



AGENDA

July 24, 2018

7:30 p.m.

Packet Page #

I.	Call to Order	
II.	Approval of Minutes: May 22, 2018	2
III.	Approval of Payments: June 2018	4
	July 2018	5
IV.	Authority Administration Reports	
	A. Clean Water, Inc. Monthly Report	10
	B. ARRO Consulting Monthly Report	12
	i. Contract Award – Fence Replacement Project	34
	C. Authority Administrator's Report	36
	i. Alternative energy review	
	ii. Financing discussion – Phase 3	
	D. Public Works Department Report	37
V.	Open Session	
VI.	Next Meeting Date: August 28, 2018 7:30 PM	
VII.	Adjournment	



MEETING MINUTES

May 22, 2018

7:30 PM

DRAFT

In Attendance: H. Harper, Member, B. Watts, Member, L. Schack, Member, G. Matthew Brown, P.E., DEE, Authority Administrator and Katie Cirone E.I.T., ARRO Consulting, Inc.

Call to Order

In that the Chairman and Vice-Chairman were not in attendance yet a quorum of members was present, the consensus of the members present was that B. Watts should act as Chair for the meeting. B. Watts called the meeting to order at 7:51 PM.

Approval of Minutes

H. Harper moved to approve the draft minutes of the April 24, 2018 meeting as submitted. L. Schack seconded. It was so moved.

Approval of Payments

Following questions and a brief discussion, a motion was made by H. Harper to approve the payments. L. Schack seconded. It was so moved. Following a brief discussion, L. Schack made a motion to accept in good faith the Balance Sheet and Revenue and Expenses Reports as prepared by the Township Treasurer. H. Harper seconded the motion. It was so moved.

Authority Administration Reports

M. Brown noted that all treatment facilities were operating well and within their permit requirements. He noted the four reports and asked if there were any questions related to them. Several questions and a brief discussion followed.

M. Brown noted he had received limited customer comments or complaints on the second quarter rate increase. He also noted that the agreement with the owners of 55 Yarmouth had been fully executed and a memo had been filed with the property deed regarding the sewerage resolution.

M. Brown noted that with the developer's dedication of the sewerage facilities for the Ewing Project in West Vincent Township, certain changes would be necessary to the intermunicipal agreement to which the Authority is a party. He said the Township and Authority Solicitors, the Township Manager and the Authority Administrator were discussing the changes and communicating with the Solicitor for West Vincent Township. M. Brown noted that once a draft was completed that appeared to address all issues, he would submit a copy to the Authority for review and approval.

M. Brown noted the second phase of the fencing replacement project was ready to build and requested permission to proceed. H. Harper moved; seconded by L. Schack to proceed with

the necessary advertisement and bidding of the fencing project. It was so moved. M. Brown then noted a request from Fred Gunther for additional EDUs to service his proposed facilities. He stated that a request from the developer for an additional 7.0 EDUs had been received. Following a review by ARRO, an opinion of 10.5 EDUs was more appropriate. M. Brown was directed to advise the developer of the need for him to obtain 10.5 EDUs for his additional facilities.

H. Harper made a motion to approve the reports of the Authority Administrator. L. Schack seconded. It was so moved.

Open Session

No members of the public were present to comment

Next Meeting Date - June 26, 2018 - 7:30 PM

B. Watts noted the date and time of the next meeting of the Authority.

Adjournment

There being no further business to be brought before the Authority, H. Harper moved, seconded by L. Schack to adjourn the meeting at 8:24 PM.

Respectfully submitted,

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

June 22, 2018
10:22 AM

Upper Uwchlan Township
Check Register By Check Id

Page No: 1

Range of Checking Accts: MA MERIDIAN
Report Type: All Checks

to MA MERIDIAN

Range of Check Ids: 1550 to 1577

Report Format: Super Condensed Check Type: Computer: Y Manual: Y Dir Deposit: Y

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Check #	Check Date	Vendor	Amount Paid	Reconciled/Void Ref Num
1550	06/26/18	21ST 21st CENTURY MEDIA PHILLY	583.90	1805
1551	06/26/18	ALSGROUP ALS GROUP USA, CORP	793.65	1805
1552	06/26/18	AQUAP010 AQUA PA	1,389.02	1805
1553	06/26/18	ARROC010 ARRO CONSULTING, INC.	40,669.19	1805
1554	06/26/18	BARBA010 BARBACANE THORNTON & COMPANY	500.00	1805
1555	06/26/18	BUCKL010 BUCKLEY, BRION, MCGUIRE, MORRI	2,673.56	1805
1556	06/26/18	CHRISFRA FRANTZ, CHRISTOPHER	231.00	1805
1557	06/26/18	CLEANWAT CLEAN WATER, INC.	6,355.00	1805
1558	06/26/18	CONWAY01 CONWAY POWER EQUIPMENT, INC.	157.25	1805
1559	06/26/18	DECKM010 DECKMAN ELECTRIC, INC.	4,500.00	1805
1560	06/26/18	EAGLHARD EAGLE HARDWARE	119.65	1805
1561	06/26/18	EDMUN010 EDMUNDS & ASSOCIATES, INC.	1,246.20	1805
1562	06/26/18	FRAME010 FRAME POWER EQUIPMENT	162.38	1805
1563	06/26/18	HONEYBRO HONEY BROOK OUTDOOR POWER	433.20	1805
1564	06/26/18	INKS0010 INK'S DISPOSAL SERVICE, INC.	622.50	1805
1565	06/26/18	INTER010 INTERCON TRUCK EQUIPMENT	19,730.00	1805
1566	06/26/18	JCEHRLIC J. C. EHRLICH CO., INC.	1,225.00	1805
1567	06/26/18	MCGOV020 MCGOVERN ENVIRONMENTAL, LLC	3,847.12	1805
1568	06/26/18	MJREIDER M. J. Reider Associates, Inc.	1,036.00	1805
1569	06/26/18	NAPA0010 NAPA	683.94	1805
1570	06/26/18	NORTHO40 NORTHERN SAFETY & INDUSTRIAL	43.01	1805
1571	06/26/18	PEC00010 PECO	18,178.82	1805
1572	06/26/18	PENNS080 PENNSYLVANIA ONE CALL	139.09	1805
1573	06/26/18	PRED0010 PREDOC	1,210.00	1805
1574	06/26/18	UNIVA010 UNIVAR USA INC	3,886.24	1805
1575	06/26/18	USABL020 USA BLUE BOOK	984.89	1805
1576	06/26/18	VERIZFIO VERIZONFIOS	1,227.17	1805
1577	06/26/18	VILLA010 VILLAGE MEDICAL CENTER	128.50	1805

Report Totals	<u>Paid</u>	<u>Void</u>	<u>Amount Paid</u>	<u>Amount Void</u>
Checks:	28	0	112,756.28	0.00
Direct Deposit:	0	0	0.00	0.00
Total:	<u>28</u>	<u>0</u>	<u>112,756.28</u>	<u>0.00</u>

July 19, 2018
02:26 PM

Upper Uwchlan Township
Check Register By Check Id

Page No: 1

Range of Checking Accts: MA MERIDIAN to MA MERIDIAN Range of Check Ids: 1579 to 1610
Report Type: All Checks Report Format: Super Condensed Check Type: Computer: Y Manual: Y Dir Deposit: Y

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Check #	Check Date	Vendor	Amount Paid	Reconciled/Void Ref Num
1579	07/24/18	21ST 21st CENTURY MEDIA PHILLY	55.54	1822
1580	07/24/18	ALSGROUP ALS GROUP USA, CORP	4,223.80	1822
1581	07/24/18	AQUAP010 AQUA PA	675.92	1822
1582	07/24/18	ARROC010 ARRO CONSULTING, INC.	24,186.45	1822
1583	07/24/18	BARBA010 BARBACANE THORNTON & COMPANY	2,150.00	1822
1584	07/24/18	BUCKL010 BUCKLEY, BRION, MCGUIRE, MORRI	584.97	1822
1585	07/24/18	CHRISFRA FRANTZ, CHRISTOPHER	294.00	1822
1586	07/24/18	CLEANWAT CLEAN WATER, INC.	12,155.00	1822
1587	07/24/18	COMM0010 COMMONWEALTH OF PENNSYLVANIA	100.00	1822
1588	07/24/18	COMM0010 COMMONWEALTH OF PENNSYLVANIA	65.00	1822
1589	07/24/18	COMM0010 COMMONWEALTH OF PENNSYLVANIA	65.00	1822
1590	07/24/18	COMM0010 COMMONWEALTH OF PENNSYLVANIA	65.00	1822
1591	07/24/18	COMM0010 COMMONWEALTH OF PENNSYLVANIA	65.00	1822
1592	07/24/18	COMM0010 COMMONWEALTH OF PENNSYLVANIA	65.00	1822
1593	07/24/18	COMM0010 COMMONWEALTH OF PENNSYLVANIA	65.00	1822
1594	07/24/18	COMM0030 COMMONWEALTH OF PENNSYLVANIA	100.00	1822
1595	07/24/18	CONWAY01 CONWAY POWER EQUIPMENT, INC.	109.28	1822
1596	07/24/18	DECKM010 DECKMAN ELECTRIC, INC.	1,200.00	1822
1597	07/24/18	DELTRUST DELAWARE VALLEY PROP&LIA TRST	2,908.63	1822
1598	07/24/18	EAGLHARD EAGLE HARDWARE	100.85	1822
1599	07/24/18	INKS0010 INK'S DISPOSAL SERVICE, INC.	920.00	1822
1600	07/24/18	JOANNEM JOANNE MARK	190.00	1822
1601	07/24/18	LUDWI060 LUDWIG'S CORNER SUPPLY CO.	184.05	1822
1602	07/24/18	MAPLEDIR MAPLE DIRECT INC	1,264.30	1822
1603	07/24/18	MCGOV020 MCGOVERN ENVIRONMENTAL, LLC	1,062.96	1822
1604	07/24/18	MJREIDER M. J. Reider Associates, Inc.	969.50	1822
1605	07/24/18	MULLS010 MULL'S ELECTRIC, INC.	915.70	1822
1606	07/24/18	PEC00010 PECO	17,472.99	1822
1607	07/24/18	PENNS080 PENNSYLVANIA ONE CALL	147.17	1822
1608	07/24/18	PIPEL020 PIPE LINE PLASTICS, INC	94.63	1822
1609	07/24/18	PRED0010 PREDOC	7,975.00	1822
1610	07/24/18	VERIZFIO VERIZONFIOS	1,232.96	1822

Report Totals	<u>Paid</u>	<u>Void</u>	<u>Amount Paid</u>	<u>Amount Void</u>
Checks:	32	0	81,663.70	0.00
Direct Deposit:	0	0	0.00	0.00
Total:	<u>32</u>	<u>0</u>	<u>81,663.70</u>	<u>0.00</u>

Upper Uwchlan Township Municipal Authority
Balance Sheet
As of June 30, 2018

ASSETS

	<u>Cash</u>	
06-100-000-010	General Checking - Fulton Bank	\$ 38,956.32
06-100-000-015	General Checking - Meridian Bank	465,745.31
06-100-000-020	General Checking - WIPP	355,911.67
06-106-000-002	Tap-in Fee Account	<u>311,553.70</u>
	Total Cash	1,172,167.00
	<u>PSDLAF Investments:</u>	
06-109-000-003	CD Program	-
06-109-000-004	Full Flex	<u>180.01</u>
	Total Investments	180.01
	<u>Accounts Receivable</u>	
06-145-000-001	Usage Fees Receivable	275,243.20
06-145-000-002	Capital Assessment Receivable	-
06-147-000-000	Misc Accounts Receivable	-
	Total Accounts Receivable	275,243.20
	<u>Other Current Assets</u>	
06-130-000-001	Due from MA Capital Fund	-
06-130-000-002	Due from UUT General Fund	7,270.00
06-130-000-003	Due from UUT Capital Fund	-
06-130-000-004	Due from Solid Waste Fund	122.27
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	-
	Total Other Current Assets	7,392.27
	<u>Fixed Assets</u>	
06-162-000-001	Fixed Assets	1,343,609.65
06-162-000-050	Accumulated Depreciation	(315,301.16)
06-163-000-100	Phase II Construction Project (CIP)	<u>1,028,308.49</u>
	Total Fixed Assets	1,028,308.49
	<u>Other Long Term Assets</u>	
06-162-000-002	Excess Treatment Capacity	<u>1,649,293.24</u>
	Total Other Long Term Assets	1,649,293.24
	Total Assets	\$ 4,132,584.21

Upper Uwchlan Township Municipal Authority
Balance Sheet
As of June 30, 2018

LIABILITIES AND FUND BALANCE

<u>Current Liabilities</u>		
06-200-000-020	Accounts Payable	-
06-230-000-010	Due to UUT General Fund	117,109.50
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	3,121.72
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	-
06-240-000-000	Accrued Expenses	6,675.73
06-241-000-100	Retainage on Phase II Construction Project	-
06-245-000-000	Due to Customers	275.00
	Total Current Liabilities	127,181.95
<u>Equity</u>		
06-272-000-001	Opening Bal Equity	753,500.35
06-272-000-002	Retained Earnings	2,967,663.79
	Current Period Net Income (Loss)	284,238.12
	Total Equity	4,005,402.26
	Total Fund Balance	4,005,402.26
	Total Liabilities & Fund Balance	\$ 4,132,584.21

Upper Uwchlan Township Municipal Authority
Statement of Revenues and Expenditures

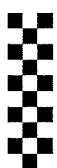
For the Period Ended June 30, 2018

	Actual 2018 YTD	Budget 2018	% of Budget	Actual 2017 (Audited)	Budget 2017
REVENUES					
06-340-000-000	Interest Income	6,975.15	7,300.00	95.6%	6,500.00
06-365-000-000	Usage Fees Residential	1,053,725.22	2,027,640.00	52.0%	1,924,864.00
06-365-000-001	Usage Fees Commercial	48,662.40	101,014.00	48.2%	101,014.00
06-365-000-010	Tapping Fees	31,255.74	2,176,350.00	1.4%	331,063.00
06-370-000-000	Misc revenue	-	1,000.00	0.0%	1,000.00
06-395-000-000	Refund of Prior Year Expenditures	-	-	#DIV/0!	-
06-395-000-100	Transfer from Sewer Fund	-	-	#DIV/0!	385,000.00
TOTAL REVENUES		\$ 1,140,618.51	\$ 4,313,304.00	26.4%	\$ 2,745,322.00
EXPENDITURES					
<i>General:</i>					
06-400-000-001	Administration	117,109.50	234,219.00	50.0%	212,464.00
06-400-000-002	Authority Administrator	61,011.60	120,000.00	50.8%	123,249.00
06-400-000-003	Professional Fees	262.74	12,000.00	2.2%	3,001.00
06-400-000-200	Admin Supplies	-	1,000.00	0.0%	10,000.00
06-400-000-341	Advertising	2,004.42	1,000.00	200.4%	-
06-400-000-352	Insurance - Liability	5,817.26	2,337.00	248.9%	8,133.00
06-400-000-355	Bank Fees	83.44	650.00	12.8%	530.00
06-402-000-450	Audit Fees	3,150.00	5,200.00	60.6%	5,050.00
06-404-000-000	Legal Fees	9,479.80	20,800.00	45.6%	19,969.00
06-406-000-100	Utility Billing Costs	6,421.10	18,000.00	0.0%	18,530.00
06-408-000-000	Engineering Fees	187,683.12	150,000.00	125.1%	140,000.00
06-408-000-100	Reimbursable Engineering Fees	-	-	#DIV/0!	-
		393,022.98	565,206.00	69.5%	557,033.00
					529,667.00
<i>Building Expenses:</i>					
06-409-000-031	Lawn Care	1,084.96	7,500.00	14.5%	11,528.00
06-409-000-032	Telephone	7,553.72	15,000.00	50.4%	13,228.00
06-409-000-035	Insurance	-	9,297.00	0.0%	-
06-409-000-036	Electric	101,615.97	250,000.00	40.6%	204,222.00
06-409-000-037	Water	4,049.26	25,000.00	16.2%	6,366.00
06-409-000-052	Bldg Maint & Repair	-	8,000.00	0.0%	600.00
06-409-000-260	Building Supplies & Small Tools	259.00	15,000.00	1.7%	1,014.00
06-409-000-427	Waste Disposal	-	-	#DIV/0!	-
		114,562.91	329,797.00	34.7%	236,958.00
					388,500.00
<i>Operations:</i>					
06-420-000-020	Supplies	5,857.20	20,000.00	29.3%	11,076.00
06-420-000-022	Chemicals	8,532.42	15,450.00	55.2%	7,377.00
06-420-000-023	Propane and Fuel Oil	-	2,575.00	0.0%	467.00
06-420-000-025	Maintenance & Repair	31,042.77	120,000.00	25.9%	134,712.00
06-420-000-030	Testing	15,630.95	40,000.00	39.1%	35,664.00
06-420-000-031	Pump & Haul	20,099.57	50,000.00	40.2%	59,530.00
06-420-000-032	Vegetation Management	9,529.69	20,000.00	47.6%	16,256.00
06-420-000-035	Permits	2,928.00	5,000.00	58.6%	2,967.00
06-420-000-042	Dues and Memberships	2,100.00	2,500.00	84.0%	2,100.00
06-420-000-045	Contracted Services	54,353.50	135,000.00	40.3%	119,358.00
06-420-000-048	Misc expenses	40,000.00	5,000.00	800.0%	5,000.00
06-420-000-235	Vehicle Maintenance	-	2,000.00	0.0%	-
06-420-000-329	PA One Call	641.09	2,500.00	25.6%	2,500.00
		190,715.19	420,025.00	45.4%	389,507.00
					367,500.00

Upper Uwchlan Township Municipal Authority
Statement of Revenues and Expenditures

For the Period Ended June 30, 2018
(Continued)

		Actual 2018 YTD	Budget 2018	% of Budget	Actual 2017 <i>(Unaudited)</i>	Budget 2017
<u>Capital:</u>						
06-483-000-000	Capital Repair	63,348.06	30,000.00	211.2%	2,497.00	30,000.00
06-493-000-083	Depreciation	36,000.00	36,000.00	0.0%	56,406.00	36,000.00
		<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	Total Expenditures before Operations Agreement and Transf	\$ 761,649.14	\$ 1,381,028.00	55.2%	\$ 1,242,401.00	\$ 1,351,667.00
	Net Income before Operations Agreement and Transfers	\$ 378,969.37	\$ 2,932,276.00	12.9%	1,502,921.00	1,333,077.00
<u>Other:</u>						
06-471-000-010	Operations Agreement Fee to UUT	94,731.25	364,463.00	26.0%	364,562.00	364,563.00
	Operations Agreement Fee to UUT-new debt	50,000.00			-	-
		<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
06-492-000-010	Transfer to Sewer Fund	-	-	#DIV/0!	-	-
06-492-000-020	Transfer to Water Resource Protection Fu	-	-	#DIV/0!	-	-
06-492-000-030	Transfer to UUT Capital Fund	-	-	#DIV/0!	-	-
		<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	TOTAL EXPENDITURES	\$ 856,380.39	\$ 1,795,491.00	47.7%	\$ 1,606,963.00	\$ 1,716,230.00
	OPERATING INCOME	\$ 284,238.12	\$ 2,517,813.00	11.3%	\$ 1,138,359.00	\$ 968,514.00
NON OPERATING REVENUES						
	Contribution from Upper Uwchlan Townsl	-	-	-	-	-
	Total Non Operating Revenues	-	-	-	-	-
INCOME BEFORE CAPITAL CONTRIBUTIONS						
	Capital contribution to Upper Uwchlan To	-	-	-	-	-
	CHANGE IN NET POSITION	\$ 284,238.12	\$ 2,517,813.00	-	\$ 1,138,359.00	\$ 968,514.00
	NET POSITION, BEGINNING OF YEAR	\$ 8,730,744.00	\$ 2,582,805.65	-	\$ 7,592,385.00	\$ 7,592,385.00
	NET POSITION, YEAR TO DATE	\$ 9,014,982.12	\$ 5,100,618.65	-	\$ 8,730,744.00	\$ 8,560,899.00



Clean Water, Inc.

170 Dallas St.
Box 475
Atglen, Pa. 19310

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

July 20, 2018

Packet Page 10

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

RE: Report for the July meeting.

Dear Authority,

Enclosed you will find copies of the monthly reports that were submitted to the DEP on your behalf. The reports are for May. Information items are current

Route 100

We continue to spray at or near permit limits where able. The field at St Elizabeth has been cut and should be harvested soon. I ordered a new battery for the Verizon Ethernet box at the Ewing tract influent station. Sludge will be hauled next week from the plant. The double doors that were damaged a while back were repaired recently. Brian from PW has done a terrific job cleaning and painting in the screen room.

Eaglepoint

Plant is running well. We have seen influent BOD levels increase once again. I collected a grab sample from Liberty Union this week. We will sample Car Sense next week. The rags continue to be a bother. I have instructed Inks to clean station weekly for a while.

St. Andrews Brac

Plant continues to run well. There were no operational issues to report.

Marsh Harbour

The plant is running fine. However, we did have a lightning strike near the influent pump station last Sunday. It knocked out several components, frying the phase loss monitor relay that controls the control circuit. A new one has been ordered. There was an overflow reported to DEP. This did reveal a scenario where we need battery back up for the auto dialer, as the present one doesn't have it because of the generator. In this instance since we only lost control circuit power it didn't run. We have asked M and S services to figure out a way to provide back up power. One of the spray pumps was pulled as it was tripping the breaker. It was shot, Deckmans has ordered a new one.

Saybrooke

Plant continues to operate well. The report regarding well 3 was submitted to DEP.

Lakeridge

Plant is running fine. Brian continues to work cleaning the control room and painting. It really looks nice. Predoc continues to clean the dosing beds and trenches.

Greenridge

Drip was shut down during cut and harvest. Lagoon levels are good for this time of year.

That is all for now, please call with any questions.

Respectfully,

Brian Norris



350 West Main Street
Suite 200
Trappe, PA 19426
T 610.495.0303
F 610.495.5855

MEMORANDUM

TO: Upper Uwchlan Township Municipal Authority

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

RE: Project Status Report

PROJECT NO.: 17000.00

DATE: July 18, 2018

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

Byers Station

Village at Byers Station (5C), Lot #1 Townhouse Parcel: At Byers Station Lot 5C ARRO is providing assistance to Toll with regards to capacity needs in determining sanitary sewer flow estimation for various potential building uses. ARRO is reviewing the Village at Byers Station (5C) sanitary sewer system package prepared by Bohler Engineering for Executive Land Holdings, LP. ARRO will be submitting review comments to the Township. ARRO completed its review of the Village at Byers Station (5C) sanitary sewer system package and submitted review comments to the Township. Revised Village at Byers Station (5C) sanitary sewer plans, dated September 12, 2016, was submitted to ARRO for review. ARRO completed its review of the plans and will issue a review comments letter to the Township by September 23, 2016. ARRO reviewed a Sewage Facilities Planning Module exemption package for The Village at Byers Station (5C). The package was signed and returned to the Township for forwarding to the Developer's engineer who will submit the package to PADEP. ARRO reviewed the full Village at Byers Station (5C) Planning Module package and returned it to the Township. The Township forwarded Components 4B and 4C to the Chester County Board of Health and Chester County Planning Commission for completion. ARRO issued a May 5, 2017 review letter to the Township with comments to the March 17, 2017 Subdivision and Amended Final PRD Plans for the Parcel 5C project. PADEP issued a June 9, 2017 Administrative Incompleteness review letter listing three items missing from the Sewage Facilities Planning Module submission. ARRO is assisting the Developer with responses to PADEP comments. PADEP issued a July 7, 2017 Administrative Incompleteness review letter for the Parcel 5C project listing one item regarding the sanitary sewer capacity. ARRO is assisting the Developer with a response to the PADEP comment. PADEP issued an August 3, 2017 letter approving the Official Plan revision for the 121 townhouses on Parcel 5C. ARRO reviewed the latest revision to the Land Development drawings and transmitted comments to Toll's engineer regarding showing the force main piping within the Station Boulevard sanitary easement. 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.

Village at Byers Station (5C), Lot #2 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 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.

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.

Nothing new to report.

Eagle Hunt

ARRO has started preparing contract documents for recommended repairs to the Eagle Hunt effluent storage tank as contained in the August 2016 tank inspection report.

ARRO conducted a site visit with Dutchland to review and discuss proposed tank repairs. ARRO is in the process of generating contract drawings and specifications for the proposed tank repairs.

Eaglepointe

Wastewater Treatment Plant and Sanitary Sewer System: ARRO prepared plans and specifications for a new chain-link fencing around the wastewater treatment plant. Eaglepointe sanitary sewer easement survey was authorized to proceed on December 15,

2017. The surveyor will prepare plot plans and legal descriptions for all easements encompassing gravity sanitary sewer at the subdivision. ARRO received and returned comments to the surveyor's preliminary easement plans on April 23, 2018.

Bids for new fencing at the Eaglepointe WWTP were received on June 22, 2018. ARRO prepared a June 25, 2018 recommendation to award letter to the Township. A notice to proceed has been issued to ProMax Fencing and ARRO is waiting for ProMax to submit its contract documents.

ARRO is working on a plan for the decommissioning of the Eaglepointe WWTP.

CarSense: ARRO received a telephone call from CarSense's engineer regarding a request to include additional flow to the sanitary sewer system from a proposed carwash facility. ARRO is awaiting a formal written request of the proposal. ARRO received a written request from CarSense's engineer to introduce additional flow from a proposed carwash facility into the Eaglepointe sanitary sewer system. ARRO responded that the estimated 2,208 gallon flow from CarSense would be acceptable provided an oil/water separator and a sampling facility be installed. CarSense's engineer expects to have sewer plans and planning module application materials for submission to the Township within two weeks. ARRO reviewed the CarSense sewer plans and planning module application materials and transmitted comments to each to CarSense's engineer by letter dated September 20, 2017. ARRO reviewed the CarSense engineer's latest revised sewer plans. ARRO prepared a November 28, 2017 letter accepting the latest revised sewer plans. CarSense has secured a general contractor for the sanitary sewer work. ARRO is assisting the contractor regarding the contractor's submission of shop drawings for the project. ARRO reviewed and approved the sanitary sewer shop drawings. The project preconstruction meeting was held on April 10, 2018. Onsite sanitary sewer installation began in mid-April 2018.

Onsite sanitary sewer installation is complete and tested. Wastewater flow from CarSense to the Eaglepointe WWTP started June 1, 2018.

Liberty Union Bar & Grille: Liberty Union effluent was tested and BOD, fat & oil and nitrogen results were found to be higher than the Non-Residential Waste Discharge resolution limits. A November 13, 2017 letter was sent to Liberty Union advising them of their discharge overages and the need to meet with the Authority Administrator, Clean Water and ARRO to discuss how Liberty Union could lower the three elevated discharges. The meeting will take place on November 30, 2017. The Authority Administrator, Clean Water and ARRO met with Liberty Union on November 30, 2017 to discuss how to lower the three elevated discharges. Liberty Union stated they will institute existing grease trap cleaning reforms and update their dish cleaning policy. Clean Water will take additional samples periodically to check the reforms. Clean Water conducted a grab sampling of Liberty Union discharges on January 31, 2018. Sampling test results for Phosphorus, BOD and Oil/Grease continue to be above the Authority's Non-Residential Waste Discharge resolution limits. ARRO had a telephone discussion with Liberty Union on February 23, 2018 about high sampling results. Liberty Union requested a third sampling as a composite sample like the first sampling. The Authority Administrator authorized Clean Water to set up the new composite sampling, which was done over February 19 and 20. A lab error occurred with the sample collected on March 29, 2018. The lab scheduled another sampler collection for April 5 into April 6, 2018. ARRO has not received the latest sampling test results. ARRO transmitted the April 6, 2018 test results to Liberty Union. ARRO is preparing comments to Liberty Union questions on the test results

ARRO prepared comments to Liberty Union questions on the test results.

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. ARRO transmitted its sanitary sewer evaluation to Dilibero on April 20, 2018. ARRO has been responding to sanitary sewer related questions from Dilibero's sewer contractor.

Nothing new to report.

Ewing Tract

Toll Brothers and Lennar started installing house service lines to new homes in Ewing Tract – West Vincent Township February 2016. ARRO is observing installation and testing of the house service lines. All sanitary sewer house service lines at Toll Brothers' Ewing Tract - West Vincent Carriage Home South subdivision are complete and tested as of June 22, 2017. Toll Brothers submitted to ARRO for review the preliminary maintenance bond amounts for the Ewing Tract – West Vincent Phase 1/2A, Ewing Tract – West Vincent Phase 2A, and Ewing Tract - West Vincent Phase 2 – Carriage Home South projects. ARRO prepared a February 22, 2018 letter to the Township approving the maintenance bond amounts submitted by Toll Brothers for the Ewing Tract – West Vincent Phase 1/2A, Ewing Tract – West Vincent Phase 2A, and Ewing Tract - West Vincent Phase 2 – Carriage Home South projects. The Authority Administrator prepared and sent a March 16, 2018 letter to the Home Owners Associations at Byers Station, Ewing-WVT and Reserve at Eagle warning residents not to ice skate on the frozen water surface of each effluent storage lagoon.

Toll Brothers and Lennar are continuing to install house service lines to new homes in Ewing Tract – West Vincent Township with ARRO observing the completed installations and the testing of the house service lines. ARRO testing reports are being sent to West Vincent Township's engineer, Cedarville Engineering Group, LLC.

ARRO prepared a June 13, 2018 memo to the Authority Administrator with findings regarding proposed residential recreational trails near existing Ewing Tract – West Vincent spray field sites.

On June 20, 2018 ARRO requested Toll Brothers submit Descriptions of Property for all Ewing Tract – West Vincent sanitary sewer easements, spray fields and the spray pump station and lagoon. Toll Brothers submitted easement documents by email on July 9, 2018. ARRO reviewed the documents and sent Toll Brothers comments to the documents by email dated July 13, 2018.

Fetter Farm Tract (McKee)

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 Fetter's Property prepared for McKee-Millford 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 (SFPM) and is working on the sanitary sewer review. The Authority Administrator signed the SFPM 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.

Nothing new to report.

Frame Property (Reserve at Chester Springs)

ARRO reviewed the sanitary sewer portion of the latest Final Subdivision/Land Development Plan and sent a January 14, 2016 letter to the Township stating all previous comments were addressed and recommending approval of the Plan. PADEP sent a March 18, 2016 letter to the Township with the approval of the Official Plan revision for the 61-unit Frame Property. ARRO reviewed the sanitary sewer escrow quantities prepared by Toll Brothers for Frame Property and found it acceptable. ARRO prepared a May 11, 2016 recommendation letter that was sent to the Township. Toll Brothers informed ARRO that they were hoping to settle on the property shortly and start construction in July. ARRO is preparing the Little Conestoga Road HOP for Toll. ARRO prepared and submitted to PennDOT the Little Conestoga Road HOP for Toll Brothers. Toll said PennDOT must issue the HOP before settlement on the property can take place. The pre-construction meeting for the Reserve at Chester Springs (Frame Property) subdivision was held on August 4, 2016. ARRO reviewed shop drawings of sanitary sewer items. The site work is underway. ARRO has been informed by the contractor that sanitary sewer installation is expected to start at the beginning of October 2016. ARRO was informed by Toll Brothers that the sanitary sewer installation will start on Monday, October 24, 2016. Sanitary sewer installation started in Little Conestoga Road on Monday, October 24, 2016 with the tie-in to a manhole immediately upstream of the Little Conestoga Pump Station. Sewer installation in Little Conestoga Road is complete and is now proceeding within the subdivision. ARRO reviewed Toll Brothers' Reserve at Chester Springs Escrow Release #2 request and

prepared a recommendation letter to release \$135,160.56. All sanitary sewer piping is installed and testing is underway. The first house service line is being installed the week of February 13, 2017. ARRO is working with Toll Brothers to obtain an easement within the subdivision for ARRO –designed sanitary sewer to serve three (3) Phase II Collection System properties. ARRO is having survey completed of the easement and for design of sewer for the three properties. The easement survey was completed and the Authority solicitor is preparing a Deed of Dedication for Sewer Easement. ARRO reviewed Toll Brothers' Reserve at Chester Springs Escrow Release #3 request and prepared a recommendation letter to release \$91,727.23. The Authority solicitor prepared a Deed of Dedication for the sewer easement to connect Phase II Collection System properties to the Reserve at Chester Springs. The Deed was transmitted to Toll Brothers for review. ARRO prepared a change order to the contractor, MG Property Management, to install 6-inch sanitary sewer and a manhole within the Reserve at Chester Springs Tot Lot for the future connection of Phase II Collection System properties. All sanitary sewer pipe testing is complete and manhole testing is underway. All sanitary sewer manhole testing is complete. MG Property Management installed the 6-inch sanitary sewer and a manhole within the Reserve at Chester Springs Tot Lot for the future connection of Phase II Collection System properties, but cannot complete its work until the Developer's contractor restores an open utility trench near the work area. ARRO prepared closeout documents for the MG Property Management project. MG Property Management completed its sanitary sewer work within the Tot Lot and will submit closeout documents for the project during the week of August 20, 2017.

Installation of the gravity house service line to each new home is continuing.

Greenridge

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 Upattinas School parcel (Open Community Adaptive Reuse Development). 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 SFPM 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. ARRO met with the 403 Greenridge Road property owner and his contractor on April 30, 2018 regarding the proposed installation of a sanitary sewer grinder pump to connect to the Stonehedge force main that runs to the Greenridge WWTP sanitary sewer system.

ARRO reviewed the 403 Greenridge Road Public Sewer Connection Plan prepared by Evans Mill Environmental for a sanitary sewer grinder pump to connect to the Stonehedge force main. The Plan was approved on June 20, 2018.

Jankowski

The Preliminary Plan/Conditional Use Application was submitted to the Township and ARRO provided comments on the sanitary sewer system. ARRO met with The Cutler Group on December 10, 2008 to discuss ARRO's Preliminary Plan/Conditional Use Application review

comments. The Cutler Group advised that it was able to locate suitable soils to provide sufficient disposal capacity for both its development needs and the Township's required disposal capacity. ARRO reviewed the soils report and issued a letter to the Township agreeing that sufficient capacity appears to exist, although actual capacity will need to be verified through an as-built survey. ARRO provided comments on a draft preliminary subdivision plan addressing the Township Engineer's June 2008 review letter. The Cutler Group subsequently requested an informal review of the revised plans and ARRO provided unofficial comments so that The Cutler Group may further refine the draft preliminary plan in anticipation of its official submission to the Township. ARRO studied the feasibility of connecting the 60 Jankowski homes to the Saybrooke WWTP system. ARRO found that the Saybrooke WWTP does not have the capacity to treat the additional 14,000 gpd and Pump Station No. 2 does not have sufficient capacity. Also, the land parcel does not have sufficient footprint to support an upgrade to the WWTP. ARRO studied expanding the Saybrooke seepage beds and adding drip facilities. ARRO intends to review PADEP records regarding original Saybrooke seepage bed and soil design parameters. On July 22, 2014, ARRO reviewed PADEP records regarding the original Saybrooke seepage bed and soil design parameters, which confirmed ARRO's initial assumptions, and it appears that all effluent can be disposed on the existing lot if four absorption beds and a drip irrigation system are utilized. ARRO is creating an opinion of probable construction cost for expanding the absorption beds. ARRO has prepared its initial opinion of probable construction cost for expanding the absorption beds. ARRO was in the process of creating an opinion of probable construction cost for the drip irrigation system, but can't obtain final design parameters from PADEP unless onsite soil testing is done to determine soil percolation rates. 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.

Lakeridge

ARRO has prepared plans and specifications for fencing around the WWTP's sand mounds and absorption trenches.

ARRO is preparing plans and specifications for construction of a sludge tank exterior to the WWTP Control Building. ARRO conducted an inspection of the Lakeridge WWTP Control Building in order to prepare maintenance and repair items for inclusion in the sludge tank construction contract. ARRO is continuing to prepare the sludge tank and building repairs plans and specifications. ARRO has both the sludge tank plans and specifications and the PADEP Part 2 permit application approximately 80 percent complete. ARRO has completed the sludge tank plans and specifications. The Part 2 permit application is expected to be submitted to PADEP by the end of May 2018. ARRO is obtaining proposals for repairs to the wastewater treatment plant's Control Building siding

Changes to sludge tank design plans were necessary due to updated Columbia Gas easement information. ARRO submitted the Part 2 permit application to PADEP on July 17, 2018.

ARRO obtained wastewater treatment plant Control Building siding repair proposals and submitted the costs to the Authority Administrator. The project was approved and ARRO directed the contractor to proceed.

ARRO prepared and sent to Clean Water on June 12, 2018 the 5-Year Groundwater Monitoring Geotechnical Comprehensive Report for inclusion in Clean Water's Lakeridge WWTP WQM permit renewal package submission to PADEP.

Bids for new fencing around the Lakeridge WWTP disposal fields were received on June 22, 2018. ARRO prepared a June 25, 2018 recommendation to award letter to the Township. A notice to proceed has been issued to ProMax Fencing and ARRO is waiting for ProMax to submit its contract drawings.

Marsh Harbour

ARRO prepared plans and specifications for miscellaneous repairs to the Marsh Harbour WWTP control building.

ARRO is continuing its evaluation of the Marsh Harbour WWTP access road and its stormwater requirements. ARRO completed its evaluation of the access road and stormwater requirements and submitted the evaluation to the Authority Administrator.

ARRO has completed specifications and an opinion of probable cost for the wastewater treatment plant's Control Building exterior repairs and the project is ready to be put out to bid.

Reserve at Eagle

ARRO prepared plans and specifications for lagoon and spray field fencing.

Bids for new fencing at the Reserve at Eagle storage lagoon were received on June 22, 2018. ARRO prepared a June 25, 2018 recommendation to award letter to the Township. A notice to proceed has been issued to ProMax Fencing and ARRO is waiting for ProMax to submit its contract drawings.

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 prepared a draft of the Route 100 Regional WWTP aerated lagoon nutrient removal study for the potential of rerating of the lagoon to obtain an additional 100,000 gallons of capacity. The draft is under internal review prior to submission to the Authority.

ARRO continues updating the Route 100 Regional wastewater system treatment facility manual and the manuals for the other treatment facilities in the Township.

ARRO prepared the DRBC permit renewal application. ARRO submitted the DRBC permit renewal application on August 3, 2017. ARRO received a March 12, 2018 email from DRBC stating the Route 100 WWTP renewal Docket should be presented and acted upon at the next Commission hearing. ARRO received and responded to a DRBC March 30, 2018 email question. DRBC stated the draft Docket is being prepared. ARRO is working on setting the entire Route 100 Regional WWTP disposal system into a geographical information system (GIS). ARRO has digitized the record drawings from each disposal system and has completed much of the field work gathering data from each spray and drip field and their associated pump stations. On May 1, 2018, ARRO received a draft of the DRBC Docket. ARRO finished data collection of all Route 100 Regional WWTP disposal fields and is currently analyzing the data and integrated it into the sanitary GIS.

On June 14, 2018, ARRO received the DRBC renewal Docket for the Route 100 WWTP.

ARRO finished integrating into sanitary GIS the data collected from all Route 100 Regional WWTP disposal fields. ARRO is currently working on digitizing into sanitary GIS the Route 100 Regional WWTP.

ARRO prepared the annual Route 100 Regional WWTP groundwater monitoring report and transmitted it to PADEP by letter dated June 19, 2018.

ARRO is working on an alternate energy assessment project for the Route 100 WWTP. Wind and solar energy sources are being evaluated. The final evaluation will be presented to the Board at the July 2018 meeting.

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.

Nothing new to report.

Saybrooke

ARRO prepared plans for a gravity and grinder pump system for 55 Yarmouth Lane and is getting a price from a contractor for the project. ARRO prepared revised plans for a gravity and grinder pump system at 55 Yarmouth Lane. Columbia Gas has approved the portion of the plans that crosses its easement area. ARRO awaits approval of the plans by the property owners. ARRO received approval from the 55 Yarmouth Lane property owners for the proposed gravity and grinder pump system. ARRO is obtaining costs from contractors for the work. ARRO completed the 5-Year Comprehensive Groundwater Evaluation for inclusion with the WQM permit renewal application being prepared by Clean Water. ARRO is attempting to contact the 55 Yarmouth Lane property owner to determine if and when the sewer connection needs to be completed. The meeting with the 55 Yarmouth Lane property owners to determine if and when the sewer connection needs to be completed was conducted on December 8, 2016. ARRO is preparing plans and specifications for miscellaneous repairs to the Saybrooke WWTP control building. ARRO prepared specifications for repairs to the Saybrooke WWTP control building roof. A contractor quote of \$5,800.00 was received for the specified work. ARRO met with the 55 Yarmouth Lane property owners to discuss the proposed grinder pump system and

also emailed to the property owners two contractor quotes for the work. ARRO is obtaining proposals for repairs to the wastewater treatment plant's Control Building roof.

ARRO obtained wastewater treatment plant Control Building roof replacement proposals and submitted the costs to the Authority Administrator. The project was approved and ARRO directed the contractor to proceed.

ARRO prepared the annual Saybrooke WWTP groundwater monitoring report and transmitted it to PADEP by letter dated June 19, 2018.

ARRO is working on a plan for the decommissioning of the Saybrooke WWTP.

St. Andrews Brae

Nothing to report.

Upland Farms

ARRO has started preparing contract documents for recommended repairs to the Upland Farms effluent storage tank as contained in the August 2016 tank inspection report.

ARRO conducted a site visit with Dutchland to review and discuss proposed tank repairs. ARRO is in the process of generating contract drawings and specifications for the proposed tank repairs.

Waynebrook

The last house service line in the development was tested on October 20, 2015. ARRO received Waynebrook Open Space parcel legal descriptions and drip field record plans for review. ARRO reviewed three Waynebrook Open Space parcel legal descriptions and had no comments to them. ARRO reviewed the drip field record plans and transmitted comments to Cutler. Subsequently, revised drip field record plans were submitted, reviewed and approved by ARRO. ARRO requested Cutler submit Waynebrook record drawings as part of dedication. Drawings were received from Cutler, but they were not record drawings. ARRO informed Cutler again to provide record drawings. ARRO received an October 12, 2016 email from Cutler stating submission of record drawings will be in the near future and asking if all legal descriptions and easements were provided for the project. ARRO will review the email's questions and respond to Cutler. ARRO and Authority counsel have reviewed documentation prepared by Cutler for dedication of the Waynebrook sanitary sewer facilities. ARRO is preparing a letter recommending acceptance of sanitary sewer dedication. ARRO prepared a letter recommending acceptance of the sanitary sewer to be dedicated. ARRO has reminded Cutler to submit the approved sanitary sewer and disposal fields record drawings in the forms required by the Authority's Specifications.

Nothing new to report.

Windsor Ridge

ARRO has started preparing contract documents for recommended repairs to the Windsor Ridge effluent storage tank as contained in the August 2016 tank inspection report.

ARRO conducted a site visit with Dutchland to review and discuss proposed tank repairs. ARRO is in the process of generating contract drawings and specifications for the proposed tank repairs.

Miscellaneous

Eagleview Wastewater Treatment Plant – Per PADEP, Upper Uwchlan Township is expected to participate in Uwchlan Township's Act 537 planning study for the Eagleview

Wastewater Treatment Plant. ARRO provided a Scope of Work and Cost Estimate for the Township's participation in the Act 537 planning study to Uwchlan Township. ARRO is proceeding with the Township's portion of the Act 537 planning study. ARRO completed drafting its portion of the Act 537 Eagleview Special Study and submitted the draft to Uwchlan Township for review and comment. On May 13, 2015 ARRO conducted an audit of the existing Eagleview WWTP. ARRO evaluated the plant capacity and prepared a report of findings in June 2015. ARRO has Gannett Fleming's Act 537 Plan Revision under review with comments forthcoming in September 2016. ARRO completed its review of the Gannett Fleming Act 537 Plan Revision and sent a September 19, 2016 letter to the Township with eight comments to the Plan Revision. PADEP issued a March 17, 2017 letter requesting additional information before reviewing and acting upon the Eagleview Wastewater Treatment Plant Act 537 Plan Update Revision.

Nothing new to report.

270 – 290 Park Road (The Townes at Chester Springs) – ARRO is reviewing the sanitary sewer portion of the Final Land Development Plan resubmission for the 44 unit townhouse project. ARRO reviewed the sanitary sewer portion of the second Final Land Development Plan submission, dated December 28, 2015, and sent a comment letter to the Township dated January 26, 2016. ARRO is currently reviewing the third submission of the Plan received February 12, 2016. ARRO reviewed the third submission, dated February 12, 2016, and sent a comment letter to the Township dated February 23, 2016. A revised Sewerage Facilities Planning Module for 33 EDUs was submitted by D. L. Howell & Associates, Inc., which ARRO reviewed and the Authority Administrator signed. The signed Module was returned to D. L. Howell. ARRO reviewed another submission of the Final Land Development Plan and in a July 5, 2016 letter transmitted its comments to the Township. Sanitary sewer from the property was redesigned to connect to the new sanitary sewer in Cambridge Road in Windsor Place. ARRO reviewed another submission of the Final Land Development Plan and in a July 5, 2016 letter transmitted its comments to the Township. Sanitary sewer from the property was redesigned to connect to the new sanitary sewer in Cambridge Road in Windsor Place. ARRO transmitted review comments to the Developer's engineer regarding the planned sanitary sewer connection to the new sanitary sewer in Cambridge Road in Windsor Place. ARRO is reviewing the Sewage Facilities Planning Modules for the project. SFPM Component 4A was completed by the Township. Components 4B and 4C were completed by Chester County and sent to the Township. Sections G1, G2 and J were completed. The Township returned all of the SFPM completed information to the Developer's Engineer to prepare the appropriate copies for submission to PADEP. Additional SFPM information was provided to PADEP in response to their April 5, 2017 requests. PADEP issued a May 10, 2017 letter approving the proposed 40 townhouses development that will generate 7,400 gallons of sewage per day to be treated at the Route 100 Regional WWTP. ARRO is reviewing the June 20, 2017 resubmission of Land Development Plans for the project. Toll Brothers will be purchasing the approved plans and will develop and build the project. ARRO reviewed and commented on the draft sanitary sewer escrow spreadsheet submitted by Toll Brothers on June 14, 2017. ARRO reviewed the June 20, 2017 resubmission of Land Development Plans for the project and sent a June 23, 2017 letter to the Township with comments. The project preconstruction meeting was held on July 27, 2017. ARRO reviewed the contractor's sanitary sewer shop drawings. Sanitary sewer installation is tentatively scheduled to start the first week of October 2017. Sanitary sewer installation started on October 9, 2017. Sanitary sewer installation was completed on November 7, 2017. All sanitary sewer testing was completed on December 18, 2017. On February 14, 2018, Toll Brothers informed ARRO that the house service line installations would begin in the later part of February 2018. House service line installations began on February 28, 2018.

House service line installations continued into June 2018.

McHugh Minor Subdivision Plan – ARRO reviewed a proposed 3-lot subdivision plan with individual on-lot disposal systems. ARRO prepared a September 6, 2016 review comments letter and transmitted it to the Township. ARRO reviewed the subdivision Sewage Facilities Planning Modules (SFPM) and the Township sent them on to Chester County for completion of Components 4B and 4C. The Township provided the completed Components 4A, 4B and 4C to the applicant's consultant to assemble the complete SFPMs for the Board of Supervisors to adopt a Resolution for submission to PADEP. PADEP issued a July 7, 2017 Administrative Incompleteness review letter for the subdivision plan listing two items. ARRO is assisting the Developer with a response to the PADEP comment. ARRO sent a September 19, 2017 email to PADEP with responses to PADEP's recent Administrative Incompleteness letter. Regarding the SFPM, an Authority letter, dated October 11, 2017, was sent to PADEP informing them that the Township is not involved in the ownership of private on-lot septic system. ARRO responded to a subsequent email from PADEP on October 30, 2017 with a draft Septage Management Ordinance that is currently under Township review. ARRO is endeavoring to obtain a status from PADEP to its last correspondence to PADEP. ARRO contacted PADEP and the Department wants either an executed O&M agreement with the property owner and Township OR a Township enacted Septage Management Ordinance. The SFPM will not be acted on until one or the other is submitted to the Department.

Nothing new to report.

Marsh Lea Subdivision – ARRO reviewed a proposed 27-lot subdivision plan with individual on-lot disposal systems. ARRO prepared a September 13, 2016 review comments letter and transmitted it to the Township. ARRO reviewed the Sewage Facilities Planning Modules and they were sent to Chester County by the Township. Component 4 B was completed by the Planning Commission, but Component 4C hasn't been returned. SFPM Component 4A was completed by the Township. Component 4B was completed by Chester County Planning Commission and Component 4C was completed by Chester County Health Board and both components were sent to the Township. The Township returned all of the SFPM completed information to the Developer's Engineer to prepare the appropriate copies for submission to PADEP. ARRO transmitted comments to the Township regarding the developer's March 8, 2017 Marsh Lea Subdivision Plans. PADEP sent an Administrative Incompleteness Review Letter, dated August 9, 2017 to the Township. ARRO is assisting with responses to the PADEP letter. Evans Mill on its own transmitted a September 5, 2017 letter to PADEP with responses to PADEP's August 9, 2017 Administrative Incompleteness review letter. After review of the September 5, 2017 letter, PADEP sent a September 28, 2017 email to Evans Mill and the Township requesting additional information for the SFPM. Evans Mill transmitted a September 29, 2017 response email back to PADEP. PADEP issued a November 17, 2017 letter approving the 27-lot residential subdivision SFPM.

Nothing new to report.

Village of Eagle

Gordon's Sports Supply - Gordon's Sports Supply expressed an interest in connecting to the Route 100 Regional WWTP sewage collection system. ARRO reviewed one year of water usage records supplied by Gordon's for analysis to estimate sewage flow and to establish a connection fee. On September 8 and September 19, 2017, ARRO sent to the Gordon's building owner the Authority's sanitary sewer requirements and a drawing of the Little Conestoga Road sanitary sewer to which the building will be connected.

Nothing new to report.

160/180 Park Road (Gunner Properties) - ARRO reviewed and commented on the sanitary sewer plans submitted to the Township on June 14, 2017 for the connection of 160/180 Park

Road to the Route 100 Regional WWTP sanitary sewer system. ARRO reviewed revised sanitary sewer plans submitted to the Township on August 3, 2017. ARRO sent a letter to the Authority approving the revised plans. ARRO received updated Preliminary/Final Land Development Plans on October 17, 2017 for review. ARRO issued an October 31, 2017 comments letter to the updated Preliminary/Final Land Development Plans, received on October 17, 2017, requesting additional information on proposed bathroom facilities to determine the sanitary sewer capacity that will need to be purchased. ARRO reviewed a request to allow installation of an 8" saddle on the existing 12" sewer main in lieu of 8" x 12" cut-in wye as shown on the Developer's approved design drawings. The request was denied unless further information is supplied supporting the request's feasibility. ARRO reviewed and accepted installation of an 8" saddle on the existing 12" sewer main in lieu of 8" x 12" cut-in wye. A preconstruction meeting for the project was held on January 11, 2018. On February 20, 2018, the Developer's contractor installed an 8" saddle on the existing 12" sewer main in Park Road. The contractor also started installing sewer within the site.

ARRO is preparing a letter to the Authority in response to the capacity request from the Developer.

Montesano Brothers Italian Market and Catering - ARRO reviewed a Conditional Use application for expansion of the Market to provide outdoor seating. ARRO sent an October 10, 2017 review letter to the Township with comments that included a review of current sewage flows and an estimate of two (2) EDUs in additional sanitary sewer flow would be generated with the expansion. ARRO attended an October 16, 2017 Conditional Use Hearing on the application. ARRO will be attending the continued Conditional Use Hearing scheduled for December 18, 2017.

Nothing new to report.

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.

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

UPPER UWCHLAN MUNICIPAL AUTHORITY
WASTEWATER TREATMENT PLANTS

MONTHLY AVERAGE DAILY FLOWS

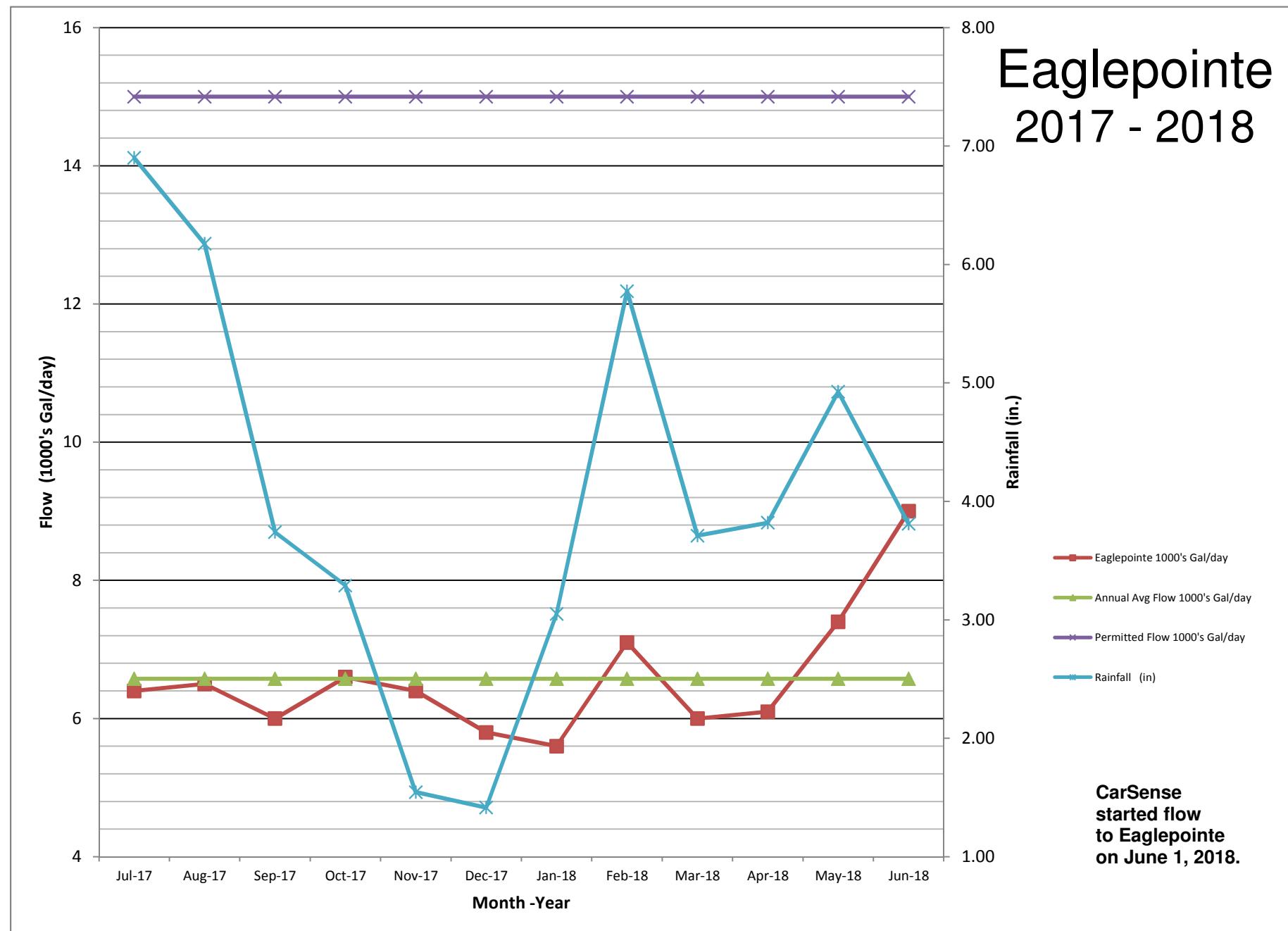
Month - Year		Average Daily Flow (MGD)							Rainfall (in)
		Eaglepointe	Greenridge	Lakeridge	Marsh Harbour	Route 100	Saybrooke	St. Andrews	
Jul-17		0.00640	0.00730	0.02600	0.03890	0.28800	0.00690	0.00150	6.90
Aug-17		0.00650	0.00750	0.02560	0.03840	0.29000	0.00770	0.00160	6.18
Sep-17		0.00600	0.00690	0.02510	0.03810	0.30340	0.00650	0.00170	3.74
Oct-17		0.00660	0.00690	0.02530	0.04030	0.29020	0.00680	0.00190	3.29
Nov-17		0.00640	0.00710	0.02760	0.03920	0.30900	0.00720	0.00180	1.55
Dec-17		0.00580	0.00700	0.02790	0.03930	0.31070	0.00720	0.00210	1.42
Jan-18		0.00560	0.00770	0.02770	0.03920	0.30760	0.00770	0.00200	3.05
Feb-18		0.00710	0.00750	0.02900	0.04240	0.33180	0.00820	0.00260	5.78
Mar-18		0.00600	0.00670	0.02850	0.04200	0.33400	0.00770	0.00250	3.71
Apr-18		0.00610	0.00790	0.02560	0.04010	0.32180	0.00750	0.00270	3.82
May-18		0.00740	0.00810	0.02650	0.04020	0.33400	0.00750	0.00250	4.93
Jun-18		0.00900	0.00780	0.02500	0.03660	0.31510	0.00730	0.00220	3.81

Annual Avg Flow = 0.00658 Permitted Flow = 0.01500

Permitted Flow as of October 2015 = 0.60000

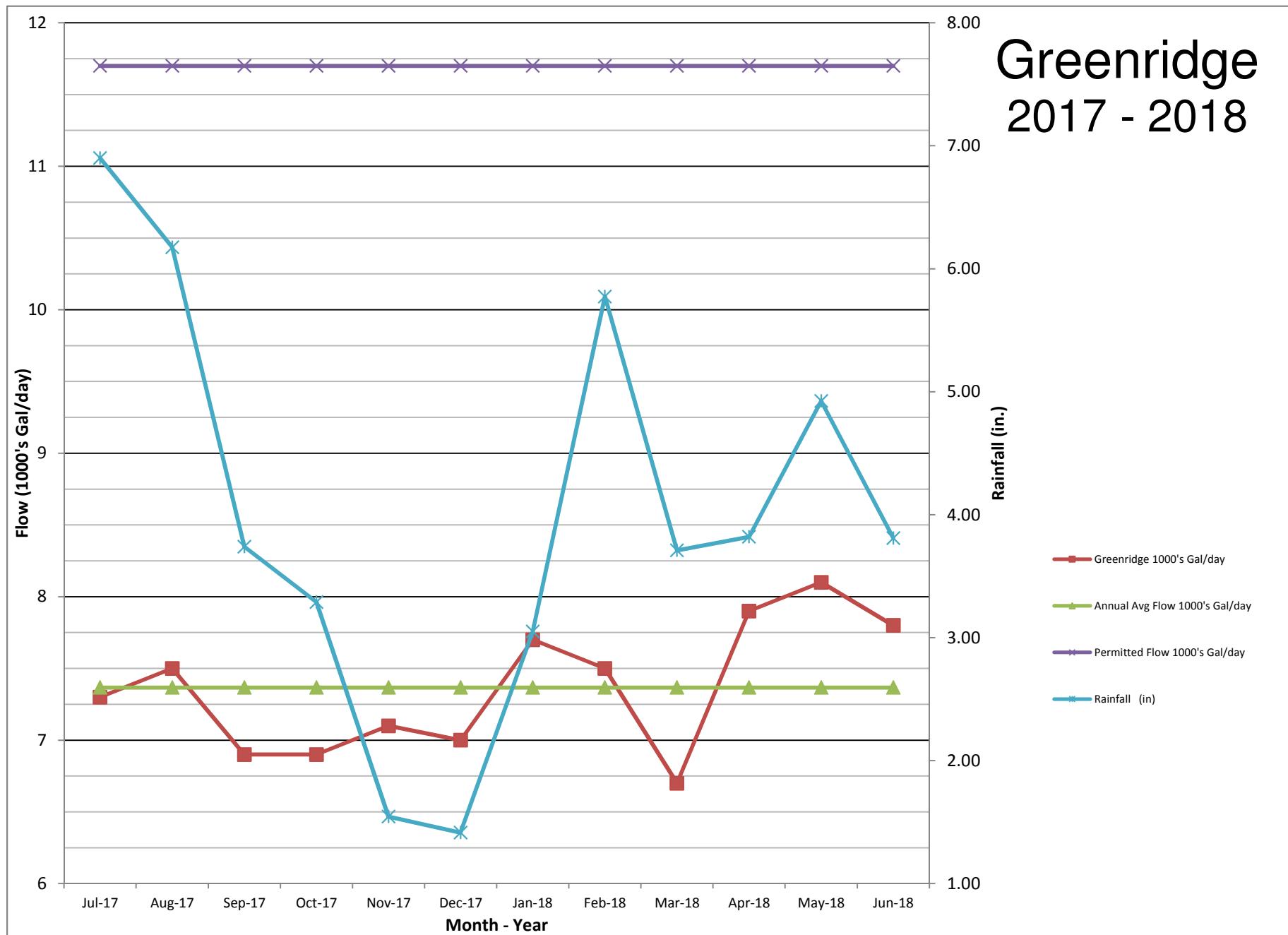
Eaglepointe

2017 - 2018

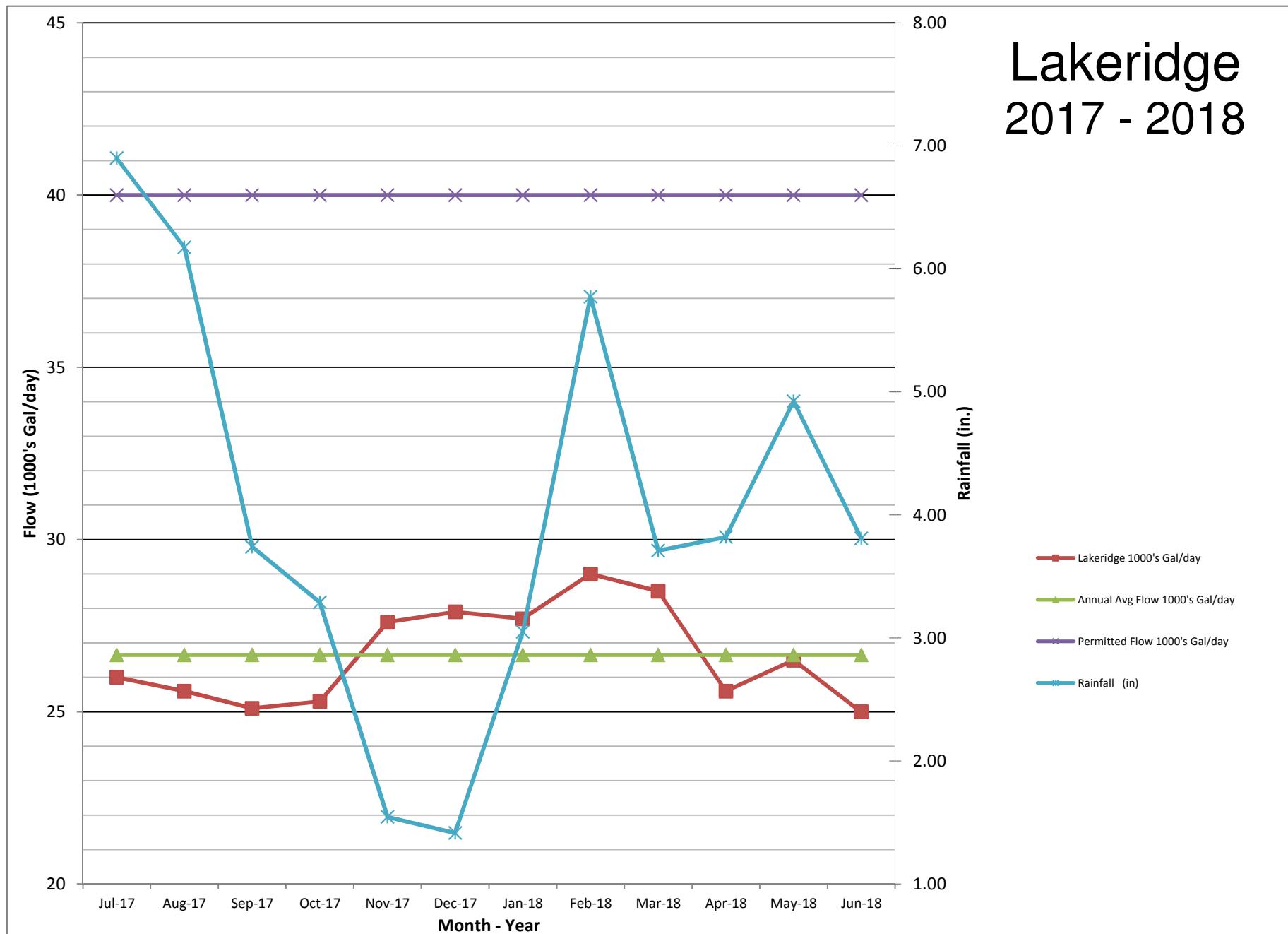


Greenridge

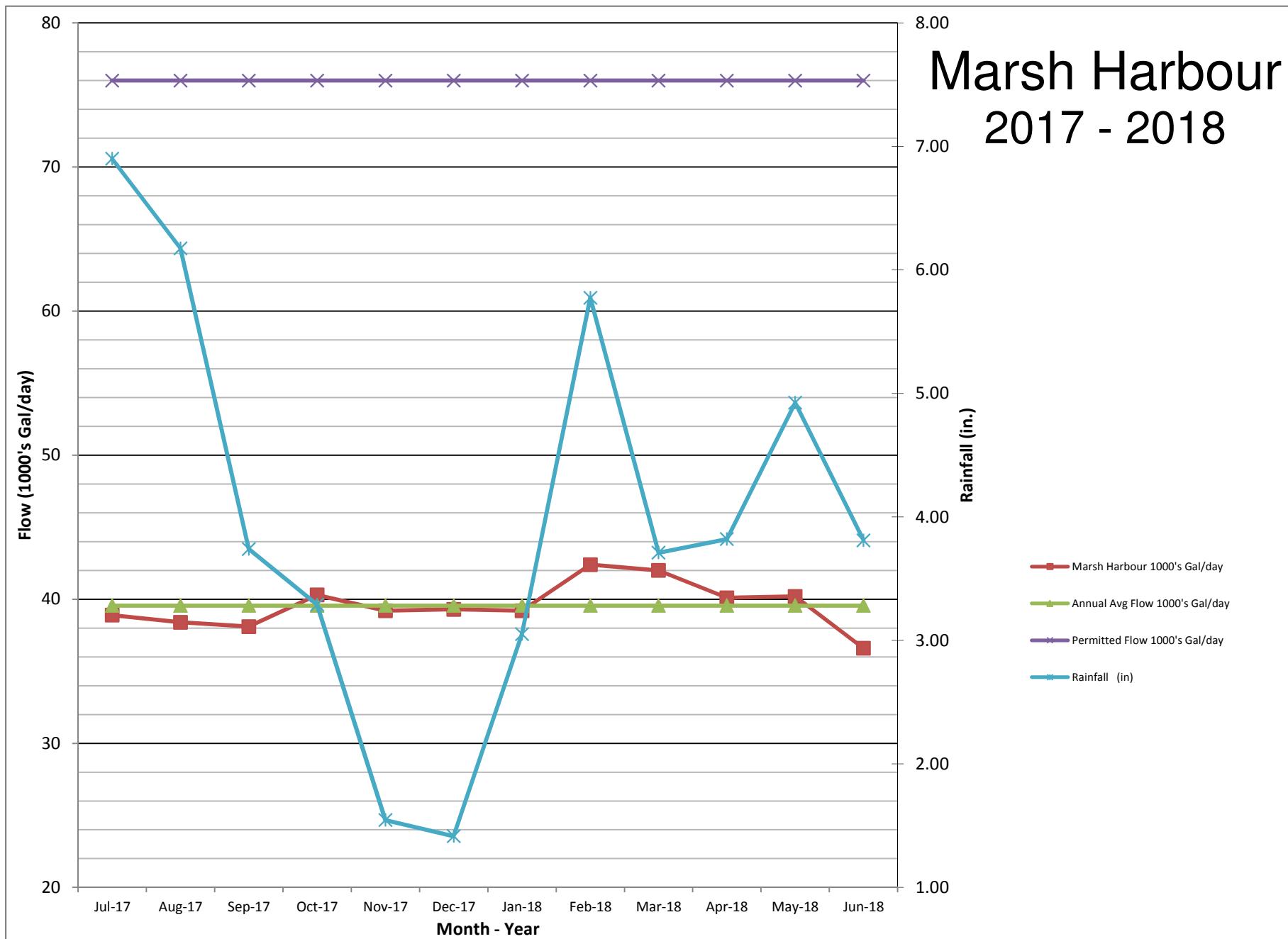
2017 - 2018



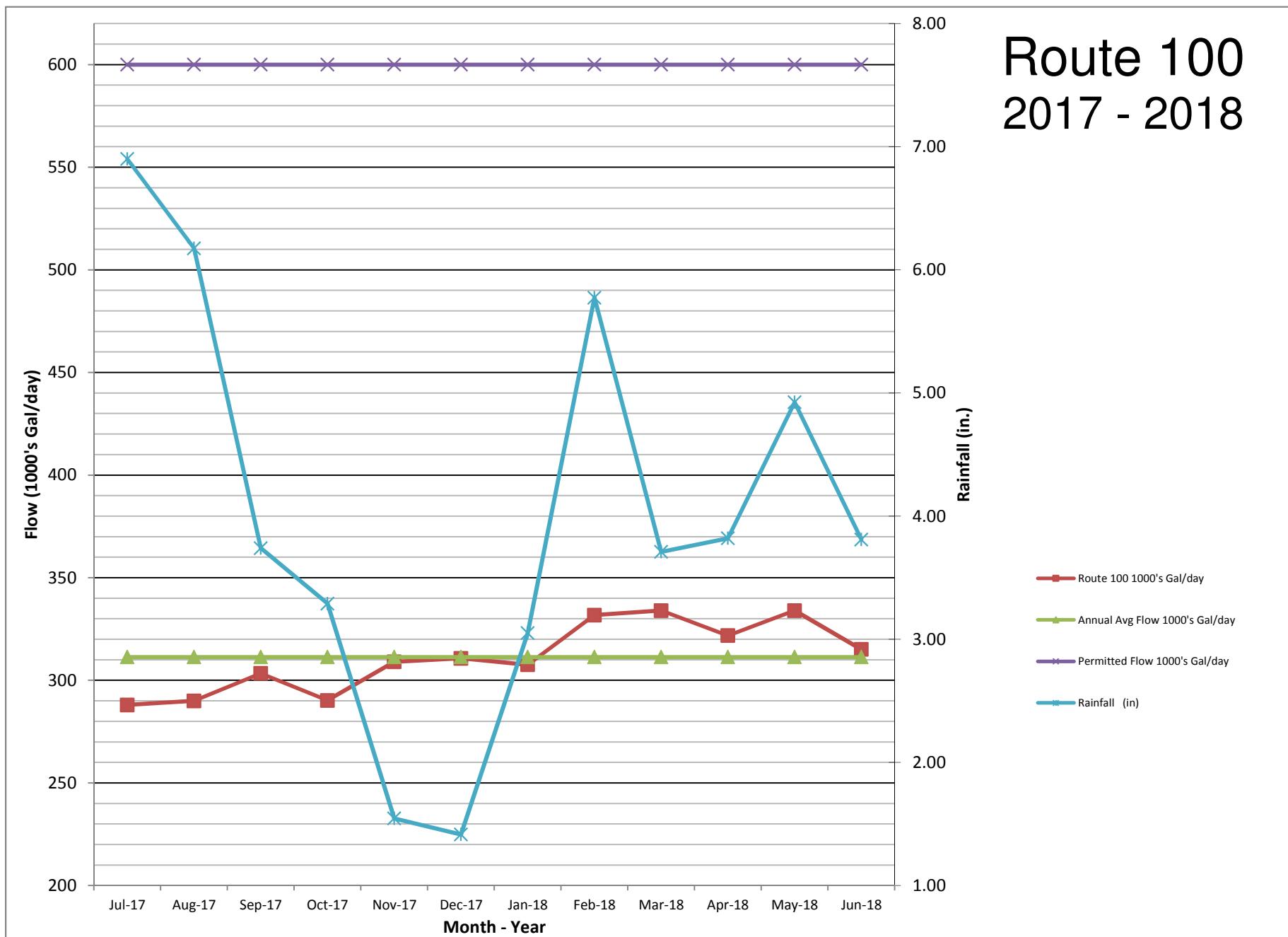
Lakeridge 2017 - 2018



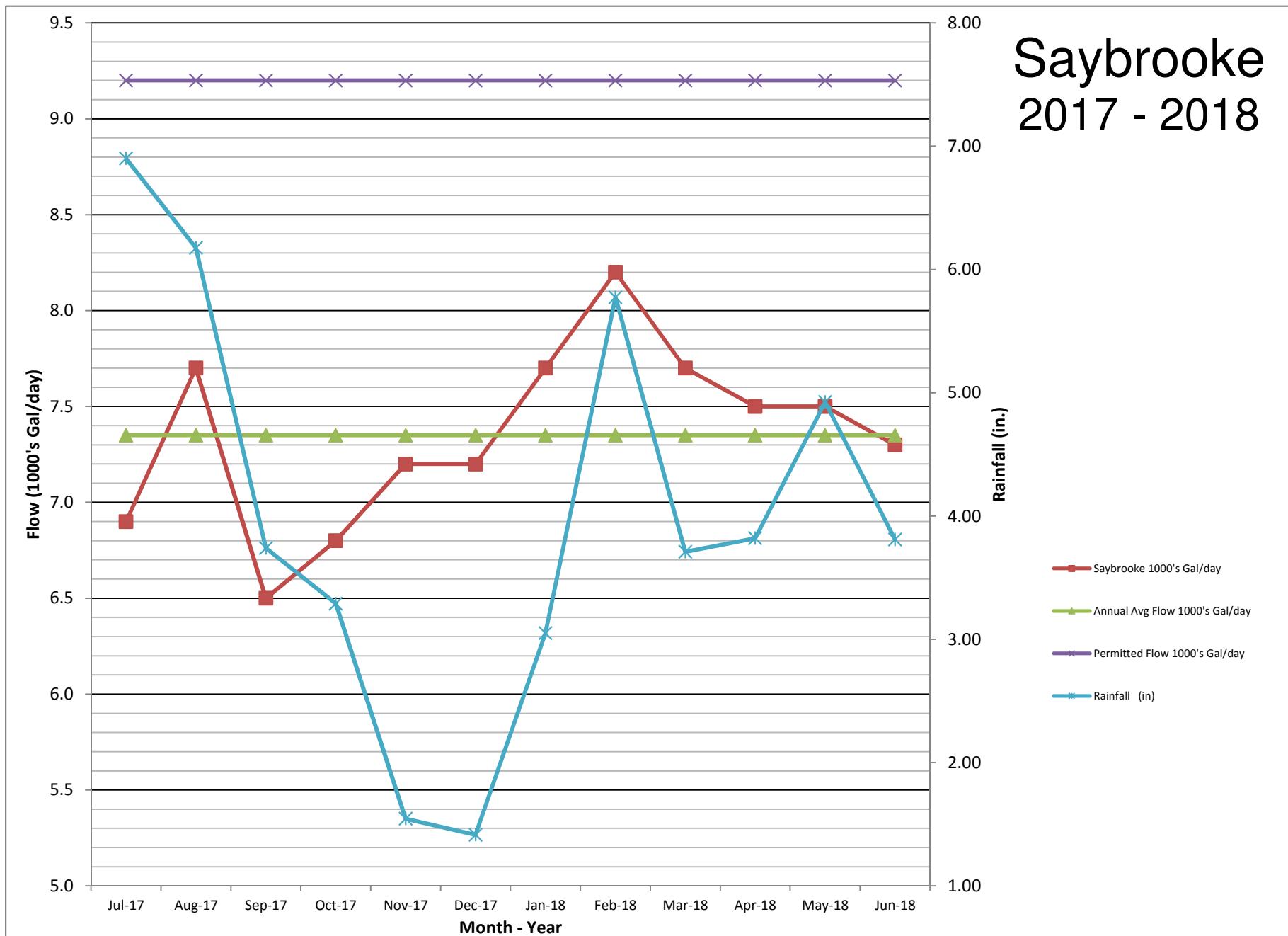
Marsh Harbour 2017 - 2018



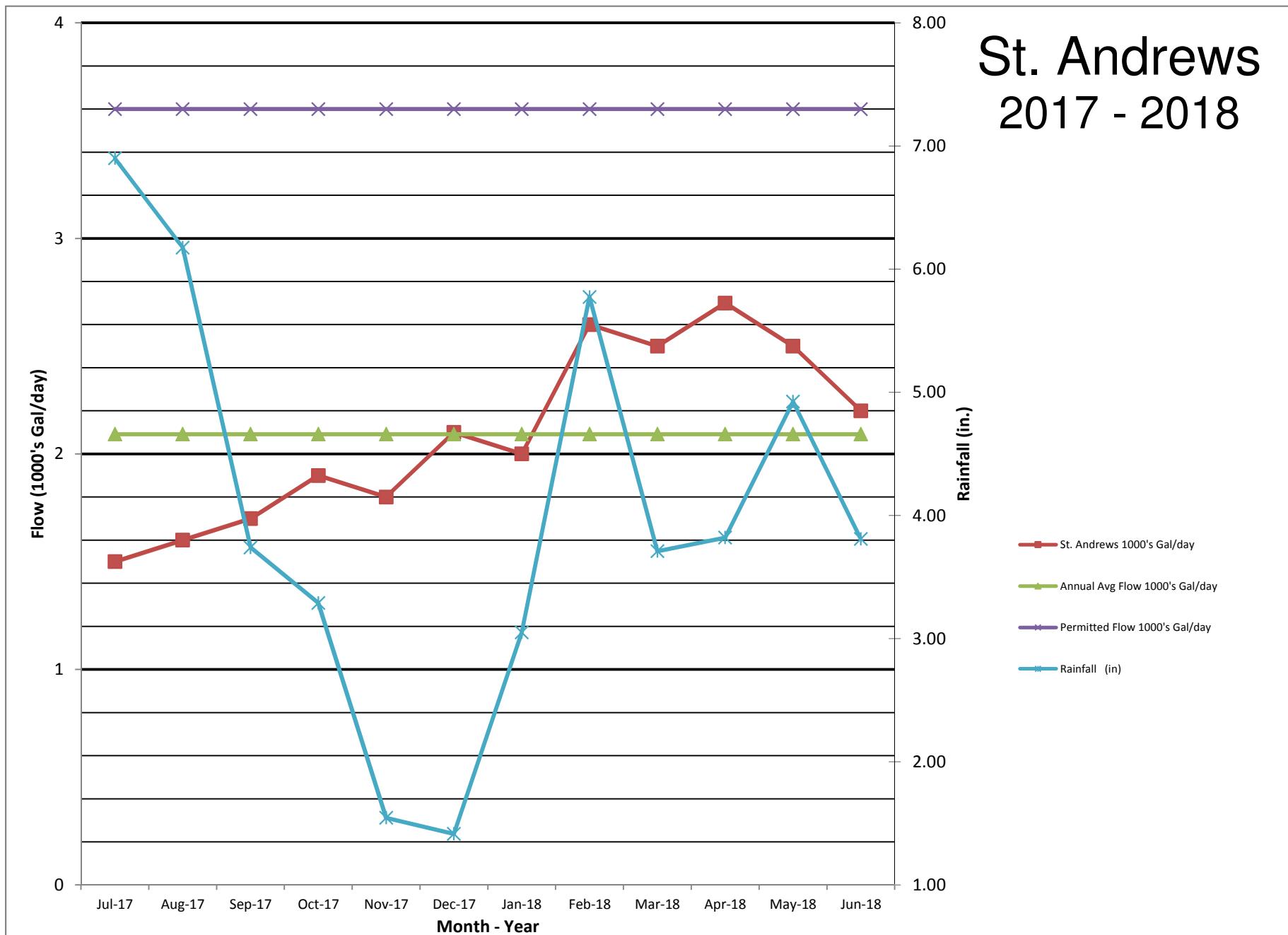
Route 100 2017 - 2018



Saybrooke 2017 - 2018



St. Andrews 2017 - 2018



June 25, 2018

Upper Uwchlan Township
140 Pottstown Pike
Chester Springs, PA 19425

Attention: G. Matthew Brown, P.E.; Authority Administrator

Reading Office
50 Berkshire Court, Ste. 209
Wyomissing, PA 19610-1219
T 610.374.5285
F 610.374.5287

RE: Reserve at Eagle WWTF, Eaglepoint WWTF, and
Lakeridge WWTF Fence Installations
Review of Bid Forms
10270.41

Gentlemen:

We have completed our review of the Bid Forms for the above-mentioned project. The bids were received via PennBid on Friday, June 22, 2018.

The apparent low bidder for Contract One – Chain Link Fence Installation is ProMax Fence Systems, Inc. of Reading, PA with a Base Bid of \$95,905.00. After a review, their Bid Forms seem to be in order with the proper seals and signatures and they have the proper experience to perform the work. ARRO recommends accepting the bid of ProMax Fence Systems, Inc. and issue a Notice of Intent to Award.

There were four (4) Alternate Bid items for the Owner to consider and they are as follows:

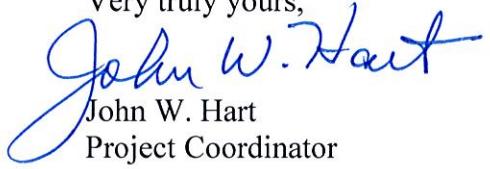
1. Alternate A: Reserve at Eagle WWTF – Install concrete fence posts instead of wood fence posts for the wood split rail fence system. The ADD cost for this alternate would be \$32,145.00. Not recommended due to cost.
2. Alternate B: Reserve at Eagle WWTF – Install vinyl three-rail fence system instead of wood split rail fence system. The ADD cost for this alternate would be \$15,405.00. Recommend installing vinyl fencing at this site for aesthetics reasons.
3. Alternate C: Lakeridge WWTF – Install concrete fence posts instead of wood fence posts for the wood split rail fence system. The ADD cost for this alternate would be \$29,340.00. Not recommended due to cost.
4. Alternate D: Lakeridge WWTF – Install vinyl three-rail fence system instead of wood split rail fence system. The ADD cost for this alternate would be \$14,950.00. Owner preference. Split rail fencing would be just fine at this site, but vinyl may be more durable over time.

The chain link privacy fencing for Eaglepoint WWTF is included in the Base Bid price.

Please accept or decline any of the above alternate bid items for this project.

If you should have any questions, please feel free to call.

Very truly yours,



John W. Hart

Project Coordinator

cc: Gwen Jonik, Upper Uwchlan Township
David M. Schlott, Jr., P.E.



To: Municipal Authority Members
From: G. Matthew Brown, P.E., DEE
Re: Authority Administrator's Report
Date: July 19, 2018

Activities for the month include:

- A. Communication with WWTF Operator and Township Staff regarding operational and maintenance issues.
- B. Responded to resident, developer and real estate agent sewer service inquiries and septic tank issues.
- C. Preparation of administrative documents for the Authority meeting packet and for the Authority files.
- D. Communication with PADEP, developers and Township relative to planning documentation for commercial properties in the Village of Eagle.
- E. Communication with PADEP regarding Phase III of the Route 100 WWTF.
- F. Communication with Township and Solicitors regarding dedication of the Ewing West Vincent Project.
- G. Communication with ARRO and PADEP regarding the Phase II, Part II main extension on Byers Road.
- H. Communication with Liberty Union, Car Sense, Clean Water and ARRO regarding discharge to the Eaglepointe WWTF.
- I. Communication with Township and ARRO regarding the disposal field fencing project.
- J. Communication with developer regarding the Parcel 5C project.
- K. Review of alternate energy provider information and alternatives for generation with ARRO.
- L. Review of alternate disposal sites for Phase III of the Route 100 WWTF.

Please advise if you have any questions or would like further details.



JUNE/JULY 2018 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.
- Annual Fire extinguisher inspections were completed and replaced/recharged as necessary at all properties.

Brian continues on the work orders as follows:

Complete:

- Route 100 WWTP
 1. General cleaning of station and office
 2. Removed, cleaned and replaced grinder area screens and pressure washed the area
 3. Door replacement for crane room is complete
- Byers Station Effluent PS
 1. General cleaning of station
- Byers Station Influent PS
 1. General cleaning of station
- Ewing PS
 1. General cleaning of station
- Ewing West Vincent PS
 1. No work orders for this location
- Ewing Tract Effluent Disposal System
 1. No work orders for this location
- Eagle Hunt
 1. Cleaning of this location

- **Windsor Ridge**
 - 1. Installed “No Trespassing” signs on spray fields.
- **Saybrooke WWTP**
 - 1. General cleaning of station
- **Seabury**
 - 1. There are currently no work orders for this facility.
- **Yarmouth PS1**
 - 1. There are currently no work orders for this facility.
- **Yarmouth PS2**
 - 1. There are currently no work orders for this facility.
- **St Andrews Brae**
 - 1. There are currently no work orders for this facility.
- **St Andrews Brae PS (at St Andrews intersection)**
 - 1. There are currently no work orders for this facility.
- **Reserve Lagoon**
 - 1. General cleaning of station
 - 2. Fence repairs
 - 3. Bush trimming along the driveway
- **Reserve at Eagle PS1**
 - 1. Trash removal and general cleaning
- **Reserve at Eagle PS 2**
 - 1. General cleaning of station
- **Upland Farms PS/ Reserve at Waynebrook**
 - 1. There are currently no work orders for this facility.
- **Greenridge**
 - 1. Completed cleanup
- **Stonehedge**
 - 1. General cleaning of station
- **Marsh Harbour WWTP**
 - 1. General cleaning and trash removal
 - 2. Installed a new lock on rear door
- **Marsh Harbour PS**
 - 1. There are currently no work orders for this facility.

- **Meadowcreek**
 1. There are currently no work orders for this facility.
- **Eaglepointe**
 1. Trash collection and cleaning
- **Heron Hill PS**
 1. There are currently no work orders for this facility.
- **Lakeridge WWTP**
 1. General cleaning and trash removal
 2. Ventilation system was checked and is in good working order
 3. Interior wall repairs were started on 6/20
 4. All non-functioning equipment has been removed from this facility
 5. Walls, pipes and floors are being recoated
 6. Sash lock has been repaired on double door
 7. Lower confined space that was holding water was pumped out and cleaned
 8. All confined space areas were marked
 9. Electrical problems have been fixed
- **Lakeridge Pump Station**
 1. There are currently no work orders for this facility.
- **Eagle Farms Rd PS (WV)**
 1. General cleaning of station
- **Little Conestoga Rd PS**
 1. There are currently no work orders for this facility.
 2. Mowed grass
- **Eagle Manor PS (Dorothy Ln)**
 1. There are currently no work orders for this facility.
- **Garrison Dr. (spray field pump station #1)**
 1. There are currently no work orders for this facility.
- **Garrison Dr. (spray field pump station #2)**
 1. There are currently no work orders for this facility.
- **Public Works continues to respond to Pa 1-calls. UUT responded to 98 PA 1-call tickets during the month of June.**

Respectfully submitted,
Michael G. Heckman
Director of Public Works
Upper Uwchlan Township