



AGENDA

May 22, 2018

7:30 p.m.

- I. Call to Order
- II. Approval of Minutes: April 24, 2018 Page 2
- III. Approval of Payments: May 2018 Page 4
- IV. Authority Administration Reports
 - A. Clean Water, Inc. Monthly Report Page 9
 - B. ARRO Consulting Monthly Report Page 11
 - C. Authority Administrator's Report
 - 1. Authorize Advertisement of Fencing Project Bid Page 31
 - 2. Fred Gunther EDU Request – Park Road Page 32
 - D. Public Works Department Report
- V. Open Session
- VI. Next Meeting Date: June 26, 2018 7:30 PM
- VII. Adjournment



MEETING MINUTES

April 24, 2018

7:30 PM

DRAFT

In Attendance: W. Quinn, Chairman, D. Carlson, Vice Chairman, H. Harper, Member, B. Watts, Member (arrived 7:50 PM), G. Matthew Brown, P.E., DEE, Authority Administrator and Katie Cirone E.I.T., ARRO Consulting, Inc.

Call to Order

W. Quinn called the meeting to order at 7:33 PM.

Approval of Minutes

D. Carlson moved to approve the draft minutes of the March 27, 2018 meeting as submitted. H. Harper seconded. It was so moved.

Approval of Payments

Following questions and a brief discussion, a motion was made by D. Carlson to approve the payments. H. Harper seconded. It was so moved. While it was not listed on the bill and payment sheet, M. Brown requested the check for the residents of 55 Yarmouth be approved for issuance. The agreement with the residents had been approved at the March meeting of the Authority. The Board of Supervisors also approved the agreement. D. Carlson moved to issue the check; H. Harper seconded. It was so moved. Following a brief discussion, D. Carlson 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 no further comment or response had been received from the developer of the Upattinas property following issuance by the Authority of a formal letter outlining what information was yet required to approve connection to the sewer system.

M. Brown noted that any final comments regarding the Septage Management Ordinance needed to be submitted to K. Cirone within the week so that the comments could be summarized in a memo to the Board of Supervisors. D. Carlson and M. Brown provided a summary of the discussion at the Joint Boards and Commissions meeting. Some discussion ensued regarding the need to do a borrowing in 2018. M. Brown suggested that a workshop-type discussion be held in June or July to review the work to be completed under the borrowing.

M. Brown noted the Authority and Township Solicitors were working on revisions to the West Vincent Township Intermunicipal Agreement. He stated the existing agreement had the "facilities" being dedicated to Upper Uwchlan Township but the land upon which the facilities sat was to be dedicated to West Vincent Township. It was the opinion of the Solicitors and the Township that the property should be dedicated to Upper Uwchlan Township. M. Brown noted that with that adjustment, the Solicitors were taking the opportunity to update other elements of the Agreement. The Authority agreed to the dedication change and asked to review the revisions prior to issuance. M. Brown noted the Authority was a signatory to the Agreement so would need to review and approve any changes.

M. Brown noted a request had been received from a home on 403 Greenridge Road to connect to the Greenridge WWTF collection system. He noted that the costs associated with such a connection was likely prohibitive to consider. The Authority had no objection if the necessary pretreatment was provided but agreed that it seemed cost prohibitive to the homeowner.

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

Open Session

No members of the public were present to comment.

Next Meeting Date - May 22, 2018 - 7:30 PM

W. Quinn noted the date and time of the next meeting of the Authority.

Adjournment

There being no further business to be brought before the Authority, B. Watts moved, seconded by H. Harper to adjourn the meeting at 8:34 PM.

Respectfully submitted,

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

May 17, 2018
12:55 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: 1525 to 1549
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
1525	05/22/18	ALSGROUP ALS GROUP USA, CORP	3,374.50	1781
1526	05/22/18	AQUAP010 AQUA PA	75.00	1781
1527	05/22/18	ARROC010 ARRO CONSULTING, INC.	61,987.86	1781
1528	05/22/18	BARBA010 BARBACANE THORNTON & COMPANY	1,100.00	1781
1529	05/22/18	BUCKL010 BUCKLEY, BRION, MCGUIRE, MORRI	1,263.90	1781
1530	05/22/18	CLEANWAT CLEAN WATER, INC.	6,355.00	1781
1531	05/22/18	COMMON005 COMMONWEALTH OF PENNSYLVANIA	500.00	1781
1532	05/22/18	COUNT010 COUNTRY ESTATE FENCE, INC.	17.50	1781
1533	05/22/18	DECKM010 DECKMAN ELECTRIC, INC.	9,500.00	1781
1534	05/22/18	DELARIVE DELAWARE RIVER BASIN COMMISION	618.00	1781
1535	05/22/18	EAGLHARD EAGLE HARDWARE	29.75	1781
1536	05/22/18	INKS0010 INK'S DISPOSAL SERVICE, INC.	632.50	1781
1537	05/22/18	LARRYHEP LARRY HEPNER CPSS	3,749.69	1781
1538	05/22/18	MCGOV020 MCGOVERN ENVIRONMENTAL, LLC	3,598.21	1781
1539	05/22/18	MJREIDER M. J. Reider Associates, Inc.	1,160.50	1781
1540	05/22/18	NAPA0010 NAPA	205.56	1781
1541	05/22/18	PEC00010 PECO	21,046.00	1781
1542	05/22/18	PENNDOT6 PennDOT Engineering District 6	810.00	1781
1543	05/22/18	PENNS080 PENNSYLVANIA ONE CALL	144.47	1781
1544	05/22/18	POSTM010 POSTMASTER UWCHLAND	60.00	1781
1545	05/22/18	PRED0010 PREDOC	1,439.04	1781
1546	05/22/18	ROBLITTL ROBERT E. LITTLE, INC.	20.00	1781
1547	05/22/18	UUTSEWER UPPER UWCHLAN TWP SEWER FUND	94,731.25	1781
1548	05/22/18	VERIZ010 VERIZON	1,099.34	1781
1549	05/22/18	VERIZFIO VERIZONFIOS	132.40	1781

Report Totals	<u>Paid</u>	<u>Void</u>	<u>Amount Paid</u>	<u>Amount Void</u>
Checks:	25	0	213,650.47	0.00
Direct Deposit:	0	0	0.00	0.00
Total:	<u>25</u>	<u>0</u>	<u>213,650.47</u>	<u>0.00</u>

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

ASSETS

	<u>Cash</u>	
06-100-000-010	General Checking - Fulton Bank	\$ 27,920.50
06-100-000-015	General Checking - Meridian Bank	331,196.90
06-100-000-020	General Checking - WIPP	315,655.33
06-106-000-002	Tap-in Fee Account	<u>310,634.30</u>
	Total Cash	985,407.03
	<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	275,183.20
06-145-000-002	Capital Assessment Receivable	-
06-147-000-000	Misc Accounts Receivable	<u>-</u>
	Total Accounts Receivable	275,183.20
	<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	6,308.18
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>
	Total Other Current Assets	13,578.18
	<u>Fixed Assets</u>	
06-162-000-001	Fixed Assets	1,231,902.54
06-162-000-050	Accumulated Depreciation	(258,894.78)
06-163-000-100	Phase II Construction Project (CIP)	<u>-</u>
	Total Fixed Assets	973,007.76
	<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	\$ 3,896,649.42

Upper Uwchlan Township Municipal Authority
Balance Sheet
As of April 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	78,073.00
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	36,281.42
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	61,987.86
06-241-000-100	Retainage on Phase II Construction Project	175,086.26
06-245-000-000	Due to Customers	275.00
	Total Current Liabilities	351,703.54
<u>Equity</u>		
06-272-000-001	Opening Bal Equity	753,500.35
06-272-000-002	Retained Earnings	2,719,706.08
	Current Period Net Income (Loss)	71,739.45
	Total Equity	3,544,945.88
	Total Fund Balance	3,544,945.88
	Total Liabilities & Fund Balance	\$ 3,896,649.42

Upper Uwchlan Township Municipal Authority
Statement of Revenues and Expenditures

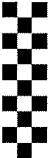
For the Period Ended April 30, 2018

	Actual 2018 YTD	Budget 2018	% of Budget	Actual 2017 <i>(Unaudited)</i>	Budget 2017
REVENUES					
06-340-000-000	Interest Income	4,210.55	7,300.00	57.7%	7,810.79
06-365-000-000	Usage Fees Residential	531,764.94	2,027,640.00	26.2%	1,906,961.05
06-365-000-001	Usage Fees Commercial	25,840.28	101,014.00	25.6%	113,284.72
06-365-000-010	Tapping Fees	31,255.74	2,176,350.00	1.4%	139,413.66
06-370-000-000	Misc revenue	-	1,000.00	0.0%	416.27
06-395-000-000	Refund of Prior Year Expenditures	-	-	#DIV/0!	52.09
06-395-000-100	Transfer from Sewer Fund	-	-	#DIV/0!	385,000.00
	TOTAL REVENUES	\$ 593,071.51	\$ 4,313,304.00	13.7%	\$ 2,552,938.58
		\$ 2,684,744.00			
EXPENDITURES					
<u>General:</u>					
06-400-000-001	Administration	78,073.00	234,219.00	33.3%	212,463.98
06-400-000-002	Authority Administrator	40,859.10	120,000.00	34.0%	123,249.31
06-400-000-003	Professional Fees	262.74	12,000.00	2.2%	3,001.06
06-400-000-200	Admin Supplies	-	1,000.00	0.0%	10.00
06-400-000-341	Advertising	1,420.52	1,000.00	142.1%	-
06-400-000-352	Insurance - Liability	5,817.26	2,337.00	248.9%	8,132.97
06-400-000-355	Bank Fees	49.44	650.00	7.6%	530.00
06-402-000-450	Audit Fees	1,550.00	5,200.00	29.8%	5,050.00
06-404-000-000	Legal Fees	5,311.34	20,800.00	25.5%	19,968.67
06-406-000-100	Utility Billing Costs	2,520.70	18,000.00	0.0%	18,530.33
06-408-000-000	Engineering Fees	142,979.98	150,000.00	95.3%	166,096.68
06-408-000-100	Reimbursable Engineering Fees	-	-	#DIV/0!	-
		278,844.08	565,206.00	49.3%	557,033.00
					529,667.00
<u>Building Expenses:</u>					
06-409-000-031	Lawn Care	126.57	7,500.00	1.7%	6,302.43
06-409-000-032	Telephone	5,094.81	15,000.00	34.0%	13,228.40
06-409-000-035	Insurance	-	9,297.00	0.0%	-
06-409-000-036	Electric	62,391.15	250,000.00	25.0%	183,345.96
06-409-000-037	Water	2,660.24	25,000.00	10.6%	6,366.14
06-409-000-052	Bldg Maint & Repair	-	8,000.00	0.0%	600.00
06-409-000-260	Building Supplies & Small Tools	-	15,000.00	0.0%	1,014.44
06-409-000-427	Waste Disposal	-	-	#DIV/0!	-
		70,272.77	329,797.00	21.3%	210,857.37
					388,500.00
<u>Operations:</u>					
06-420-000-020	Supplies	866.56	20,000.00	4.3%	14,172.54
06-420-000-022	Chemicals	3,661.29	15,450.00	23.7%	7,376.71
06-420-000-023	Propane and Fuel Oil	-	2,575.00	0.0%	467.18
06-420-000-025	Maintenance & Repair	22,621.23	120,000.00	18.9%	144,956.90
06-420-000-030	Testing	9,266.30	40,000.00	23.2%	35,664.25
06-420-000-031	Pump & Haul	12,654.24	50,000.00	25.3%	59,529.61
06-420-000-032	Vegetation Management	4,555.00	20,000.00	22.8%	16,255.65
06-420-000-035	Permits	500.00	5,000.00	10.0%	2,966.66
06-420-000-042	Dues and Memberships	2,100.00	2,500.00	84.0%	2,100.00
06-420-000-045	Contracted Services	41,515.00	135,000.00	30.8%	119,358.29
06-420-000-048	Misc expenses	40,000.00	5,000.00	800.0%	129.44
06-420-000-235	Vehicle Maintenance	-	2,000.00	0.0%	-
06-420-000-329	PA One Call	357.53	2,500.00	14.3%	476.72
		138,097.15	420,025.00	32.9%	403,453.95
					367,500.00

Upper Uwchlan Township Municipal Authority
Statement of Revenues and Expenditures

For the Period Ended April 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	34,118.06	30,000.00	113.7%	25,723.91	30,000.00
06-493-000-083	Depreciation	36,000.00	66,000.00	0.0%	-	36,000.00
		<u>34,118.06</u>	<u>66,000.00</u>	<u>51.7%</u>	<u>25,723.91</u>	<u>66,000.00</u>
Total Expenditures before Operations Agreement and Transf		\$ 521,332.06	\$ 1,381,028.00	37.7%	\$ 1,197,068.23	\$ 1,351,667.00
Net Income before Operations Agreement and Transfers		\$ 71,739.45	\$ 2,932,276.00	2.4%	1,355,870.35	1,333,077.00
<u>Other:</u>						
06-471-000-010	Operations Agreement Fee to UUT	364,463.00	50,000.00	0.0%	364,562.50	364,563.00
	Operations Agreement Fee to UUT-new debt	<u>-</u>	<u>414,463.00</u>	<u>0.0%</u>	<u>364,562.50</u>	<u>364,563.00</u>
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	<u>-</u>	<u>-</u>	<u>#DIV/0!</u>	<u>-</u>	<u>-</u>
		<u>-</u>	<u>-</u>	<u>#DIV/0!</u>	<u>-</u>	<u>-</u>
TOTAL EXPENDITURES		\$ 521,332.06	\$ 1,795,491.00	29.0%	\$ 1,561,630.73	\$ 1,716,230.00
OPERATING INCOME		\$ 71,739.45	\$ 2,517,813.00	2.8%	\$ 991,307.85	\$ 968,514.00
NON OPERATING REVENUES						
Contribution from Upper Uwchlan Townsl		-	-	-	-	-
Total Non Operating Revenues		<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
INCOME BEFORE CAPITAL CONTRIBUTIONS						
Capital contribution to Upper Uwchlan To		-	-	-	-	-
CHANGE IN NET POSITION		\$ 71,739.45	\$ 2,517,813.00	2.8%	\$ 991,307.85	\$ 968,514.00
NET POSITION, BEGINNING OF YEAR		\$ 8,583,692.85	2,582,805.65		7,592,385.00	7,592,385.00
NET POSITION, YEAR TO DATE		\$ 8,655,432.30	\$ 5,100,618.65		\$ 8,583,692.85	\$ 8,560,899.00



Clean Water, Inc.

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

170 Dallas St.
Box 475
Atglen, Pa. 19310

May 18, 2018

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

RE: Report for the May 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 March. Information items are current

Route 100

With the exception of this past week, spray rates were doing fine. Wet weather has limited recently. The initial cut and harvest will be done as able and needed. Predoc replaced the rebuilt pump for the Reserve no 1 pump station. The lagoon aerator for the Reserve storage lagoon has crapped out. MGK is going to quote us for a larger unit. MGovern hauled sludge. I believe Ehrlich will be out shortly to treat lagoons for algae control.

Eaglepoint

Plant is running well. McGovern will be cleaning out the equalization basin soon. Grease accumulation is getting bad.

St. Andrews Brae

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

Marsh Harbour

The plant is running fine. Spray has been shut down as the farmer has moved his equipment to this site. Aqua shade has been added to the lagoon to assist with algae control.

Saybrooke

Plant continues to operate well. There were no operational issues to report for this month.

Lakeridge

Plant is running fine. The new 25 hp motor for the cam d unit has been delivered for inventory. I suspect Predoc will be out to clean the beds shortly. DEP sent a letter stating there is no indication the plant is impacting water intended for drinking.

Greenridge

Drip continues here. There were n operational issues to report.

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: May 16, 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.

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 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 is currently reviewing revised Plans.

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.

ARRO is currently reviewing revised Plans. 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.

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.

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.

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.

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.

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.

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.

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-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 (SFFPM) and is working on the sanitary sewer review. The Authority Administrator signed the SFFPM 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.

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.

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.

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.

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.

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 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.

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.

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.

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.

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.

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 April 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.

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

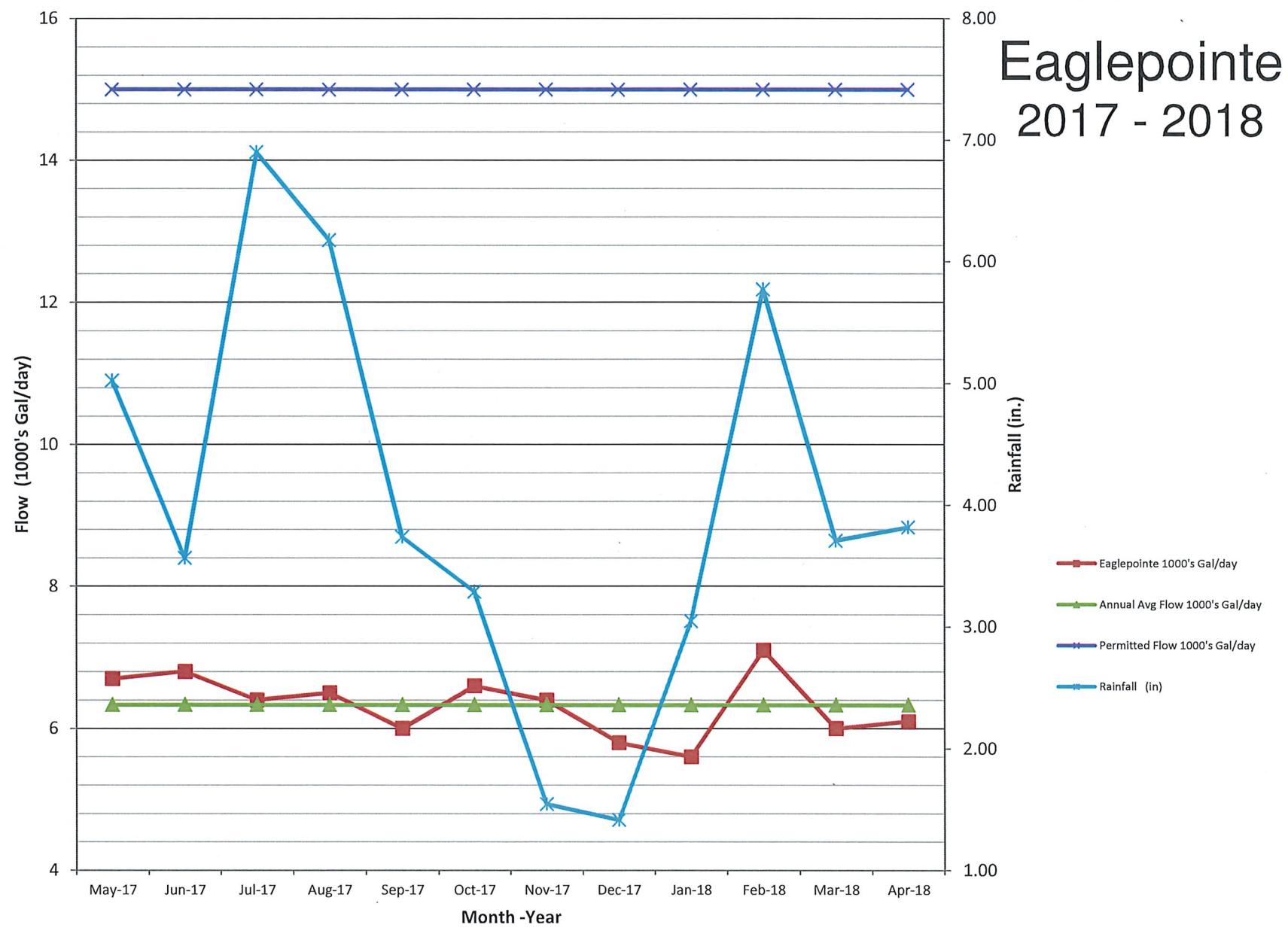
UPPER UWCHLAN MUNICIPAL AUTHORITY
WASTEWATER TREATMENT PLANTS
MONTHLY AVERAGE DAILY FLOWS

Month - Year		Average Daily Flow (MGD)							Rainfall (in)
		Eaglepointe	Greenridge	Lakeridge	Marsh Harbour	Route 100	Saybrooke	St. Andrews	
May-17		0.00670	0.00770	0.02740	0.04230	0.30790	0.00630	0.00200	5.03
Jun-17		0.00680	0.00750	0.02750	0.03910	0.29000	0.00650	0.00170	3.57
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

Annual Avg Flow = 0.00633 Permitted Flow = 0.01500 Permitted Flow as of October 2015 = 0.60000

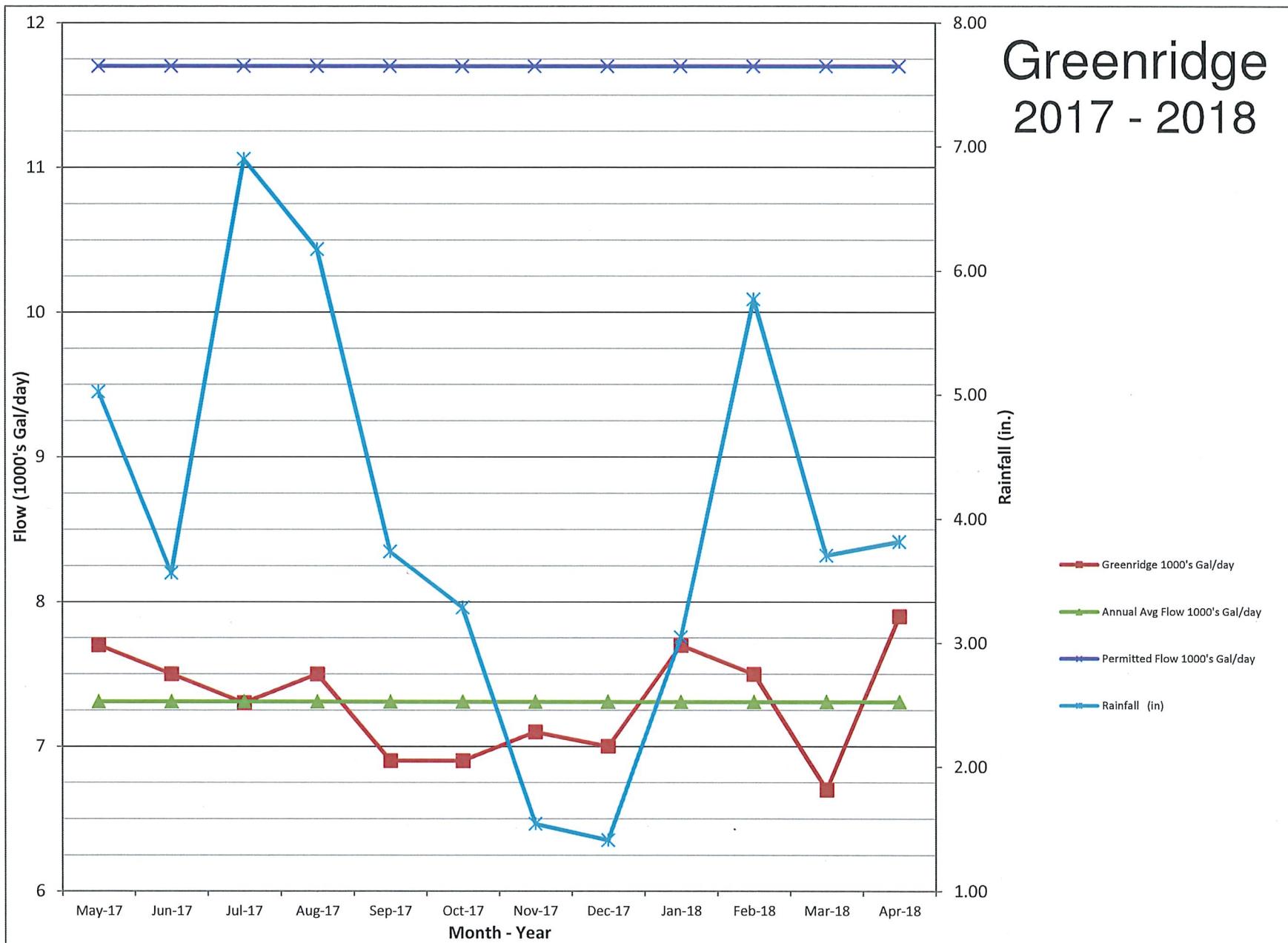
Permitted Flow as of October 2015 = 0.60000

Eaglepointe 2017 - 2018

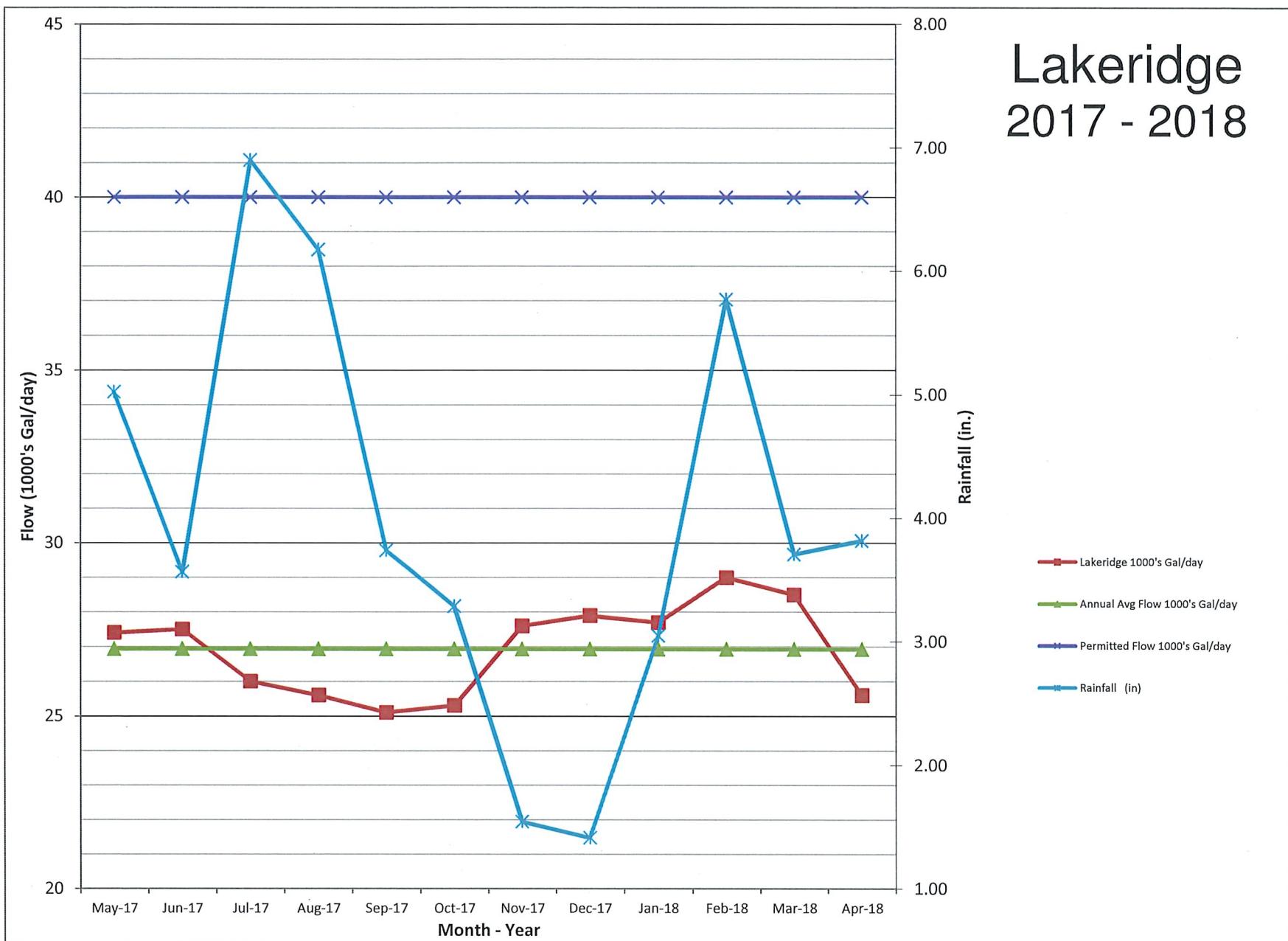


Greenridge

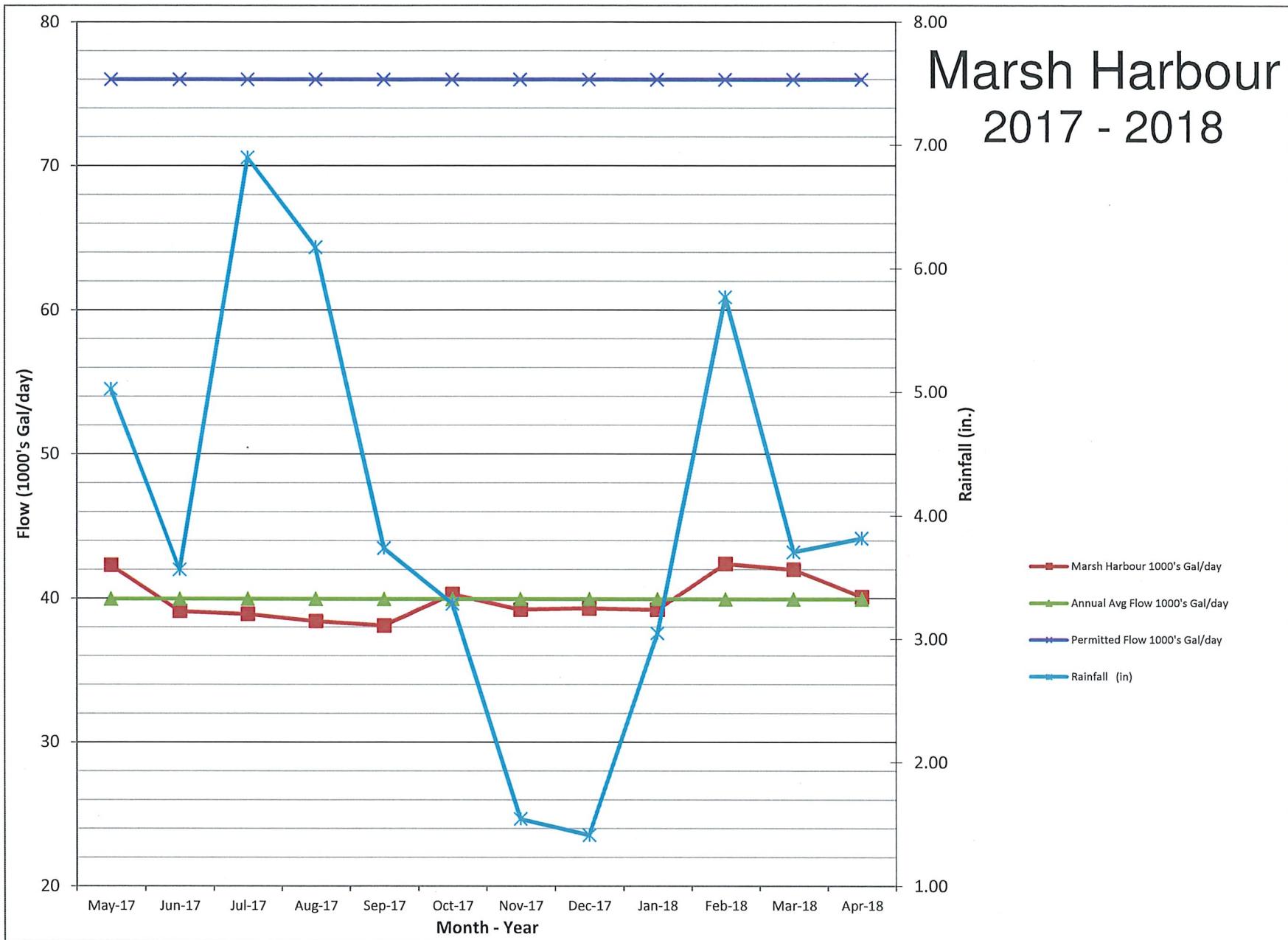
2017 - 2018



Lakeridge 2017 - 2018

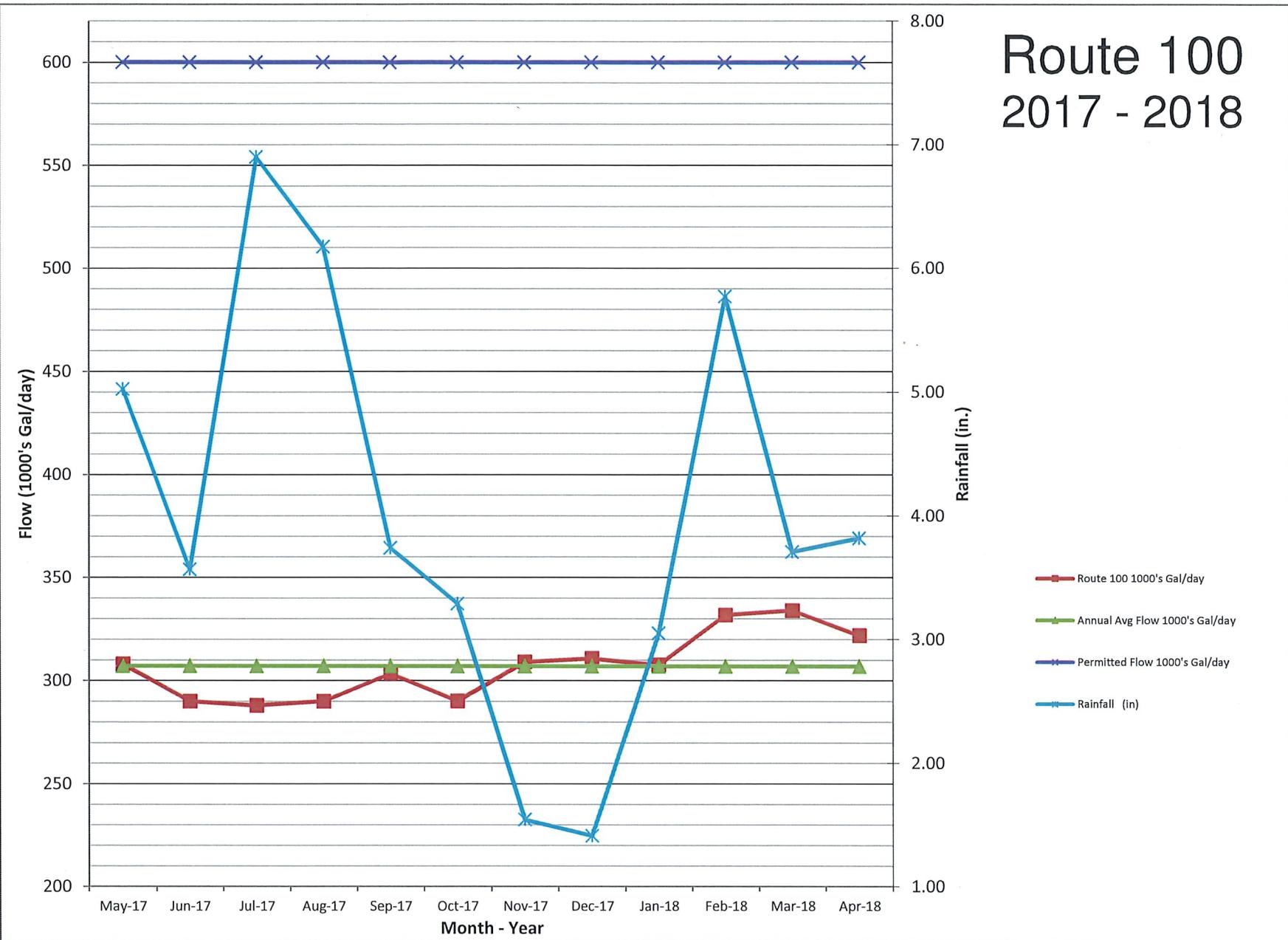


Marsh Harbour 2017 - 2018

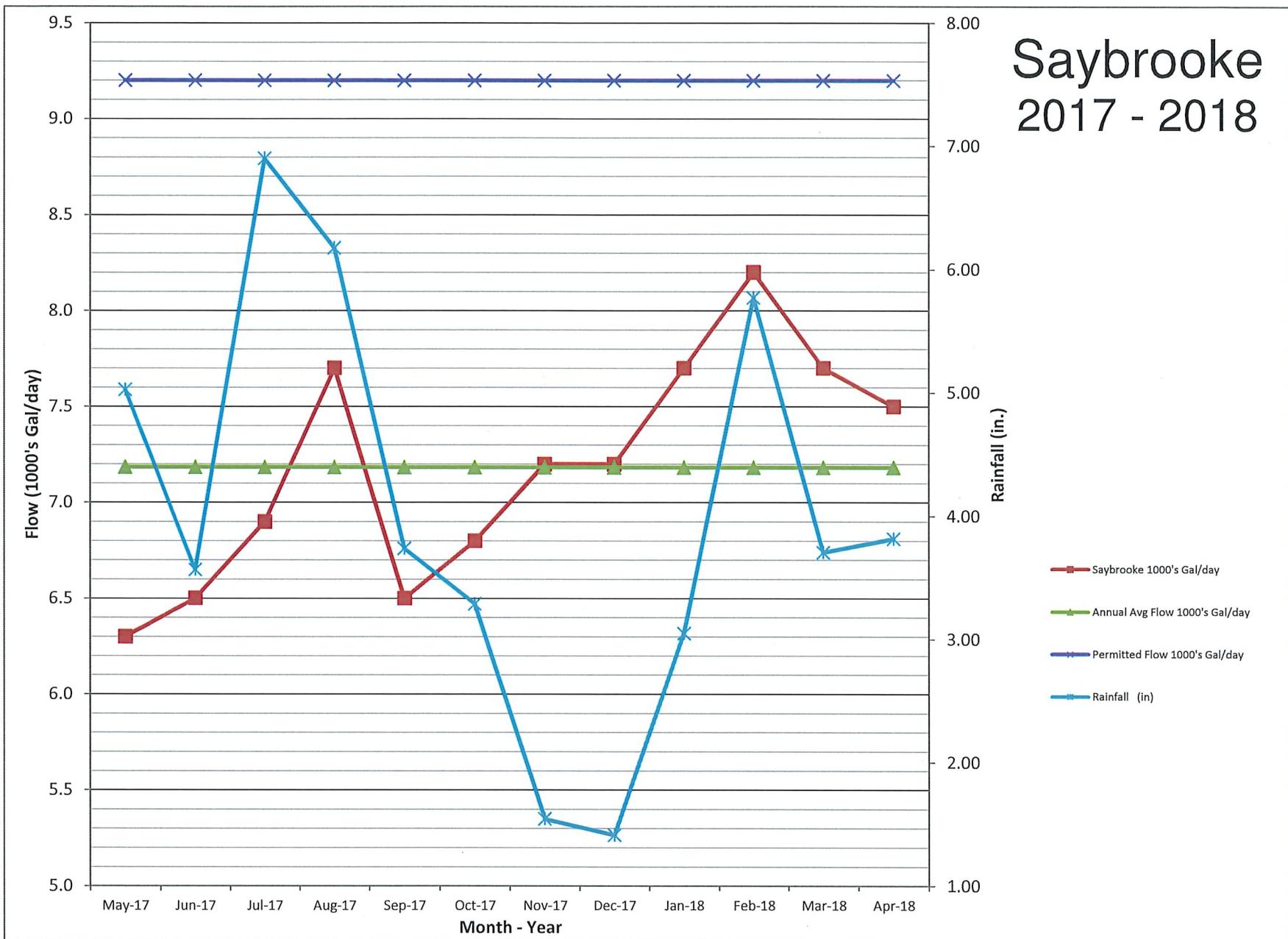


Route 100

2017 - 2018

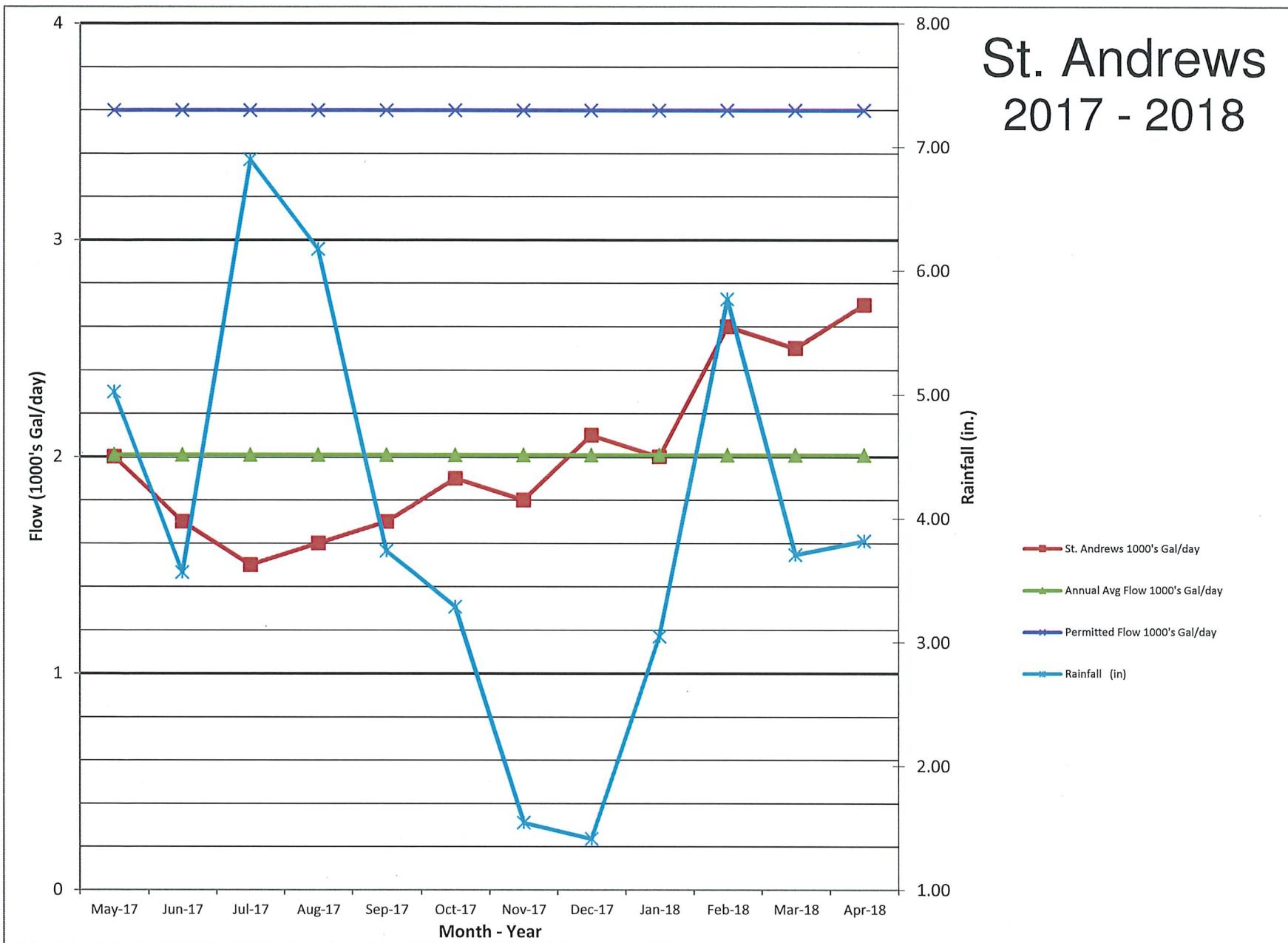


Saybrooke 2017 - 2018



St. Andrews

2017 - 2018





To: Municipal Authority Members
From: G. Matthew Brown, P.E., DEE
Re: Authority Administrator's Report
Date: May 17, 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 Parcel 5C.
- E. Communication with PADEP regarding Phase III of the Route 100 WWTF.
- F. Communication with Township and Authority members relative to a draft Ordinance for Septic Tank Maintenance.
- G. Communication with ARRO and PADEP regarding the Phase II, Part II main extension on Byers Road.
- H. Communication with Randy DiLibero and ARRO regarding service to his buildings along Route 100.
- I. Communication with residents over 2nd Quarter rate increase.
- J. Communication with PADEP regarding property insurer's requirements regarding the sludge holding tank at Lakeridge.
- K. Communication with ARRO with respect to capital projects proposed for 2018.
- L. Communication with contractors relative to ongoing maintenance and improvement work planned for 2018.

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



May 17, 2018

G. Matthew Brown Authority Administrator
Upper Uwchlan Township Municipal Authority
140 Pottstown Pike
Chester Springs, PA 19425

Corporate Headquarters
108 West Airport Road
Lititz, PA 17543
T 717.569.7021
F 717.560.0577
www.thearrogroup.com

RE: 160 Park Road - Eagle Village
Upper Uwchlan Township
ARRO No #17000.00

Dear Mr. Brown:

ARRO, Consulting, Inc. reviewed the following information relating to the above referenced project, in accordance with the Upper Uwchlan Township Ordinances, and offers the following comments based on current engineering practices.

1. Projected new sewage flow information for Eagle Village prepared by DL Howell.

We offer the following comments for your consideration at this time:

We understand the following:

- Property is already connected to the sanitary sewer system, although the beer garden is serviced by portal/temporary facilities serviced by an owned & operated disposal vendor.
- 3.5 EDUs or 788 GPD of capacity was purchased at the time of sewer connection for the property.
- The applicant desires to discharge uses as follows into the sanitary sewer system:
 - Building #1
 - Lower Level Bar with Seating & Outside Seating
 - Inside 60 seating capacity
 - Outside (Seasonal Use) 200 seating capacity
 - 7 employees
 - Upstairs Restaurant – Pizza (utilizing paper and plastic ware)
 - 40 seating capacity
 - 5 employees
 - Building #3 – Bakery - Accessory to Restaurants
 - 2 employees
 - Building #5 – Breakfast /Coffee/Restaurant
 - 30 seating capacity
 - 5 employees

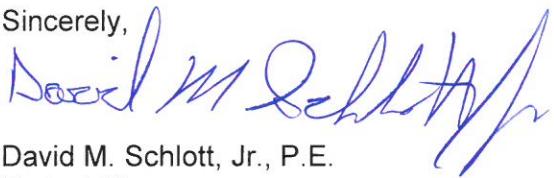
Taking into consideration the proposed uses, seating and that the outside seating will be seasonal; ARRO recommends that 14.5 EDUs be required (breakdown attached). Since 3.5 EDUs were already purchased, an additional 11 EDUs should be purchased. Additionally, the Authority should reserve the right to review water usage in the future and require the purchase of additional sanitary sewer capacity, if warranted.

G. Matthew Brown Authority Administrator
Upper Uwchlan Township Municipal Authority
May 17, 2018
Page 2

The proposed establishments will need to comply with the Regulations for the Discharge of Non-Residential Waste into the Upper Uwchlan Township Municipal Authority's Sewerage System, Resolution #10-20-04-15, dated October 20, 2004.

If you have any questions or concerns, please feel free to contact me at your earliest convenience at 717-560-6069.

Sincerely,



David M. Schlott, Jr., P.E.
Project Manager

Attachment
DMS Jr.:kal

c: Gwen Jonik-UUT

160 Park Road - Eagle Village Projected New Sewage Flows

	Inside	Outside
Building #1		
Lower Level Bar & Seating & Outside Seating	1,200 GPD	1,000 GPD
Upstairs Restaurant – Pizza	530 GPD	
Building #3		
Bakery (Accessory to Restaurants)	45 GPD	
Building #5	500 GPD	
Breakfast /Coffee/Restaurant		
Total	2275 GPD	1,000 GPD
	225 GPD/EDU	10.11 EDUs
		4.44 EDUs

Building #1

Lower Level Bar & Seating & Outside Seating

Information provided by DL Howell

Area	3000 SF
Occupancy Inside	60 seats
Occupancy Outside (Seasonal Use)	200 seats
Employee Count	7

Inside Usage

Usage (per Metcalf and Eddy Cocktail Lounge 20 GPD/seat)

$$20 \text{ GPD/seat} \quad \times \quad 60 \text{ seats} \quad = \quad 1,200 \text{ GPD}$$

Outside Usage (Seasonal)

Method 1 (per Metcalf and Eddy Cocktail Lounge 20 GPD/seat)

$$20 \text{ GPD/seat} \quad \times \quad 200 \text{ seats} \quad = \quad 4,000 \text{ GPD}$$

seasonal presume usage is 3 months/year

$$\text{Use} \quad 1,000 \text{ GPD}$$

Upstairs Restaurant – Pizza*Information provided by DL Howell*

<i>Area</i>			<i>2000 SF</i>	
<i>Occupancy Inside</i>			<i>40 seats</i>	
<i>Employee Count</i>			<i>5</i>	
40 seats	x	2 occupants/day/seat	x	6 gallons/occupant
	=	480 GPD		
10 GPD/employee	x	5 employee	=	50 GPD
480 GPD	+	50 GPD	=	530 GPD

Building #3**Bakery (Accessory to Restaurants)***Information provided by DL Howell*

<i>Area</i>		<i>972 SF</i>		
<i>Equipment Cleaning</i>		<i>25 GPD</i>		
<i>Employee Count</i>		<i>2</i>		
<i>Employee Flow Rate</i>		<i>8 GPD/Employee</i>		
<i>Estimated Flow</i>		<i>41 GPD</i>		
10 GPD/employee	x	2 employee	=	20 GPD
25 GPD	+	20 GPD	=	45 GPD

Building #5**Breakfast /Coffee/Restaurant***Information provided by DL Howell*

<i>Area</i>		<i>1500 SF</i>		
<i>Occupancy Inside</i>		<i>30 seats</i>		
<i>Employee Count</i>		<i>5</i>		
<i>Employee Flow Rate</i>		<i>8 GPD/Employee</i>		
<i>Estimated Flow</i>		<i>400 GPD</i>		
30 seats	x	2.5 occupants/day/seat	x	6 gallons/occupant
	=	450 GPD		
10 GPD/employee	x	5 employee	=	50 GPD
450 GPD	+	50 GPD	=	500 GPD