0.02420	0.03960	0.38400	0.00740	0.00230	3.32
Jun-21		0.00720	0.00770	0.02430	0.03810	0.38210	0.00720	0.00220	2.55
Jul-21		0.00740	0.00760	0.02290	0.03580	0.36390	0.00720	0.00110	5.81
Aug-21		0.00740	0.00770	0.02380	0.03670	0.36290	0.00710	0.00110	6.54
Sep-21		0.00780	0.00790	0.02450	0.03680	0.37500	0.00720	0.00180	6.42
Oct-21		0.00780	0.00810	0.02290	0.03630	0.37410	0.00780	0.00190	3.63
Nov-21		0.00790	0.00770	0.02330	0.03580	0.37750	0.00740	0.00170	1.01
Dec-21		0.00730	0.00780	0.02430	0.03610	0.37090	0.00730	0.00180	1.16
<b>Annual Avg Flow =</b>		<b>0.00781</b>	<b>0.00776</b>	<b>0.02451</b>	<b>0.03873</b>	<b>0.38158</b>	<b>0.00747</b>	<b>0.00204</b>	
<b>Permitted Flow =</b>		<b>0.01500</b>	<b>0.01170</b>	<b>0.04000</b>	<b>0.07600</b>	<b>0.60000</b>	<b>0.00920</b>	<b>0.00360</b>	

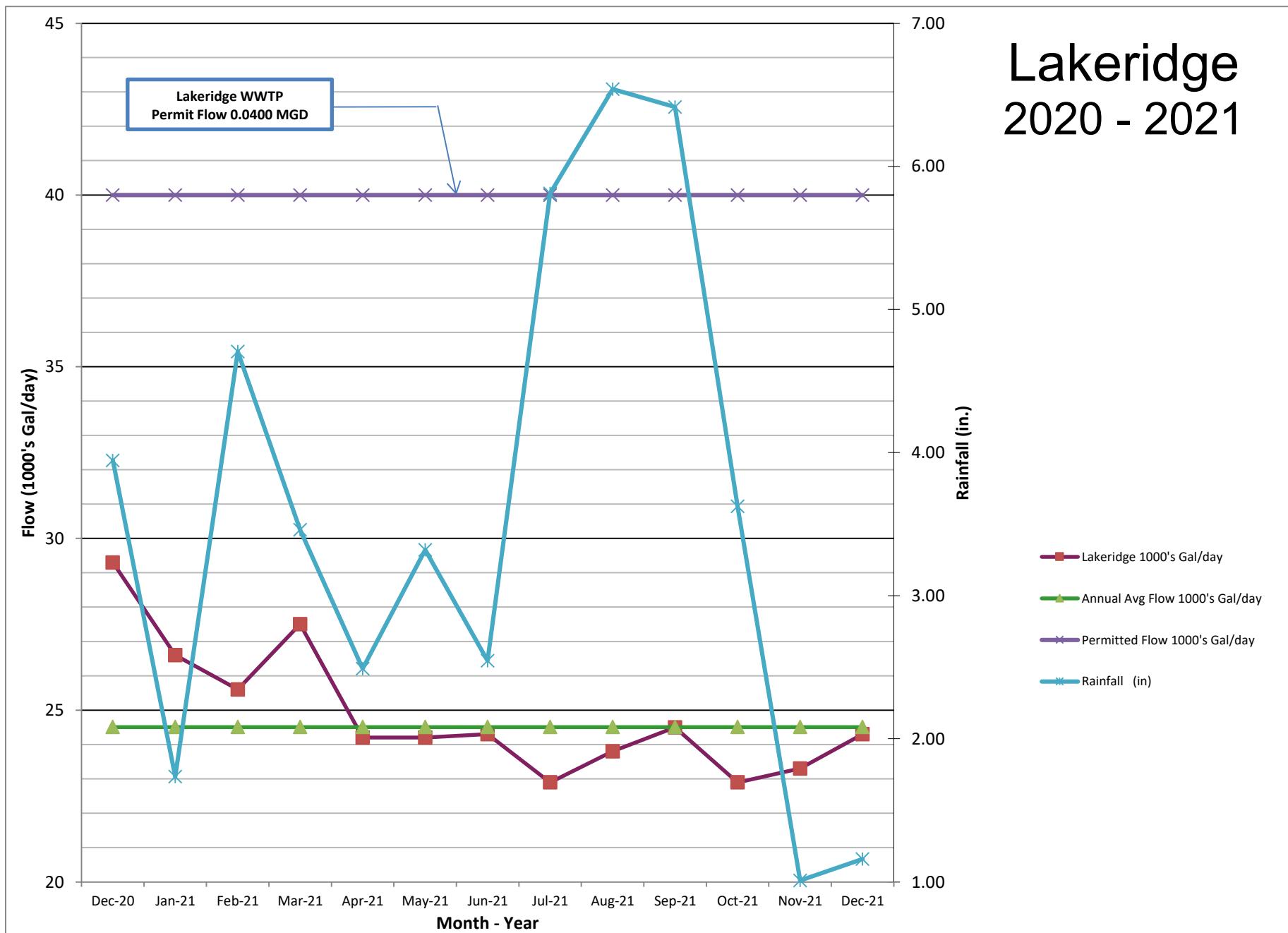
# Eaglepointe 2020 - 2021



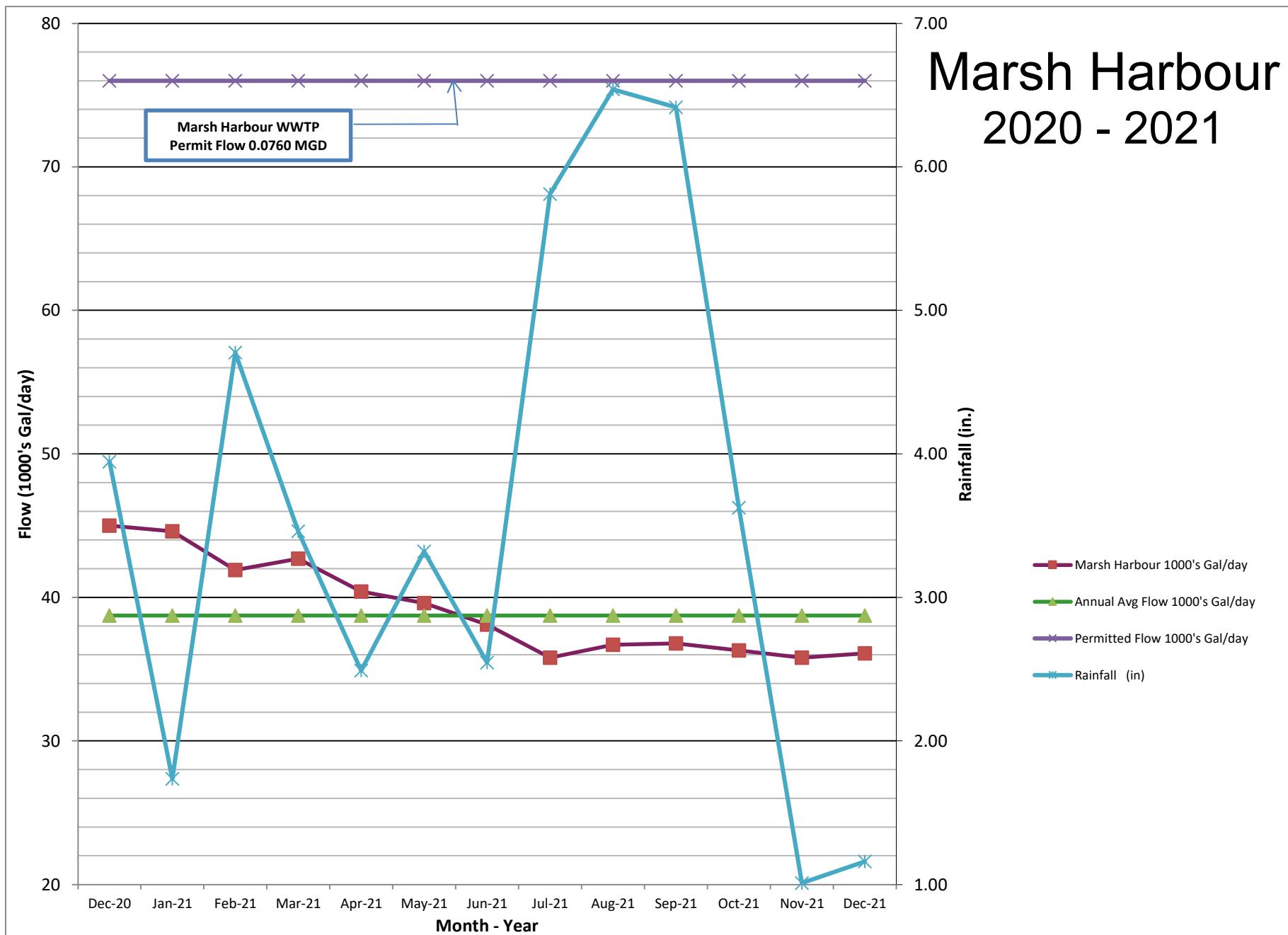
# Greenridge 2020 - 2021



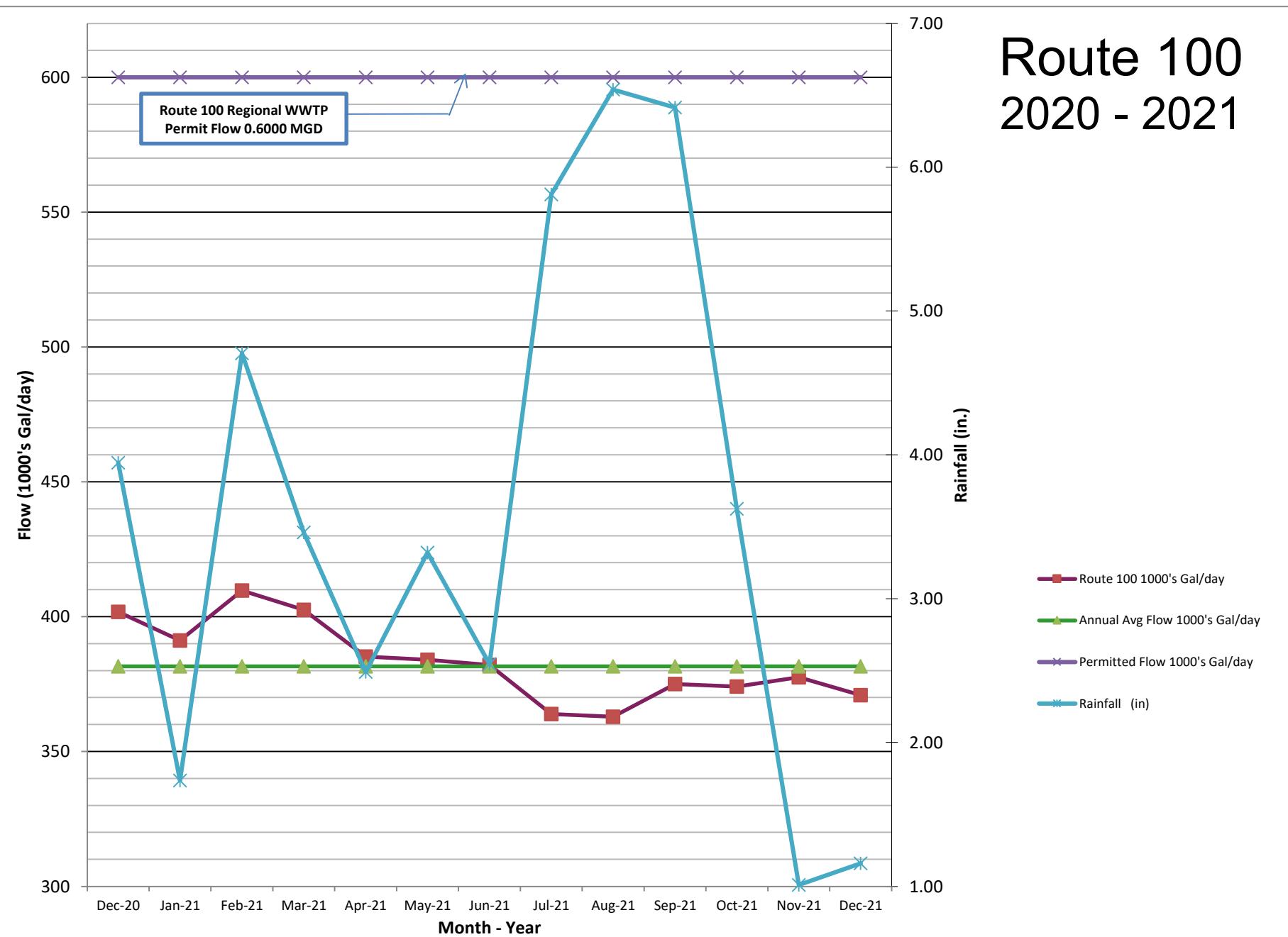
# Lakeridge 2020 - 2021



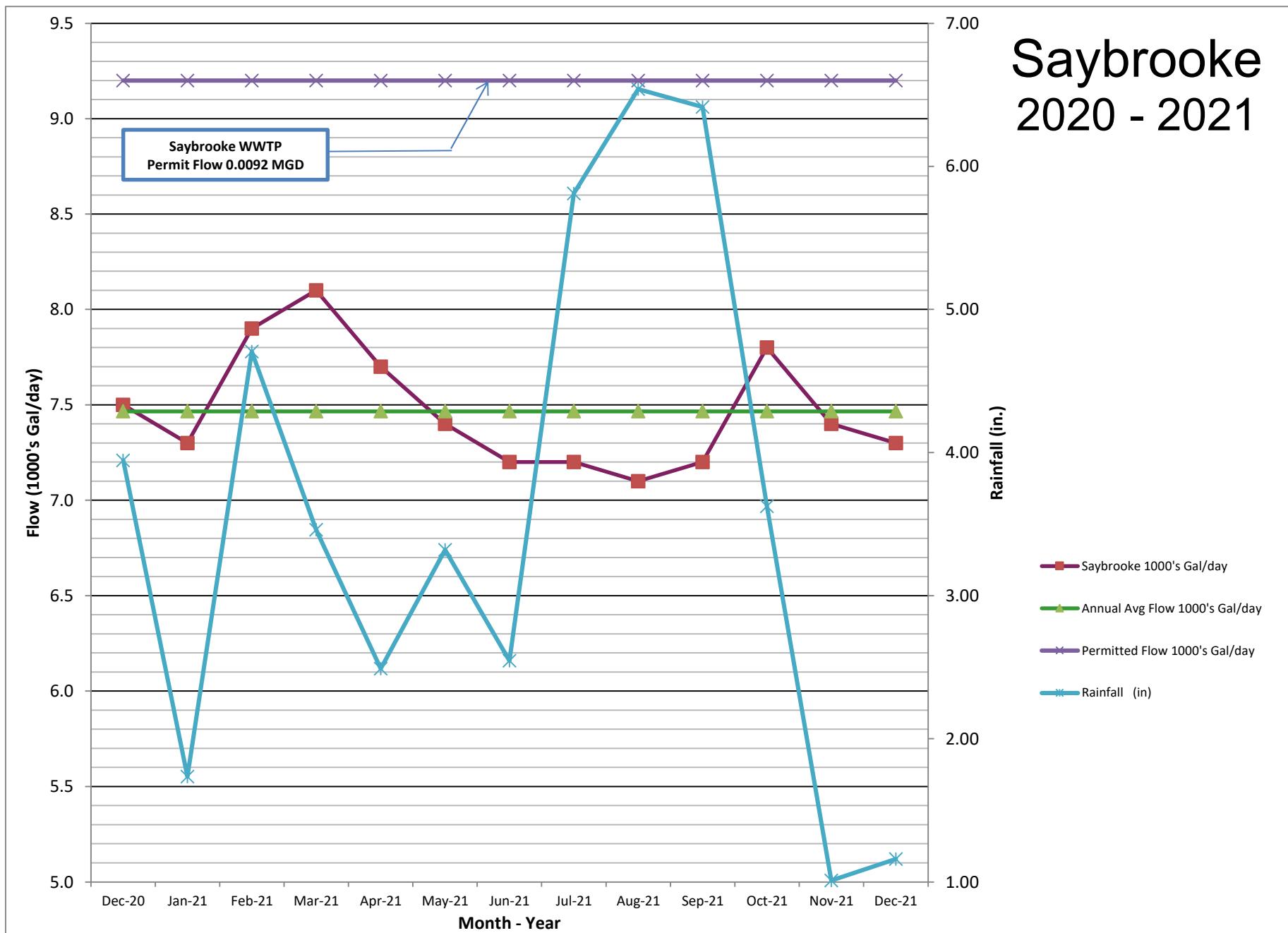
# Marsh Harbour 2020 - 2021



# Route 100 2020 - 2021

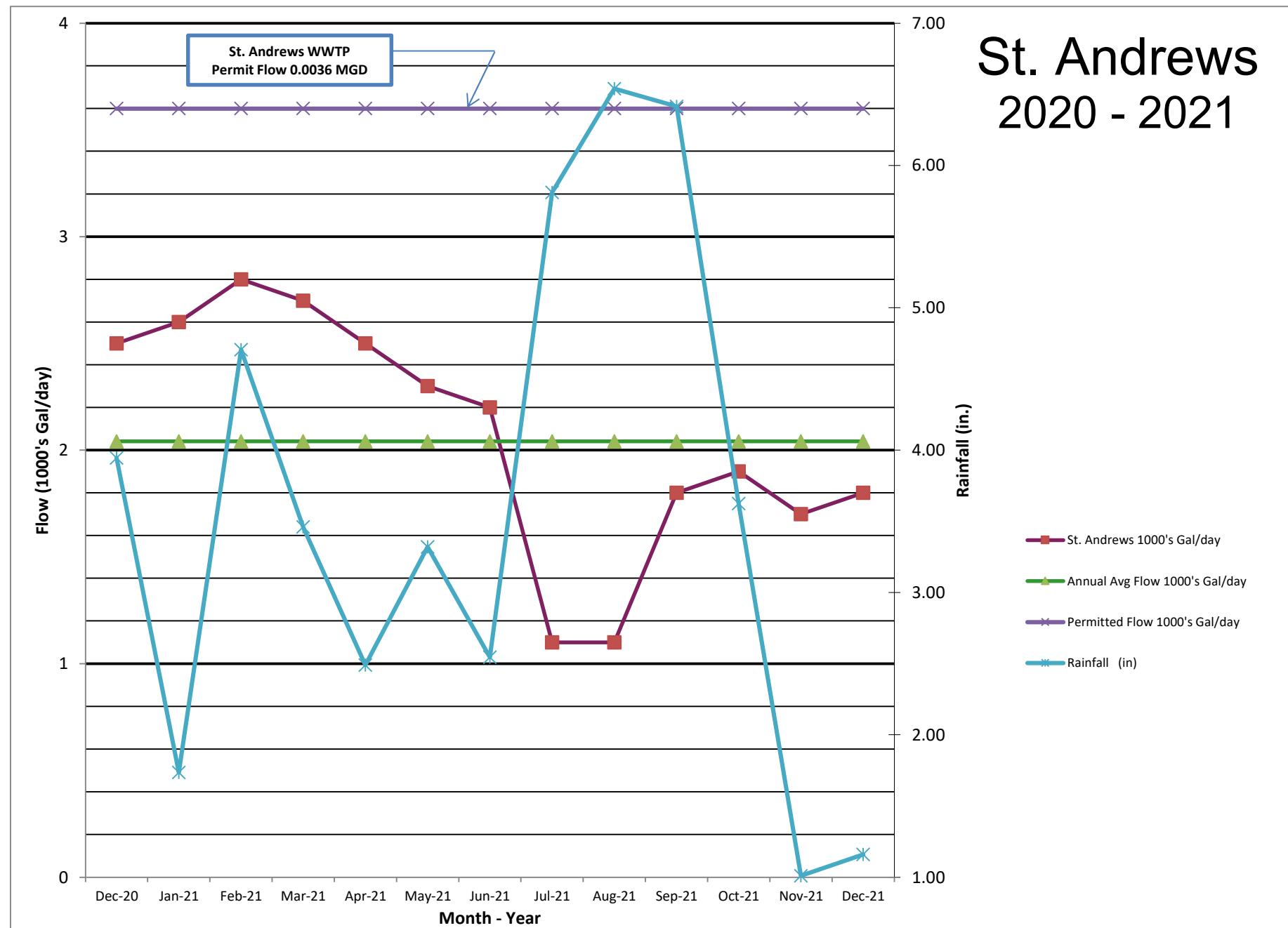


# Saybrooke 2020 - 2021



# St. Andrews

## 2020 - 2021





To: Municipal Authority Members  
From: G. Matthew Brown, P.E., DEE  
Re: Authority Administrator's Report  
Date: January 19, 2022

Activities for the **five-week** month include:

- A. Communication with WWTF Operator, ARRO and Township Staff regarding operational and maintenance issues. (47.0 hours)
- B. Preparation of administrative documents for the Authority meeting packet and for the Authority files. (4.0 hours)
- C. Ongoing communication with residents in Stonehedge relative to concern over a proposed Toll project at 100 Greenridge Road. This includes discussion with the Operator, ARRO and Township staff. (6.0 hours)
- D. Ongoing communication with residents in Bordeaux Estates over the draft Act 537 Plan and the potential for extension of sanitary sewer. (10.0 hours)
- E. Communication regarding septic system issues and/or possible connection to the sanitary sewer system. Inquiries included residents on Moore Road and Walter Court. (1.0 hours)
- F. Preparation of the 2022 Draft Capital and Operating Budgets (12.0 hours)
- G. Communication with the Authority Solicitor and McKee regarding an amendment to the developer agreement to facilitate the developer financing. (2.0 hours)

Please advise if you have any questions or comments.



## DECEMBER 2021 REPORT UUT MUNICIPAL AUTHORITY PUBLIC WORKS DEPARTMENT

The following projects are underway:

**Ongoing:**

- Locks were spot checked at all pump stations. All have been secure.
- Spot checks continue and all visitors are still using the sign-in sheets at all properties.

Public Works continues to work on the properties as follows:

**Complete:**

- Route 100 Wastewater Treatment Plant (WWTP)
  - Mopped
  - Restroom cleaned
  - Site checks
- Byers Station Effluent Pump Station (PS)
  - General cleaning
  - Swept floors
  - Site checks
- Byers Station Influent PS
  - General cleaning of station
  - Site checks
- Ewing PS
  - General cleaning of station
  - Site checks
  - Trash removal
- Ewing West Vincent PS
  - General cleaning of station
  - Site checks

- **Ewing Tract Effluent Disposal System**
  - Site checked
  - Cleaned facility
- **Eagle Hunt**
  - Site check
  - General cleaning of this location
- **Windsor Ridge**
  - General cleaning
  - Site checks
- **Saybrooke WWTP**
  - Site checks
  - General cleaning of station
- **Seabury Lane**
  - Site check
- **Yarmouth PS1**
  - Site checked
- **Yarmouth PS2**
  - Site checks
- **St Andrews Brae**
  - Site checks
  - Cleaned facility
- **St Andrews Brae PS (at St Andrews intersection)**
  - Site checks
- **Reserve Lagoon**
  - Site checks
  - General cleaning of station
- **Reserve at Eagle PS1**
  - Site checks
  - General cleaning of station
- **Reserve at Eagle PS 2**
  - Site checks
  - General cleaning of station
- **Upland Farms PS/ Reserve at Waynebrook**
  - Site checks
  - Cleaned facility

- **Greenridge**
  - Cleaning of station
  - Site checks
- **Stonehedge**
  - Site checks
  - General cleaning
- **Marsh Harbour WWTP**
  - Site checks
  - General cleaning
- **Marsh Harbour PS**
  - Site checks
- **Meadowcreek**
  - Site checks
- **Eaglepointe**
  - General cleaning
  - Trash collection
  - Site checks
- **Heron Hill PS**
  - Site check
- **Lakeridge WWTP**
  - General cleaning
  - Site checks
- **Lakeridge Pump Station**
  - Site check
  - General cleaning
- **Eagle Farms Rd PS (West Vincent)**
  - General cleaning of station
- **Little Conestoga Rd PS**
  - Cleaned facility
  - Site checks
- **Eagle Manor PS (Dorothy Lane)**
  - Site checks
- **Garrison Drive (spray field pump station #1)**
  - Site checked

- **Garrison Dr. (spray field pump station #2)**
  - Site checked
  - Cleaned facility
  
- **Public Works continues to respond to Pa 1-calls.**
- **Snow removal was done**
- **Heaters were checked**
- **Thermo Plastered any manhole tops that needed done for plowing**
- **UUT responded to 64 PA 1-Call tickets during the month.**

**Respectfully submitted,**

**Michael G. Heckman  
Director of Public Works  
Upper Uwchlan Township**



## RESOLUTION # 01-25-22-22

**WHEREAS**, the Upper Uwchlan Township Municipal Authority wishes to establish Administration Costs and User Fees for calendar year **2022**, and

**WHEREAS**, the Upper Uwchlan Township Municipal Authority has determined the Administration Costs and User Fees as follows:

**2022 Administration Costs:** **\$ 275,100**

**2022 User Fees:**

SYSTEM	2021 RATE	PROPOSED 2022 RATE
Commercial Users	\$12.00 / 1,000 gallons	\$12.00 / 1,000 gallons
Fellowship Road	\$190.00 / quarter	\$190.00 / quarter
Lakeridge	\$190.00 / quarter	\$190.00 / quarter
Marsh Harbour	\$190.00 / quarter	\$190.00 / quarter
Meadow Creek	\$190.00 / quarter	\$190.00 / quarter
Saybrooke	\$190.00 / quarter	\$190.00 / quarter
St. Andrews Brae	\$190.00 / quarter	\$190.00 / quarter
Greenridge	\$190.00 / quarter	\$190.00 / quarter

**NOW, THEREFORE**, be it resolved, the Upper Uwchlan Township Municipal Authority 2022 Operating Budget totals **\$ 2,123,585.00**

**HEREBY RESOLVED and ADOPTED**, this 25th day of January, 2022.

UPPER UWCHLAN TOWNSHIP  
MUNICIPAL AUTHORITY

ATTEST:

\_\_\_\_\_  
Donald Carlson, Member

\_\_\_\_\_  
G. Matthew Brown  
Authority Administrator

\_\_\_\_\_  
Hal Harper, Member

\_\_\_\_\_  
William Quinn, Member

\_\_\_\_\_  
Louis Schack, Member

\_\_\_\_\_  
Robert Watts, Member



**UPPER UWCHLAN TOWNSHIP MUNICIPAL AUTHORITY  
CHESTER COUNTY  
COMMONWEALTH OF PENNSYLVANIA**

# **2022 Budget**

**Budget Presented – December 28, 2021**

**Budget Approved – January 25, 2022**

**Table of Contents**

	<u>Page</u>
<b>1. Executive Summary</b>	
About the Upper Uwchlan Township Municipal Authority	1
Executive Summary	2
Accomplishments & Goals	3
Wastewater Treatment Facilities – At A Glance	5
Basis of Accounting and Budgeting	6
<b>2. Facilities</b>	
Wastewater Treatment Facilities – Detailed Description	
• Eaglepointe	7
• Greenridge	7
• Lakeridge	8
• Marsh Harbour	9
• Meadow Creek	10
• Route 100 Regional	11
• Saybrooke	13
• St. Andrews Brae	13
<b>3. Operating Budget</b>	15
<b>4. Capital Budget Equipment Replacement</b>	17
Recommendations	20
<b>5. Glossary</b>	

## **About the Upper Uwchlan Township Municipal Authority**

### **Organization**

The Upper Uwchlan Township Municipal Authority (Authority) was incorporated by the Upper Uwchlan Township, Chester County, Pennsylvania in 1990 for the purpose of operating the sewage collection, treatment plants and other facilities used in the processing and disposal of sewage from Township residents and businesses. All of the capital assets are owned by Upper Uwchlan Township and are operated and maintained by the Authority under a long-term arrangement.

### **Board of Directors**

The Authority is governed by a five (5) member Board of Directors. Board members are appointed by the Upper Uwchlan Township Board of Supervisors to serve for five (5) year terms. Each year, the Board votes to select a new Chairman and Vice-Chairman. The current Board members and their terms of office are:

<b><u>Member</u></b>	<b><u>Position</u></b>	<b><u>Term Expires</u></b>
Robert Watts	2021 Chairman	12/31/2022
Louis Schack	2021 Vice-Chairman	12/31/2025
Bill Quinn	Member	12/31/2021
Donald B. Carlson	Member	12/31/2023
Hal Harper	Member	12/31/2023

### **Management and Operations**

The Authority has appointed G. Matthew Brown, P.E., D.E.E. as the Authority Administrator and has hired ARRO Consulting, Inc. as the Authority's Engineer. Clean Water, Inc. was appointed by the Authority as the Authority Operator.

The Authority has an administration agreement with Upper Uwchlan Township under which the Township employees perform many functions for the Authority and the Authority reimburses the Township for the cost of the services provided. These include: oversight, providing financial services (paying Authority bills, preparing monthly reports for Authority meetings, etc.), treasury functions, collection of sewer receipts, providing services to residents, maintenance of facilities (grass cutting, etc.) and any other services needed.

The Authority has no employees.

## Executive Summary

Upper Uwchlan Township (Township) has eight (8) public wastewater systems located throughout the Township to collect and treat sewage generated by homes and businesses residing within each system service area. The Township also has a large number of homes and businesses that have private on-lot disposal systems consisting of septic tanks and drain fields, some of which are failing. This is especially critical as the Township lies within two (2) high quality watersheds; Marsh Creek (which lies within the East Branch of Brandywine Creek watershed) and Pickering Creek; which both ultimately drain to the Chesapeake Bay. Due to the initiatives outlined by the United States Environmental Protection Agency (US EPA) to protect the Delaware and Chesapeake Bays from nutrient overload, these high quality watersheds must be protected, specifically from higher levels of nitrogen and phosphorous compounds commonly found in wastewater. Failing or malfunctioning on-lot disposal systems have an adverse impact on the watersheds.

A review of the soils within the Township boundary using the Natural Resources Conservation Service Web Soil Survey indicates that over half of the soils in the Township have very limited suitability for septic tank absorption fields. The soil properties considered are those that affect absorption of the effluent, construction and maintenance of the system, and public health. Very limited suitability indicates that the soil has one or more features that are unfavorable for septic tank absorption fields. Knowing this, the Township strives to connect residences and businesses to one (1) of the eight (8) public wastewater systems whenever possible.

Another complication that results from the high quality watersheds that surround the Township is the method used to dispose of treated effluent. Of the eight (8) wastewater treatment plants (WWTP) in the Township, only two (2) are permitted by the Pennsylvania Department of Environmental Protection (PA DEP) to discharge treated wastewater directly to a stream (which is the conventional method of wastewater disposal in PA). The remaining six (6) WWTPs utilize land application of treated effluent for disposal. Land application must be used because obtaining a direct discharge permit is becoming increasingly difficult as the PA DEP continues to make the treatment requirements more and more stringent to comply with the USA EPA Chesapeake Bay program requirements. This becomes even more complicated when the stream that is being discharged to is high quality. The level of treatment that would be required to meet these standards is so high that it would not be cost effective to the Township or its residents to construct and operate the wastewater systems this way. Therefore, land application is used in lieu of direct discharge of disposal of treated wastewater.

The capital assets of the wastewater system are owned by the Township, but are operated and maintained by the Township Municipal Authority (Authority). More detailed information on each of the eight (8) wastewater facilities, what has been achieved in the past year, and the goals for the future can be found below.

## 2021 Accomplishments and Our Goals for 2022

### **What was accomplished in 2021**

In 2021, the Authority's quarterly sewer rates were not increased and remained at \$190 per quarter. The COVID-19 pandemic impacted some project schedules.

Byers Road Sanitary Sewer Extension Project was awarded and construction was initiated. Due to Covid-19 and supply chain issues some of the materials were delayed for the project. The construction is currently ongoing.

Lakeridge Wastewater System - The Ivy Stone Drive sanitary sewer mains televising investigation was completed. Only some minor sags were found with no major pipe compromises.

Marsh Harbour Wastewater System - Monitoring Well No. 6 casing was raised two feet.

Route 100 Regional Wastewater System - The aerator motor for the treatment lagoon was replaced. The Influent Pump No. 2 was replaced. The screen and brush on the Roto Screen were also replaced.

Saybrooke Wastewater System – A Pump was replaced in the remote pump station.

The Act 537 Plan Update was drafted and submitted to the Township and County Planning Commissions for review. Responses were prepared to the comments received from both entities, and it is nearing the public comment phase.

## What is planned for 2022

In 2019 the Authority secured funding in the amount of \$5.105 million for projects that are scheduled to take place in 2022 or later. These projects are as follows:

- \$2.5 million for the Route 100 WWTP Phase III upgrade
  - As discussed in the Route 100 Regional Wastewater Treatment Facility Detailed Description, the McKee/Fetter's property development is going to exceed the Phase II capacity of the Route 100 WWTP. The developer is going to design and construct Phase III of the WWTP, and the Township will purchase excess capacity that results from the upgrade that the developer does not utilize for the McKee/Fetter's property. This excess capacity will be used for connecting new or existing homes within the Authority's service area to the Route 100 WWTP.
- \$0.785 million for the Byers Road Phase II collection system expansion (less H2O Grant).
  - Part of the Authority's most recent update to the Act 537 Sewage Facilities Plan on record with the PA DEP indicates that a collection system will be installed out Byers Road east of Route 100. The design of this expansion is complete and all approvals were obtained from PA DEP. The project was delayed due to H2O Grant funding approval and COVID-19 pandemic. The project is currently under construction and should be completed in the Spring 2022.
- \$1.1 million for the purchase of land for effluent disposal
  - As discussed in the Executive Summary, six (6) of the wastewater facilities within the Township utilize land application for treated effluent as opposed to direct stream discharge. For most of the facilities, there was no anticipated growth at the time of design and construction, therefore there is adequate disposal capacity for the size of the WWTP. However, the Route 100 WWTP was constructed with the knowledge that it would be expanded. The Township does not currently own enough land to dispose of all 900,000 gallons of treated effluent that could be generated in a day once Phase III is constructed. Therefore, purchase of land that is sufficient for land application of wastewater is an important task for the Township and Authority to pursue.
- Remaining funds will be used for the Milford Farms collection system expansion
  - Milford Farms is known as an area with a large number of failing septic systems. As part of the Chester County Health Department's review of the Jankowski Tract planning documents, they commented that "because there have been several malfunctions along Surrey Lane, Font Road and Carriage Drive, the area would benefit from public sewerage." This, in addition to the presence of residents at the Authority meetings toward the end of the 2018 calendar year, is the impetus behind the design of a collection system in this area. This project is expected to commence in 2022.

**Wastewater Treatment Facilities – At a Glance**

Facility Name	Location	Daily Capacity (gallons)	Disposal Methods	Date Placed in Service	Number of businesses or residences served
Eaglepointe	South of Ticonderoga Blvd, adjacent to the Pa. Turnpike	15,000	Effluent is directly discharged to a tributary of Marsh Creek	2003	30 businesses located west of Route 100 and Little Conestoga Road
Greenridge	Southwest of the intersection of Greenridge Rd and Dan Dr	15,125	Effluent is discharged to one disposal field for drip irrigation	2005	61 homes in Greenridge & Stonehedge developments
Lakeridge	North of Dorlan Mill Rd and to the east of Moore Rd	40,000	Effluent is discharged to a series of five sand mounds and one subsurface absorption bed	1983	148 homes in Lakeridge, Hunter's Ridge and Ivystone developments
Marsh Harbour	Between Mallard Ln and Carpenter's Cove Ln	82,000	Effluent is discharged to two disposal fields for spray irrigation	1990	All homes in Marsh Harbour and Heron Hill developments
Meadow Creek	Southeast corner of Styer Rd and Meadow Creek Ln	1,300	Effluent is discharged to one subsurface absorption bed	1990	5 homes in Meadow Creek development
Route 100 Regional *	East of Route 100 along the north side of Fellowship Rd	800,000	Effluent is discharged to 19 disposal fields for spray and drip irrigation	2004	All homes in Byers Station, Reserve at Eagle, Reserve at Waynebrook, Windsor Ridge, Eagle Manor, Heather Hill, and Windsor Place.
Saybrooke	Southwest side of Yarmouth Ln	9,200	Effluent is discharged to a series of four subsurface absorption beds	1999	41 homes in Saybrooke development
St. Andrews Brae	North side of Kiloran and Bryan Wynds southern intersection	3,600	Effluent is directly discharged to a tributary of Marsh Creek	2003	13 homes in St. Andrews Brae development

\* The Route 100 Regional WWTP will have an ultimate capacity of 800,000 gallons. Phase I of the WWTP (placed in service in 2004) had a capacity of 200,000 gallons, Phase II of the WWTP (placed in service in 2015) has a capacity of 600,000. Phase III of the WWTP is anticipated to be placed into service in 2022.

## BASIS OF ACCOUNTING AND BUDGETING

### Accounting Basis

The Authority uses the accrual basis of accounting. Under this basis, revenues are recorded when earned and expenses are recorded when incurred, even though actual payment or receipt may not occur until after the period ends.

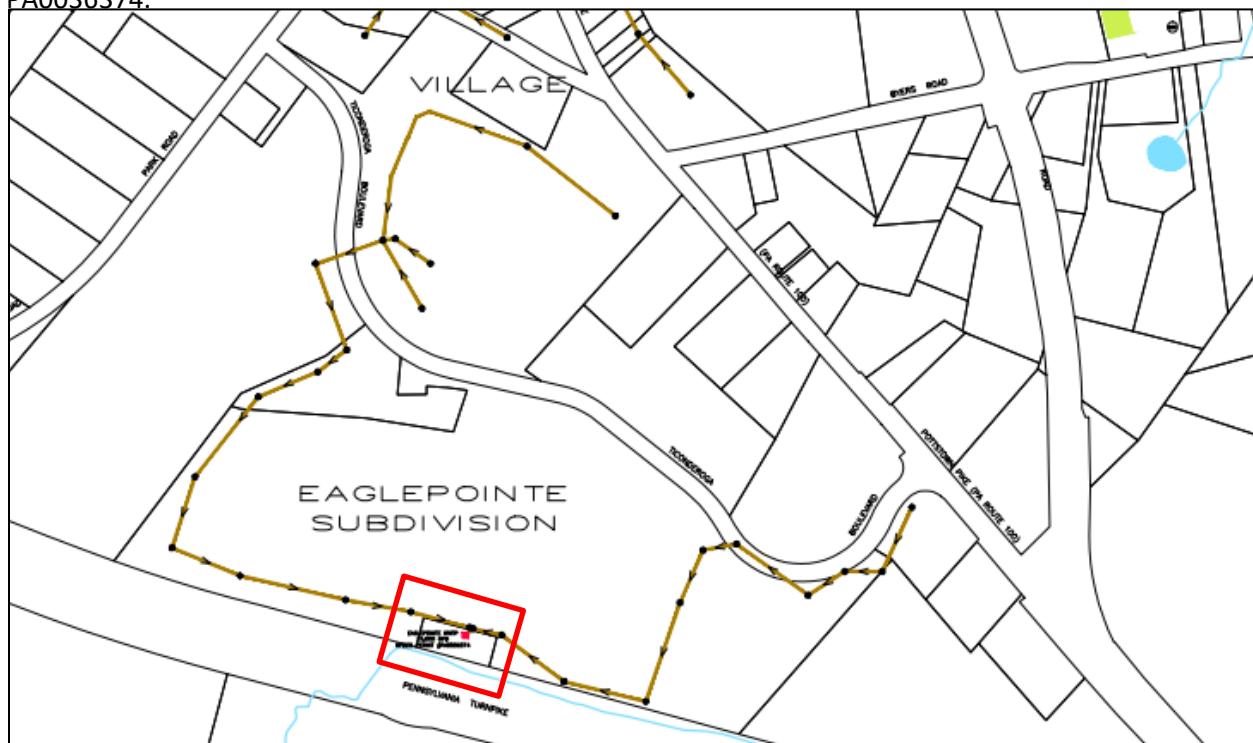
### Basis of Budgeting

The Authority's budget has been prepared using the modified accrual method of accounting. Modified accrual accounting recognizes revenues when they become measurable and available. **Measurable** means that the dollar amount of the transaction is known. **Available** means that it is collectible within the current period, or soon enough after the end of the current period to pay liabilities of the current period. For this purpose, the Township considers revenues to be available if they are collected within 30 days of the reporting period. Expenditures are generally recorded when a liability is incurred.

## Wastewater Treatment Facilities – Detailed Description

### Eaglepointe Wastewater System

The Eaglepointe Wastewater System consists of the Eaglepointe WWTP, rated for 15,000 gallons per day (gpd), which collects sewage from commercial properties along Ticonderoga Boulevard. The treatment process consists of an equalization tank, an aeration tank, a clarifier, sand filters, and a chemical contact tank. Following treatment, effluent is discharged directly into a tributary of Marsh Creek under the PA DEP National Pollutant Discharge Elimination System (NPDES), Permit No. PA0036374.



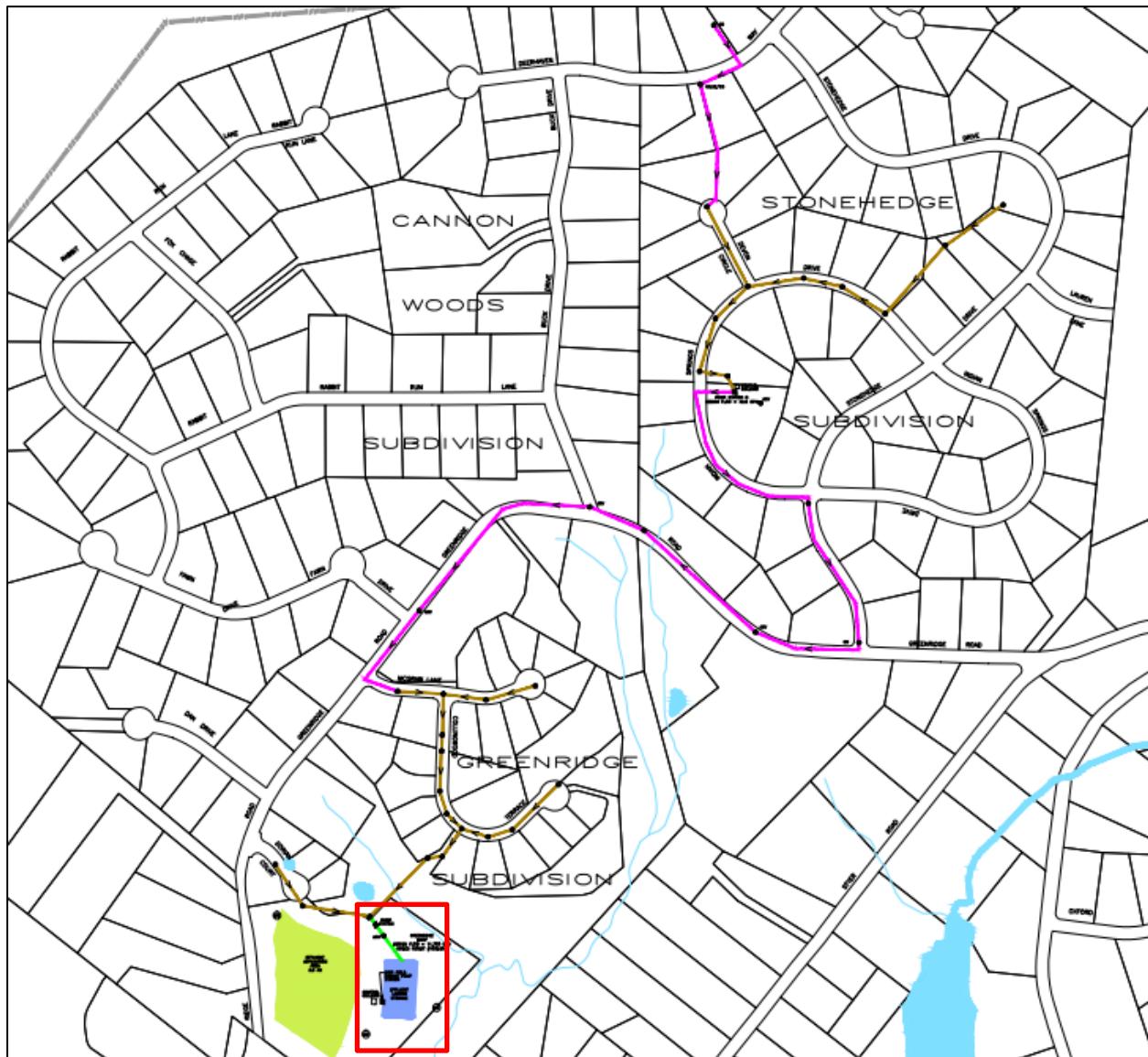
**Eaglepointe Wastewater System Map**

NOTE: For additional detail, see Township Sewer Atlas in township office

NOTE: Red rectangle indicates WWTP

### Greenridge Wastewater System

The Greenridge Wastewater System consists of the Stonehedge conveyance pump station and the Greenridge WWTP, rated for 15,125 gpd, which collect sewage from residential customers within the Greenridge and Stonehedge developments. The Stonehedge conveyance pump station collects sewage from a small portion of the Stonehedge development and conveys it to the Greenridge WWTP while sewage from the Greenridge development flows via gravity to the WWTP. The wastewater from both developments is received by an influent pump station on the WWTP property, which conveys the sewage to a dual-sectioned treatment lagoon. Following treatment, the wastewater flows through sand filters prior to disposal via drip irrigation within the field located behind the WWTP. This is done under PA DEP Water Quality Management (WQM) Permit No. 1502403.



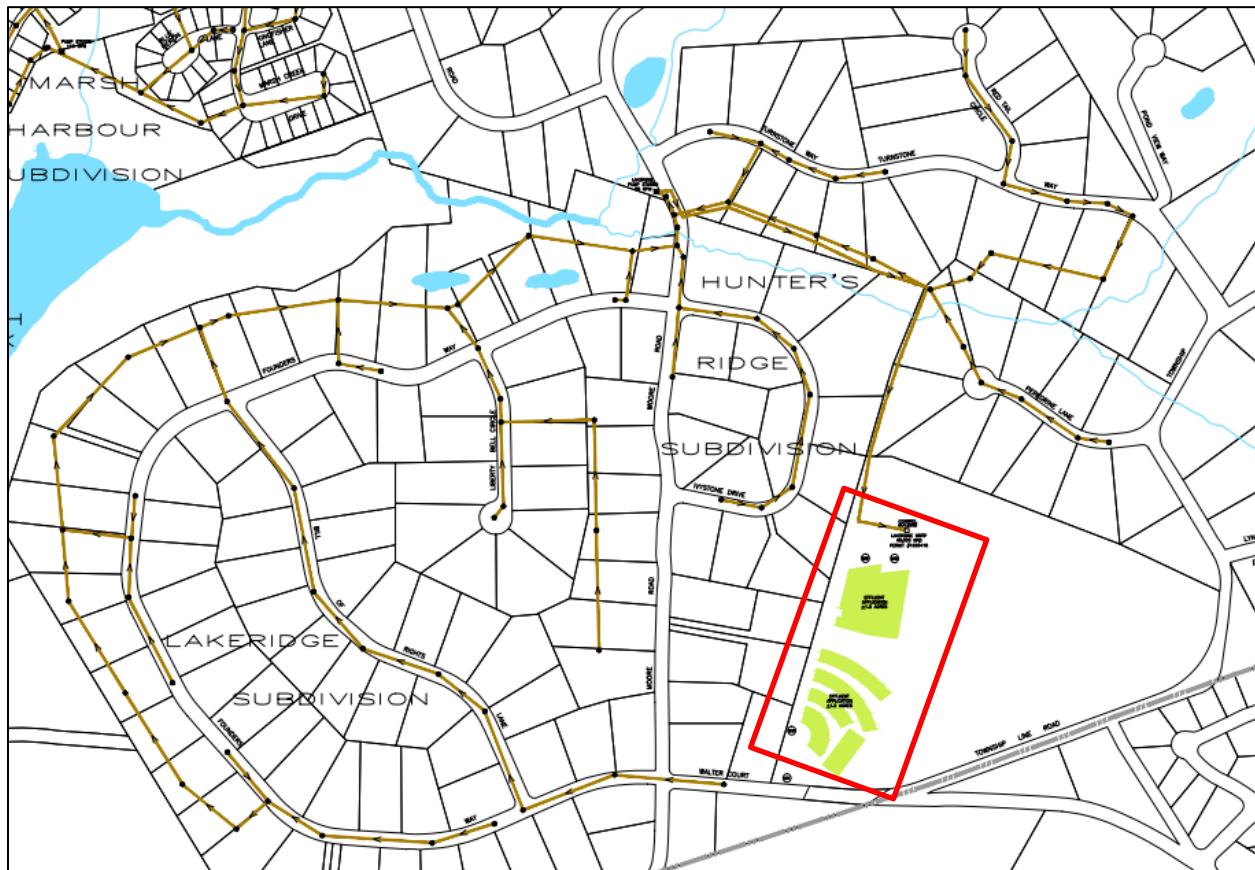
**Greenridge Wastewater System Map**

NOTE: For additional detail, see Township Sewer Atlas in township office

NOTE: Red rectangle indicates WWTP

#### Lakeridge Wastewater System

The Lakeridge Wastewater System consists of the Lakeridge conveyance pump station and the Lakeridge WWTP, rated for 42,000 gpd, which collects sewage from residential customers in the Lakeridge, Hunter's Ridge, and Ivystone developments. The Lakeridge conveyance pump station collects sewage from the developments and conveys it to the WWTP. The treatment process consists of a sequencing batch reactor (SBR), holding tank, and sand filter prior to disposal through one (1) of five (5) sand mounds, then to a subsurface absorption bed for final disposal. This is done under PA DEP WQM Permit No. 1590416.



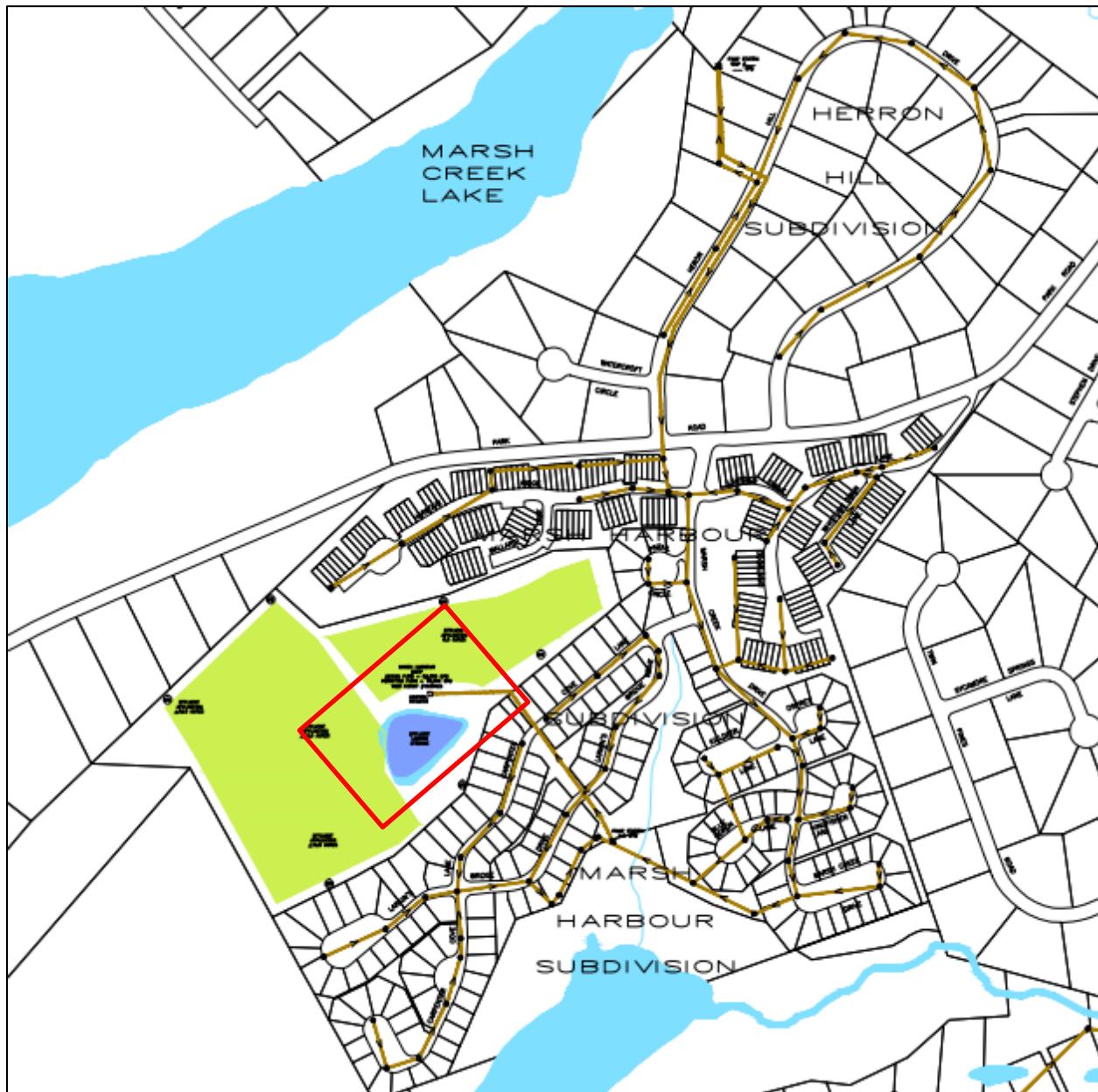
**Lakeridge Wastewater System Map**

NOTE: For additional detail, see Township Sewer Atlas in township office

NOTE: Red rectangle indicates WWTP

#### **Marsh Harbour Wastewater System**

The Marsh Harbour Wastewater System consists of the Herron Hill conveyance pump station, the Marsh Harbour conveyance pump station, and the Marsh Harbour WWTP, rated for 82,000 gpd which collects sewage from residential customers within the Marsh Harbour and Herron Hill developments. The Herron Hill pump station collects sewage from homes within the Herron Hill development and pumps it to the Marsh Harbour development collection system. Wastewater from both the Herron Hill and Marsh Harbour developments is collected by the Marsh Harbour pump station and conveyed to the Marsh Harbour WWTP. The treatment process consists of a bar screen, SBR, and a storage lagoon prior to discharge via spray irrigation on one (1) of two (2) fields located behind the WWTP. This is done under PA DEP WQM Permit No. 1598425.



**Marsh Harbour Wastewater System Map**

NOTE: For additional detail, see Township Sewer Atlas in township office

NOTE: Red rectangle indicates WWTP

#### **Meadow Creek Wastewater System**

The Meadow Creek Wastewater System consists of the Meadow Creek WWTP, rated for 1,300 gpd, collects sewage from five (5) residential customers in the Meadow Creek development. The treatment process consists of an equalization tank prior to discharge through a seepage field located at the corner of Meadow Creek Lane and Styer Road. As the Meadow Creek WWTP is only a seepage field, it is not permitted through PA DEP.



**Meadow Creek Wastewater System Map**

NOTE: For additional detail, see Township Sewer Atlas in township office

NOTE: Red rectangle indicates WWTP

#### **Route 100 Regional Wastewater System**

The Route 100 Regional Wastewater System consists of eight (8) conveyance pump stations, the Route 100 Regional WWTP rated for 600,000 gpd, and seven (7) effluent disposal systems. This wastewater system was designed to be upgraded in phases, which are further discussed below. The Byers Station, Eagle Manor, Ewing, Ewing West Vincent, Little Conestoga, Reserve at Eagle 1, Reserve at Eagle 2, and Windsor Ridge conveyance pump stations collect wastewater from residential customers throughout numerous developments and convey it to the WWTP for treatment (discussed in additional detail below). Following treatment, the effluent is distributed to the Reserve at Eagle, Eagle Hunt, Reserve at Waynebrooke, Windsor Ridge, Byers Station, Upland Farms, or Ewing Tract effluent disposal system for storage, filtration, and disposal via spray or drip irrigation. This is completed under PA DEP WQM Permit No. 1086294.

##### **Route 100 Regional WWTP Phase I:**

Phase I had a capacity of 200,000 gpd and commenced operation in 2004. This phase provided wastewater service to residential customers in the Byers Station (including the Ewing Tract), Eagle Hunt, Reserve at Eagle, Reserve at Waynebrook, and Windsor Ridge developments. Phase I treatment was completed via a secondary treatment aerated lagoon.

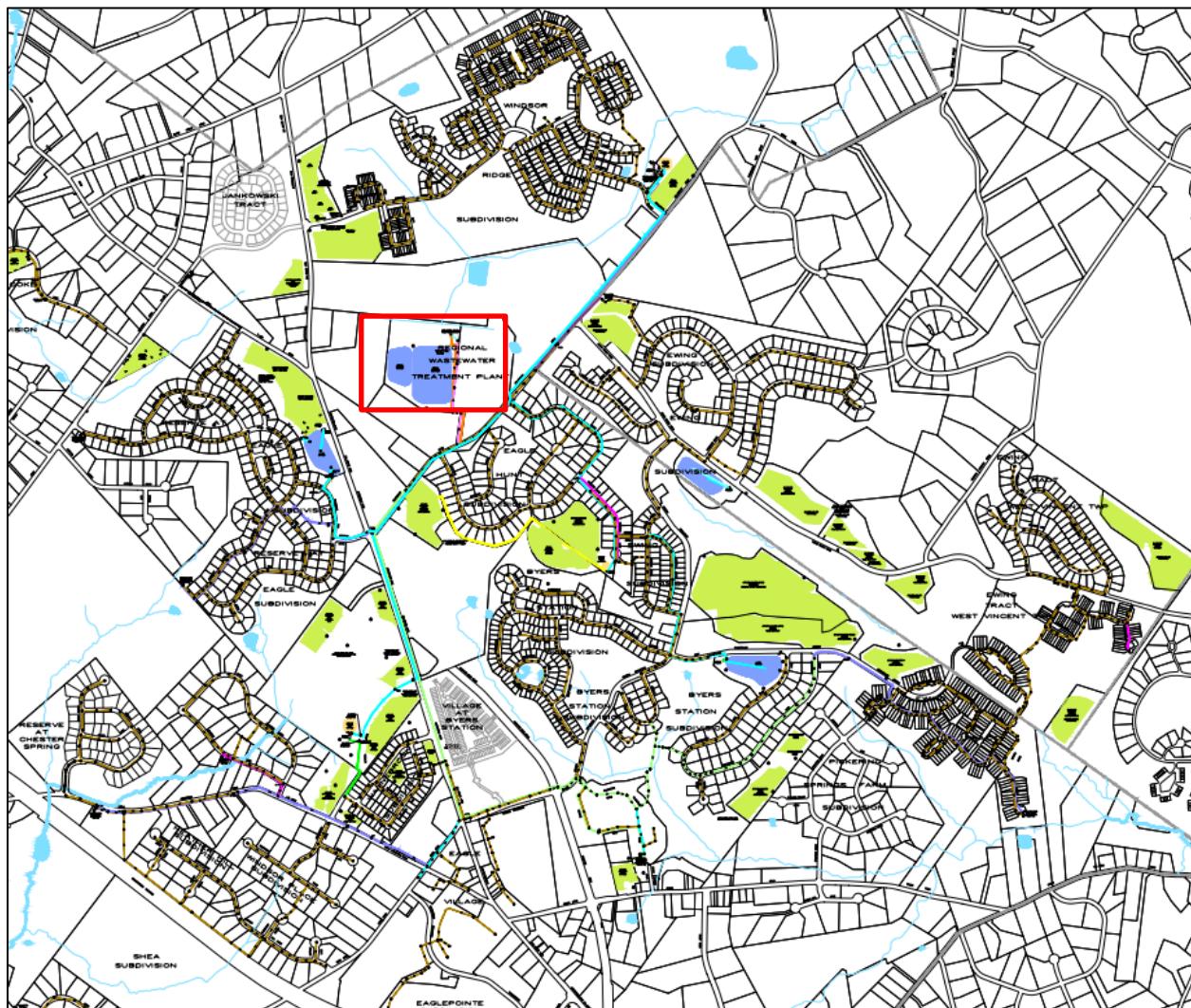
##### **Route 100 Regional WWTP Phase II:**

Phase II added an additional 400,000 gpd of capacity for a total of 600,000 gpd and commenced operation in 2015. This phase has already provided public sewer to the Eagle Manor, Windsor Place,

and Heather Hill developments, and there are plans for additional connections in upcoming years. The Phase II expansion of the WWTP included the addition of two (2) SBRs to allow for a higher level of treatment, specifically nitrogen reduction. Generally, two-thirds of the incoming wastewater is treated by the SBRs and the remaining third is treated by the secondary treatment aerated lagoon constructed in Phase I.

**Route 100 Regional WWTP Phase III:**

Phase III is currently undergoing design and permitting due to a new development that has been approved in the Township, the McKee/Fetters Property. This property will exceed the Phase II capacity of the WWTP, so the developer is going to construct Phase III. This phase will add two (2) additional SBRs to the WWTP, allowing for 800,000 gpd of treatment capacity in the SBRs.



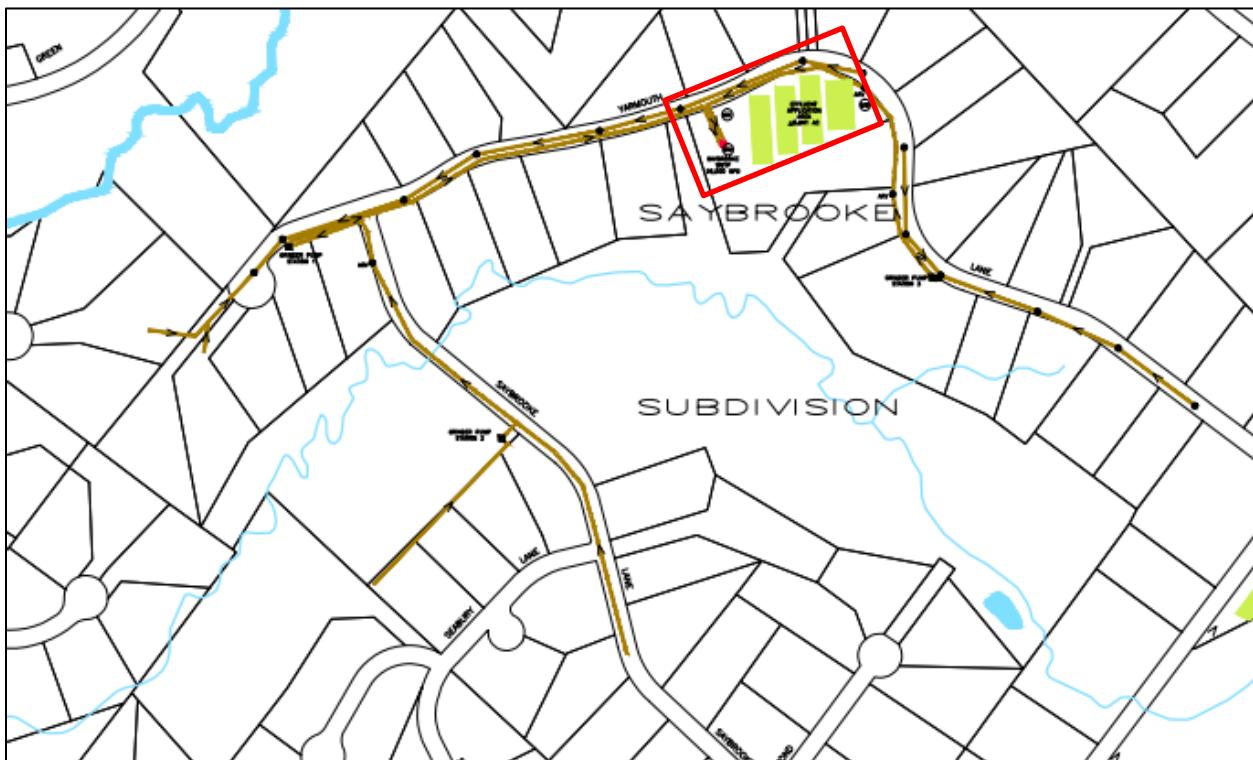
**Route 100 Regional Wastewater System Map**

NOTE: For additional detail, see Township Sewer Atlas in township office

NOTE: Red rectangle indicates WWTP

### **Saybrooke Wastewater System**

The Saybrooke Wastewater System consists of the Seabury, Saybrooke 1, and Saybrooke 2 conveyance pump stations and the Saybrooke WWTP, rated for 9,200 gpd, which collect sewage from residential customers within the Saybrooke development. The Seabury pump station collects sewage from five (5) homes along Seabury Lane and pumps it to the Saybrooke 2 pump station. The Saybrooke 2 pump station conveys sewage collected from residences on the western part of Yarmouth Lane and Seabury to the WWTP, while the Saybrooke 1 pump station collects and conveys sewage collected from residences on the eastern part of Yarmouth Lane. The treatment process consists of an SBR followed by sand filtration and an ultraviolet disinfection system. Following treatment, treated effluent is discharged to one (1) of four (4) subsurface absorption beds located adjacent to the WTWP property under PA DEP WQM Permit No. 1593413.



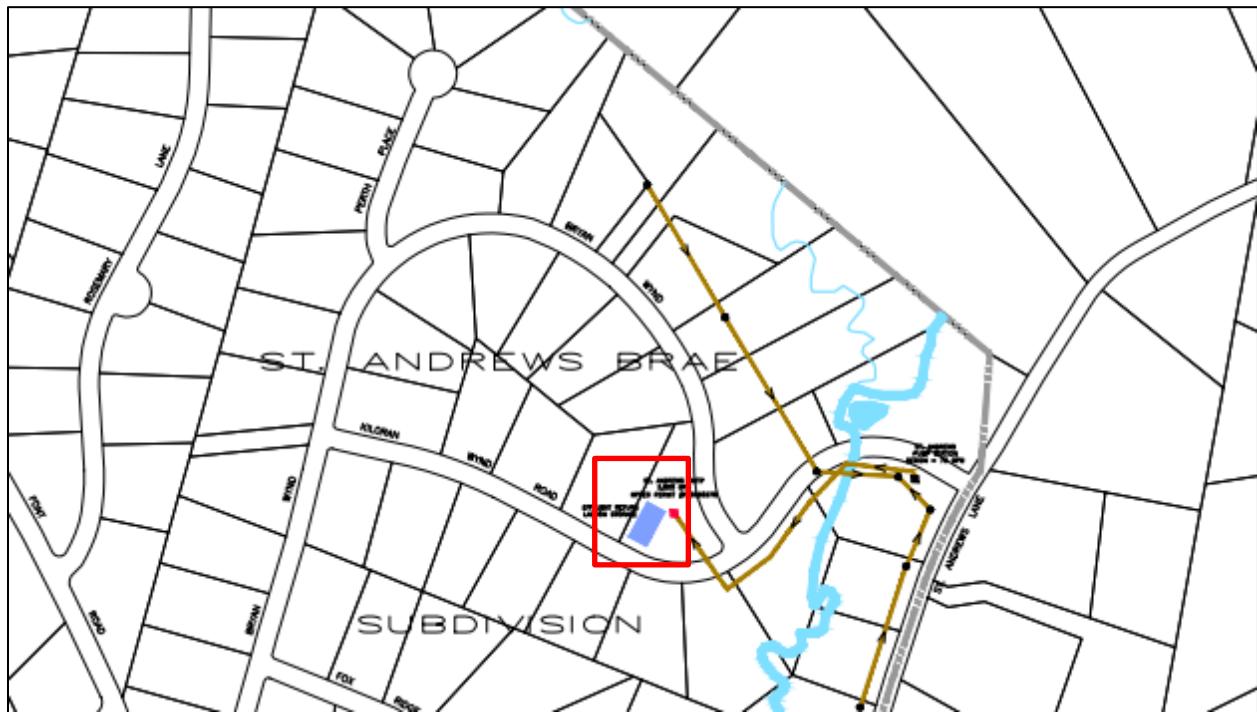
**Saybrooke Wastewater System Map**

NOTE: For additional detail, see Township Sewer Atlas in township office

NOTE: Red rectangle indicates WWTP

### **St. Andrews Brae Wastewater System**

The St. Andrews Brae Wastewater System consists of the St. Andrews Brae conveyance pump station and the St. Andrews Brae WWTP, rated for 3,600 gpd, which collect sewage from residential customers within the St. Andrews Brae development. The treatment process consists of an equalization tank, an aeration tank, a clarifier, disinfection, sand filtration, and dechlorination. Following treatment, treated effluent is discharged directly into Black Horse Creek under PA DEP NPDES Permit No. PA0058378.



St. Andrews Brae Wastewater System Map

NOTE: For additional detail, see Township Sewer Atlas in township office

NOTE: Red rectangle indicates WWTP

**Upper Uwchlan Municipal Authority**  
**2022 BUDGET and FIVE YEAR PROJECTION**

	2019 Actual (audited)	2020 Actual (audited)	YTD 2021 (thru 10/31)	2021 Budget	\$ Over Budget	% of Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget
<b>Income</b>											
<b>300 Revenues</b>											
06-340-000-000 Interest Income	143,373	36,969	4,369	43,500	(39,131)	-90%	1,000	1,000	1,000	1,000	1,000
06-365-000-000 Usage Fees - Residential	2,197,145	2,276,187	1,890,475	2,250,000	(359,525)	-16%	2,375,580	2,486,340	2,537,820	2,630,640	2,707,860
06-365-000-001 Usage Fees - Commercial	121,234	97,168	85,334	100,000	(14,666)	-15%	100,000	100,000	100,000	120,000	120,000
06-365-000-010 Connection Fees	25,875	51,571	291,828	4,677,750	(4,385,922)	-94%	1,347,500	1,153,425	-	834,750	834,750
Grant Revenue		11,471	7,050	465,000	(457,950)	-98%	525,000	-	-	-	-
06-370-000-000 Misc Revenue	-			1,000	(1,000)	-100%	1,000	1,000	1,000	1,000	1,000
06-393-000-100 Proceeds from Long Term Debt	-	-	-	-	-	0%	-	-	-	-	-
06-395-000-000 Refund of Prior Year Expenditures	-	-	-	-	-	0%	-	-	-	-	-
06-395-000-100 Transfer from Sewer Fund	-	-	-	-	-	0%	-	-	-	-	-
<b>Total Income</b>	<b>2,487,627</b>	<b>2,473,366</b>	<b>2,279,056</b>	<b>7,537,250</b>	<b>(5,258,194)</b>	<b>-413%</b>	<b>4,350,080</b>	<b>3,741,765</b>	<b>2,639,820</b>	<b>3,587,390</b>	<b>3,664,610</b>
<b>Expense</b>											
<b>General</b>											
06-400-000-001 Administration	270,080	245,253	225,940	264,736	(38,796)	-15%	275,000	286,000	297,440	309,338	321,711
06-400-000-002 Authority Administrator	128,347	124,394	102,963	120,000	(17,037)	-14%	120,000	124,800	129,792	134,984	140,383
06-400-000-003 Professional Fees	-	-	-	5,000	(5,000)	-100%	5,000	5,200	5,408	5,624	5,849
06-400-000-200 Admin Supplies	150	299	520	1,000	(480)	-48%	1,000	1,040	1,082	1,125	1,170
06-400-000-341 Advertising	150	2,928	155	3,000	(2,845)	-95%	3,000	3,120	3,245	3,375	3,510
06-400-000-352 Insurance - Liability	3,575	4,112	3,868	5,370	(1,502)	-28%	4,891	5,087	5,290	5,502	5,722
06-400-000-355 Bank Fees	319	97	124	650	(526)	-81%	250	260	270	281	292
06-402-000-450 Audit Fees	5,550	5,800	6,050	7,500	(1,450)	-19%	7,500	7,800	8,112	8,436	8,774
06-404-000-000 Legal Fees	16,663	5,460	11,182	25,000	(13,818)	-55%	25,000	26,000	27,040	28,122	29,246
06-406-000-100 Utility Billing Costs	12,217	12,608	7,452	13,000	(5,548)	-43%	13,000	13,520	14,061	14,623	15,208
06-408-000-000 Engineering Fees	207,307	410,263	282,064	150,000	132,064	88%	150,000	156,000	162,240	168,730	175,479
<b>Total General Expenses</b>	<b>644,358</b>	<b>811,214</b>	<b>640,318</b>	<b>595,256</b>	<b>45,062</b>	<b>8%</b>	<b>604,641</b>	<b>628,827</b>	<b>653,980</b>	<b>680,139</b>	<b>707,344</b>
<b>Building Expenses</b>											
06-409-000-031 Lawn Care	-	-	-	5,000	(5,000)	-100%	5,000	5,200	5,408	5,624	5,849
06-409-000-032 Telephone	14,513	15,305	13,678	15,000	(1,322)	-9%	17,500	18,200	18,928	19,685	20,473
06-409-000-035 Insurance - Property	10,726	12,336	8,169	15,000	(6,831)	-46%	13,950	14,508	15,088	15,692	16,320
06-409-000-036 Electric	233,860	194,595	185,880	250,000	(64,120)	-26%	250,000	260,000	270,400	281,216	292,465
06-409-000-037 Water	19,150	11,921	22,064	20,000	2,064	10%	20,000	20,800	21,632	22,497	23,397
06-409-000-052 Building Maintenance & Repair	-	-	-	10,000	(10,000)	-100%	10,000	10,400	10,816	11,249	11,699
06-409-000-260 Building Supplies and Small Tools	16,011	-	-	15,000	(15,000)	-100%	15,000	15,600	16,224	16,873	17,548
06-409-000-427 Waste Disposal	250	-	-	-	-	-	-	-	-	-	-
<b>Total Building Expenses</b>	<b>294,510</b>	<b>234,157</b>	<b>229,791</b>	<b>330,000</b>	<b>(100,209)</b>	<b>-30%</b>	<b>331,450</b>	<b>344,708</b>	<b>358,496</b>	<b>372,836</b>	<b>387,750</b>
<b>Operations</b>											
06-420-000-020 Supplies	51,258	25,453	15,400	50,000	(34,600)	-69%	50,000	52,000	54,080	56,243	58,493
06-420-000-022 Chemicals	9,539	8,096	9,445	15,000	(5,555)	-37%	15,000	15,600	16,224	16,873	17,548
06-420-000-023 Propane & Fuel Oil	1,152	2,991	-	5,000	(5,000)	-100%	10,000	10,400	10,816	11,249	11,699
06-420-000-025 Maintenance & Repair	110,708	158,210	106,602	120,000	(13,398)	-11%	150,000	156,000	162,240	168,730	175,479
06-420-000-030 Testing	39,736	36,203	30,216	35,000	(4,784)	-14%	50,000	52,000	54,080	56,243	58,493
06-420-000-031 Pump and Haul	70,632	100,218	83,570	60,000	23,570	39%	75,000	78,000	81,120	84,365	87,739
06-420-000-032 Vegetation Management	18,056	5,895	9,649	20,000	(10,351)	-52%	20,000	20,800	21,632	22,497	23,397
06-420-000-035 Permits	2,616	2,878	3,102	5,000	(1,898)	-38%	5,000	5,200	5,408	5,624	5,849
06-420-000-042 Dues and Memberships	10	75	-	-	-	-	-	-	-	-	-
06-420-000-045 Contracted Services	156,978	161,528	118,210	150,000	(31,790)	-21%	175,000	182,000	189,280	196,851	204,725
06-420-000-048 Misc Expenses	1,488	284	888	10,000	(9,112)	-91%	10,000	10,400	10,816	11,249	11,699
06-420-000-235 Vehicle Maintenance	39	-	373	2,000	(1,627)	-81%	2,000	2,080	2,163	2,250	2,340
06-420-000-329 PA One Call	1,254	1,875	1,299	2,500	(1,201)	-48%	2,500	2,600	2,704	2,812	2,925
<b>Total Operations</b>	<b>463,466</b>	<b>503,706</b>	<b>378,754</b>	<b>474,500</b>	<b>(95,746)</b>	<b>-20%</b>	<b>564,500</b>	<b>587,080</b>	<b>610,563</b>	<b>634,986</b>	<b>660,385</b>

**Upper Uwchlan Municipal Authority  
2022 BUDGET and FIVE YEAR PROJECTION**

	2019 Actual (audited)	2020 Actual (audited)	YTD 2021 (thru 10/31)	2021 Budget	\$ Over Budget	% of Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget
<b>06-483-000-000 Capital Repair</b>	20,113		42,623	100,000	(57,377)	-57%	50,000	50,000	50,000	50,000	50,000
<b>Total Misc. Expenses</b>	20,113	-	42,623	100,000	(57,377)	-57%	50,000	50,000	50,000	50,000	50,000
<b>Operations Management Agreements</b>											
<b>06-471-000-020 Operations Mgt Agree-2019 Bonds</b>	190,062	237,408	103,370	236,744	(133,374)	-56%	235,994	235,244	239,344	238,294	237,244
<b>06-471-000-030 Operations Mgt Agree-2019A Bonds</b>	48,198	335,280	63,098	336,200	(273,102)	0%	337,000	332,700	334,475	331,175	331,775
<b>Total Operations Management Agreements</b>	238,260	572,688	166,468	572,944	(406,476)	-71%	572,994	567,944	573,819	569,469	569,019
<b>06-492-000-020 Transfer to Water Resource Protection Fund</b>											
<b>Tapping Fee Reimbursement</b>	-	-	-	-	-	0%	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
<b>Total Expenses</b>	1,660,707	2,121,765	1,457,954	2,072,700	(614,746)	-30%	2,123,585	2,178,558	2,246,858	2,307,430	2,374,498
<b>Net Income before Operations Agreements</b>	<b>826,920</b>	<b>351,601</b>	<b>821,102</b>	<b>5,464,550</b>	<b>(4,643,448)</b>	<b>-85%</b>	<b>2,226,495</b>	<b>1,563,207</b>	<b>392,962</b>	<b>1,279,960</b>	<b>1,290,112</b>

**Upper Uwchlan Township Municipal Authority  
2022 Capital Budget Equipment Replacement Recommendations**

The following are recommendations for replacement or maintenance of equipment and facilities for the year 2022 for each of the wastewater treatment systems maintained by the Township.

**Eaglepointe Wastewater System**

Equipment Type	Expected Service Life (years)	Condition Rating*	Estimated Remaining Useful Life (years)	Quantity	Unit	Unit Cost	Estimated Cost
<b>Total Estimated Cost:</b>							<b>\$0.00</b>

**Notes:**

1. There are no recommendations for replacement or capital maintenance of equipment for the year 2022 at this wastewater system.

**Greenridge Wastewater System**

Equipment Type	Expected Service Life (years)	Condition Rating*	Estimated Remaining Useful Life (years)	Quantity	Unit	Unit Cost	Estimated Cost
Paving				1	LS	\$5,000.00	\$5,000.00
<b>Total Estimated Cost:</b>							<b>\$0.00</b>

**Notes:**

1. Estimated Cost as provided by the Department of Public Works.

**Lakeridge Wastewater System**

Equipment Type	Expected Service Life (years)	Condition Rating*	Estimated Remaining Useful Life (years)	Quantity	Unit	Unit Cost	Estimated Cost
							\$0.00
<b>Total Estimated Cost:</b>							<b>\$0.00</b>

**Notes:**

1. Estimated Cost as provided by the Department of Public Works.

**Upper Uwchlan Township Municipal Authority  
2022 Capital Budget Equipment Replacement Recommendations**

The following are recommendations for replacement or maintenance of equipment and facilities for the year 2022 for each of the wastewater treatment systems maintained by the Township.

**Marsh Harbour Wastewater System**

Equipment Type	Expected Service Life (years)	Condition Rating*	Estimated Remaining Useful Life (years)	Quantity	Unit	Unit Cost	Estimated Cost
Replace SBR Blower <sup>1</sup>				1	LS	\$12,300.00	\$12,300.00
<b>Total Estimated Cost:</b>							<b>\$12,300.00</b>

**Notes:**

1. Estimated Cost as provided by the Department of Public Works.

**Meadow Creek Wastewater System**

Equipment Type	Expected Service Life (years)	Condition Rating*	Estimated Remaining Useful Life (years)	Quantity	Unit	Unit Cost	Estimated Cost
<b>Total Estimated Cost:</b>							<b>\$0.00</b>

**Notes:**

1. There are no recommendations for replacement or capital maintenance of equipment for the year 2022 at this wastewater system.

**Route 100 Wastewater System**

Equipment Type	Expected Service Life (years)	Condition Rating	Estimated Remaining Useful Life (years)	Quantity	Unit	Unit Cost	Estimated Cost
Wet well coating (Spray Roq-125 mil thickness) <sup>1</sup>				300	SF	\$20.20	\$6,060.00
Spare pump for remote pump stations <sup>2</sup>				3	LS	\$12,200.00	\$36,600.00
Rebuild/replace second influent pump <sup>1</sup>				1	LS	\$9,800.00	\$9,800.00
<b>Total Estimated Cost:</b>							<b>\$52,460.00</b>

**Notes:**

1. Surface area is approximate and may change upon closer inspection.
2. Spare pumps are required at the Windsor Ridge, Ewing West Vincent, and Reserve at Eagle pump station. Estimated cost per WWTP Operator and trended utilizing ENR CCI
3. WWTP Operator requested considering floating aerators in storage lagoon.

**Upper Uwchlan Township Municipal Authority  
2022 Capital Budget Equipment Replacement Recommendations**

The following are recommendations for replacement or maintenance of equipment and facilities for the year 2022 for each of the wastewater treatment systems maintained by the Township.

**Saybrooke Wastewater System**

Equipment Type	Expected Service Life (years)	Condition Rating*	Estimated Remaining Useful Life (years)	Quantity	Unit	Unit Cost	Estimated Cost
<b>Total Estimated Cost:</b>							<b>\$0.00</b>

**Notes:**

1. There are no recommendations for replacement or capital maintenance of equipment for the year 2022 at this wastewater system.

**St. Andrews Brae Wastewater System**

Equipment Type	Expected Service Life (years)	Condition Rating*	Estimated Remaining Useful Life (years)	Quantity	Unit	Unit Cost	Estimated Cost
Control/Blower Building Roof Replacement				1	LS	\$10,000.00	\$10,000.00
<b>Total Estimated Cost:</b>							<b>\$10,000.00</b>

**Notes:**

1. Control/Blower Building roof appears to be in need of replacement, per WWTP Operator.

Summary Capital Budget Replacement Costs	2022	2023
<b>UUTMA Wastewater Facility Equipment Recommendations</b>		
Eaglepointe Wastewater System	\$0.00	
Greenridge Wastewater System	\$0.00	
Lakeridge Wastewater System	\$0.00	
Marsh Harbour Wastewater System	\$12,300.00	
Meadow Creek Wastewater System	\$0.00	
Route 100 Wastewater System	\$52,460.00	
Saybrooke Wastewater System	\$0.00	
St. Andrew's Brae Wastewater System	\$10,000.00	
Act 537 Plan Update (remaining)	\$38,000.00	
Byers Road Sanitary Sewer Extension (less H2O Grant)	\$785,000.00	
Milford Farms Sanitary Sewer Extension *	\$700,000.00	\$2,000,000.00
Meadow Creek Sanitary Sewer Extension *	\$750,000.00	\$1,250,000.00
<b>Miscellaneous Budgetary Items</b>		
System - UCC Code Updates	\$30,000.00	
Capital Equipment Purchases shared with Twp.	\$19,000.00	
System - Misc. Capital Purchases	\$35,000.00	
<b>Total Cost:</b>	<b>\$2,431,760.00</b>	

Notes: Capital Maintenance is defined by unanticipated or extraordinary expenses or equipment failure.

\*Duration of project extends over two calendar years

## GLOSSARY

**Accrual Basis of Accounting** – The basis of accounting in which revenues are recognized when they are earned and expenses are recognized when they are incurred.

**Act 537 Plan** – Refers to the Pennsylvania Sewage Facilities Act, as amended, enacted on January 24, 1966 to correct existing sewage disposal problems and prevent future problems. The Act requires proper planning in all types of sewage disposal situations. Local municipalities are largely responsible for administering the Act 537 sewage disposal program.

**Assets** – Property owned by the Township that has a monetary value.

**Balanced Budget** – A budget is considered balanced when budgeted revenues equal or exceed budgeted expenditures.

**CAFR** – Abbreviation for Comprehensive Annual Financial Report. The CAFR expands upon full GAAP financial statements by including a large amount of statistical information applicable to the municipality.

**Capital Assets** – any tangible or intangible asset that has an initial useful life extending beyond a single reporting period. Assets such as land, easements, buildings, building improvements, vehicles, machinery, equipment, infrastructure, works of art or of historical significance are normally capital assets.

**Capital Expenditures** – Money expended to purchase capital assets.

**Comprehensive Annual Financial Report** – The official financial report of a municipal entity. It includes management's discussion and analysis, financial statements, supporting schedules and required supplementary information and statistics on the municipality.

**DDB** – “DDB” is an abbreviation for Dry Detention Basin. Dry detention basin outlets have been designed to detain storm water runoff for a minimum period of time (ie. Usually 24 hours) to allow particles and pollutants to settle. Unlike wet ponds, they do not have a permanent pool of water.

**Debt Limit** – The State-set maximum amount of legally permitted outstanding net debt.

**Delaware Valley Insurance Trust (DVIT)** – A regional risk sharing pool providing property, liability and/or health coverage to its participating members which consists of municipalities in Southeastern Pennsylvania. The Trust was formed under the authority granted by the Pennsylvania Intergovernmental Cooperation Act and the Pennsylvania Political Subdivision Tort Claims Act.

The Township currently has all of its insurance coverage through DVIT.

**Effluent** – The outflow from a sewage treatment facility.

## GLOSSARY, cont'd

**Enterprise Funds** – Proprietary fund type used to report an activity for which a fee is charted to external users for goods or services.

**Fund** – A fiscal and accounting tool with a self-balancing set of accounts to record revenues and expenditures.

**Fund Balance** – Fund balance is the net position of a governmental fund. It is equal to the difference between assets, liabilities, deferred outflows of resources and deferred inflows of resources. It is the “equity” of a governmental fund.

**GAAP** - GAAP is an abbreviation for Generally Accepted Accounting Principles which are the standard framework and guidelines used in financial accounting in the United States of America. The Financial Accounting Standards Board is responsible for issuing new accounting pronouncements.

**GASB** - GASB is an abbreviation for The Government Accounting Standards Board. GASB is the authoritative accounting and financial reporting standard –setting body for state and local governments.

**General Fund** - An accounting entity used to account for all revenue and expenditures applicable to the general operations of the departments of the Township, and to record all financial transactions not accounted for in another fund.

**GFOA** – GFOA is the abbreviation for The Government Finance Officers Association. The GFOA is a national professional organization comprised of people who are working in government finance on a state, local or federal level. The GFOA holds educational training seminars nationally and also provides information on “Best Practices”, as well as other services, to its members. State and local chapters provide local training on a monthly, quarterly or annual basis.

**Impervious Coverage** - Impervious coverage refers to any man-made surfaces, along with compacted soil, that water cannot penetrate. Examples, are asphalt, concrete, and rooftops.

**LUAR** –The abbreviation for a Land Use Assumptions Report.

**Modified Accrual Basis of Accounting** – An accounting method that combines elements of the two basic accounting methods, cash basis and accrual basis. Revenues are recognized when earned, measurable and available. Expenses are recognized when the liability is incurred.

**MS-4** – Under the 1987 Clean Water Act Amendments, the U.S. EPA developed new regulations to address storm water that might impact water quality. These new “Municipal Separate Storm Sewer System” (MS4) regulations were established by the EPA and are administered in Pennsylvania by the Pennsylvania Department of Environmental Protection (“DEP” or “PADEP”).

**NPDES permit** – National Pollutant Discharge Elimination System permit. Permits are issued by PADEP.

**GLOSSARY, cont'd**

**PADEP** – Pennsylvania Department of Environmental Protection

**PEMA** – Pennsylvania Emergency Management Agency

**Scheduled Interest** - The amount of interest that would be paid by following the bank's amortization schedule. If the Township pays additional principal amounts during the remaining years of the loan, the actual amount of interest paid will be less.

**Second Class Township** – A second class township is defined as having a population of less than 300 inhabitants per square mile and in Pennsylvania they are governed by the Second Class Township Code, enacted by the state legislature on May 1, 1933, as amended.

**WWTF** – Waste Water Treatment Facility