

AGENDA

Regular Meeting - 4:00 p.m. - June 16, 2021

- 1. Call to Order
- 2. Approval of the Minutes: Regular Meeting- May 19, 2021
- 3. Public Comment
 - **3.1** Other items not on the agenda
- 4. Old Business
 - **4.1** Purchase of Vactor Sewer Cleaner
- 5. New Business
 - **5.1** 2020 Summation of Capacity Report Presentation
 - **5.2** Residential Solar Pilot Project
 - **5.3** Requisitions
- 6. Reports of Officers
 - **6.1** SCBWA Liaison
 - **6.2** Financial Report
 - **6.3** Chairman's Report
 - **6.4** Plant Superintendent's Report
 - **6.5** Collection Systems Superintendent's Report
 - **6.6** Consulting Engineer's Report
 - **6.7** Construction Engineer
 - **6.8** Executive Directors Report
- 7. Other Business
- 8. Adjournment

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MINUTES UNIVERSITY AREA JOINT AUTHORITY 1576 SPRING VALLEY ROAD STATE COLLEGE, PA 16801

Regular Meeting – May 19, 2021

1. Call to Order

Mr. Lapinski, Chair, called the meeting to order at 4:00 p.m., Wednesday, May 19, 2021. The meeting was held in the Board Room in the office of the Authority with the following in attendance in person: Messr. Auman, Guss, Kunkle, Miller; Cory Miller, Executive Director; Jason Brown, Assistant Executive Director; Mark Harter, Collection System Superintendent; Art Brant, Plant Superintendent; Michele Aukerman, Rettew; Jason Wert, Rettew; David Gaines, Solicitor; C-NET; Ben Burns, HRG Consulting Engineer; Jeff Garrigan, HRG Consulting Engineer; and Jennifer Grove, Administrative Assistant. Those in attendance via Zoom were: Messrs. Daubert, Dempsey, Derr, Nucciarone; Kevin Mullen; Spenser McGrath, Maher Duessel; Brian McCall, Maher Duessel; and Corey Rilk, COG Planning.

2. Reading of the Minutes

UAJA Regular Meeting – April 21, 2021

UAJA Meeting Minutes Approved

A motion was made by Mr. Miller, second by Mr. Guss, to approve the minutes of the UAJA meeting held on April 21, 2021. The motion passed unanimously.

3. Public Comment

3.1 Other items not on the agenda

Mr. Mullen spoke to the board about being overbilled for a second EDU over the past five or six years.

4. Old Business

4.1 2020 Audit

Included in your packet are the following:

Draft Financial Statements

Draft Communication to Those Charged with Governance letter

Draft Management letter

The Board Treasurer Dan Guss, Assistant Treasurer Matt Auman, Board Member Mark Kunkle, Cory Miller and Jason Brown met with Maher Duessel (via Zoom) on May 17th to review and comment on the 2020 Draft Audit. Brian McCall, a partner in Maher Duessel, will attend the meeting to review the 2020 Audit with the Board.

Recommendation: Approve the 2020 Audit

2020 Audit Accepted A motion was made by Mr. Guss, seconded by Mr. Kunkle to accept the 2020 Audit as presented. The motion passed unanimously.

*The meeting agenda for Reports of Officers and New Business were switched at the chairman's discretion. When discussing New Business, Residential Solar Presentation and Requisitions were also switched at the chairman's discretion.

5. Reports of Officers

5.1 SCBWA Liaison

None.

5.2 Financial Report

The different cost centers of the YTD budget report for the period ending April 30, 2021 were reviewed with the Board by Jason Brown.

5.3 Chairman's Report

None.

5.4 Plant Superintendent's Report

Compost & Septage Operations Report

The following comments are as presented to the Board in the written report prepared by Art Brant, Plant Superintendent.

COMPOST PRODUCTION AND DISTRIBUTION

	Nov. 2020	<u>Dec. 2020</u>	Jan. 2021	Feb. 2021	Mar. 2021	Apr. 2021
Production	797 cu/yds.	848 cu/yds.	716 cu/yds.	673 cu/yds.	897 cu/yds.	848 cu/yds.
YTD. Production	11,231cu/yds	12,079 cu/yds.	716 cu/yds.	1,389 cu/yds.	2,286cu/yds.	3,134 cu/yds.
Distribution	952cu/yds.	0 cu/yds.	120cu/yds.	11 cu/yds.	978 cu/yds.	963cu/yds.
YTD. Distribution	12,512cu/yds	12,512 cu/yds.	120 cu/yds.	131 cu/yds.	1,109 cu/yds.	2,072cu/yds.
Immediate Sale	892cu/yds.	1,684 cu/yds.	2,412 cu/yds.	3,117 cu/yds.	2,812 cu/yds.	2,746 cu/yds.
Currently in Storage	1,689 cu/yds.	2,532 cu/yds.	3,128 cu/yds.	3,790 cu/yds.	3,709 cu/yds.	3,594 cu/yds.

SEPTAGE OPERATIONS

	Nov. 2020	Dec. 2020	Jan. 2021	Feb. 2021	Mar. 2021	Apr. 2021
Res./Comm.	68,500 gals.	78,350 gals.	55,000 gals.	57,530 gals.	71,300 gals.	74,400 gals.
CH/Potter	3,794.70	5,041.53	5,421.00	3,923.97	2,777.22	0.00
	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids
Port	1,367.76	1,601.28	834.00	1,434.48	1,684.68	500.40
Matilda	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids
Huston	1000.80	733.92	717.24	617.16	533.76	600.48
Twp.	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids

Total Flow	123,000 gals.	133,250 gals.	116,000 gals.	114,030gals.	113,800 gals.	88,400 gals.

Plant Operation

The treatment plant is operating well with one exception. The 12-month rolling average flow for April was 3.22mgd with the average for the month being 4.21mgd. The average monthly **influent** flow was 5.34mgd.

Treatment units online are as follows: primary clarifiers #1, #5 and #6; aeration basins #1 and #3; secondary; clarifiers'#1, #2, and #3; all eight tertiary filters are online.

Below is the chart for Reuse Distribution and Temperature Data:

		•	Plant Effl.	Wetland Effl.
	Apr-21	YTD	Temp	Temp.
Best Western	32,000	78,000		
Centre Hills	1,190,000	1,190,000	Apr-21	Apr-21
Cintas	517,000	1,861,000	59.3	57.4
Red Line	586,000	2,203,000		
UAJA Wetland	6,244,000	14,162,000		
GDK Vault	17,233,000	78,526,000		
Kissingers	2,289,000	7,964,000		
Stewarts/M.C.	0	10,000		
TOTAL	24,696,000	105,994,000		

Plant Maintenance

- Replace vacuum pump for Headworks grit removal system.
- Replaced one of the VFD's for the IPS.
- Replaced one of the VFD's for plant drain Station.
- Repaired long auger on the screening unit at Headworks.
- Replaced a hydraulic hose on agitator #1 and conveyor chains on agitator #2.
- Installed clean-outs for the 8 inch drain line from Dewatering and Septage.
- Fabricated a new spool for MF #1.
- Serviced both HSP in AWT.
- CIP'ed RO #1.
- Installed a PRV at AWT to lower pressure inside building.

5.5 Collection System Superintendent's Report

The following comments are as presented to the Board in the written report prepared by Mark Harter, Collection System Superintendent.

Mainline Maintenance:

Shiloh Pump Station Project – 700 ft of force main was completed and tied into the discharge manhole. Completed restoration on the Greenbriar project.

Completed restoration on the Harris Reuse project.

Main Line Televising – 4,834.7 ft televised - 34 manholes inspected.

Equipment maintenance.

Lift Station Maintenance:

Cleaned check valves on all pumps at Big Hollow station.

Cleaned (11) lift station wet wells.

Routine Maintenance.

Next Month Projects:

Continue the Shiloh Rd. pump station upgrade project.

Continue conduit project at Shiloh station.

Install new lateral on Henzey street.

Repair mainline on Dale street.

Cleaning wet wells.

Televise paving projects.

Inspection: Final As-Builts Approved: Patton Crossing Phase 1

Mainline Construction:

- a. Harner Farms Construction is approximately (95%) complete.
- b. Grays Pointe phase 6 sec D.1 Construction is approximately (20%) complete.

New Connections:

a. Single-Family Residential	10	c. Commercial	1
b. Multi-Family Residential	0	d. Non-Residential	0

TOTAL 11

PA One-Calls Responded to 04/1-30/21: 454

5.6 Engineer's Report

The following comments are as presented to the Board in the written report prepared by the Consulting Engineer.

Consulting Engineer Services (R001178.0693)

• Assisted with the completion of capacity tables for Component 3 Planning Modules being prepared by developers.

Odor Control System Upgrades (R001178.0597)

- Contract No. 17-03: General Construction (Global Heavy Corporation) Complaint against the UAJA and HRG.
- The Air Quality Plan Approval must be transitioned to an Operating Permit, which will require the identification and characterization of emissions from all sources at the facility.
- Providing any support necessary for the evaluation of the irrigation pump leaking issue.

Greenbriar Sanitary Sewer (R001178.0631)

• GeoDecisions provided a link to updated data. The record drawings will be finalized.

Shiloh Road Pump Station Upgrades (R001178.0632)

• HRG is available to assist with construction phase services.

Extension of Beneficial Reuse Water to Harris Township (R001178.0637)

- Contract 2020-02 (Ligonier) has completed the conventional bore crossing of SR 0322 near the Centre Hills Booster Station. A value of \$3,000.00 is being retained as a punch list item until restoration can be confirmed.
- The hydraulic model was updated, and field testing was conducted on April 15th. HRG provided a memo on the model results for the system pressures under initial service to Mountain View and

under future service to Tussey at full pump capacity.

Scott Road Pump Station and Bristol Interceptor – Act 537 Plan Special Study (R001178.0661)

- Final design and contact documents are being prepared.
- The PennDOT HOP for crossing Whitehall Road has been issued.
- Required signatures and fees for the Ferguson Township permits (Zoning, Lighting, Road Occupancy) were acquired and these permits were submitted for review and approval.
- Required signatures and fees for the NPDES permit and E&S approval were acquired and these permits were submitted for review and approval.
- Proposed easement exhibits have been prepared. These will be provided to the Authority's solicitor to begin discussions with the identified property owners.

Meeks Lane Pump Station – Act 537 Plan Special Study (R001178.0663)

• The Special Study was updated and re-submitted to the Authority staff for review.

Beneficial Reuse Service Area Designation – Act 537 Plan Special Study (R001178.0666)

• Completion of the Special Study has been paused while a Risk Assessment is conducted.

Fiber Optic Conduit – (R001178.0687)

- Drawings were prepared for the Shiloh Road alignment to Premier Drive. The drawings were sent to Columbia Gas for review since a portion of the alignment is within their right-of-way.
- The College Township roadway occupancy permit for the crossing of Trout Road (Shiloh Road alignment) was issued.
- HRG and UAJA staff are working with Columbia Gas to determine if the conduit can occupy the same right-of-way as the gas utility. Columbia Gas responded that it will not permit UAJA to install the fiber optic conduit inside its right-of-way between Trout Road and Hartman Farm Lane.
- HRG coordinated with Columbia Gas to revise the Shiloh Road alignment drawings. Columbia Gas subsequently provided a letter of no objection for review and execution by the Authority.
- Drawings are being prepared for the second fiber optic conduit alignment (Trout Road to Hartman Farm Lane to Short Lane, near SR0026).

Entry Road Storm Water Improvements – (R001178.0681)

- The entry road design was reviewed with UAJA staff and updated based on specific comments.
- Permit applications have been prepared and submitted.
- A preliminary right-of-way exhibit was provided to the Authority's solicitor to begin discussions with the property owner.
- Relocation of the utility poles is being coordinated with First Energy, which will require evidence of a right-of-way or an acknowledgement signature from the property owner.

Whitehall Road Low Pressure Sanitary Sewer – (R001178.0692)

- Field survey data was collected and a base map was prepared.
- HRG reviewed the alignment in the field with UAJA representatives.
- Due to the number of units and sequencing of connections, the system is proposed as two zones, consisting of 1.5 inch and 2 inch diameter low pressure sewer.
- Preliminary drawings have been prepared and will be used as the basis to prepare a Component 3M Sewage Facilities Planning Module.

Princeton Drive Sanitary Sewer Replacement – (R001178.0699)

• Sanitary sewer profiles were generated using field data and proposed drawings provided by Ferguson Township's consultant. The proposed stream restoration improvements will remove any available cover on the existing sanitary line. As discussed, the sanitary line will need to be replaced at a lower slope in order to gain appropriate cover.

- Replacement of the sewer will require separate permitting, involving a GP-5 or GP-11.
- An engineering services agreement will be prepared.

Developer Plan Reviews

 The Contractor's (GOH/Hawbaker Eng) as-built drawings for sanitary system associated with the PennDOT work in North Atherton St. were reviewed and returned for corrections; April 8, 2021 (1178.0686).

5.7 Construction Report

ENR/AWT Upgrade Project (094612009)

• We continue to work with the Contractor (HRI, Inc.) to resolve the remaining defective work. The Authority is currently retaining \$83,500.94 for these items.

Sludge Storage Tank Mixer (094612034)

 Definitive Certificate of Substantial Completion has been issued via separate cover for 4-M Construction Services LLC (2020-01). Definitive Certificate of Substantial Completion has been issued for Stelco, Inc. (2020-05).

	Payment Requests to Date									
Contract	Application	Current	Contract Price	Total Work to	% Monetarily	Balance of Contract				
Number	for	Payment	to Date	Date	Complete	Amount				
	Payment #	Due	incld/CO							
2020-01			\$69,600.00	\$69,600.00	100.00%	\$0.00				
2020-05	4-Final	\$5,230.93	\$29,380.14	\$29,380.14	100.00%	\$0.00				
		\$5,230.93	\$98,980.14	\$98,980.14	100.00%	\$0.00				

• Stelco, Inc. (2020-05) has submitted Application for Payment No. 4-Final and we are recommending final payment in the amount of \$5,230.93.

Aeration Line Improvements (094612035)

• Both contractors, GM McCrossin (2020-08) and HRI (2020-09), are providing submittals for review and have begun site work this month.

	Payment Requests to Date									
Contract	Application	Current	Contract Price	Total Work	% Monetarily	Balance of				
Number	for Payment	Payment Due	to Date	to Date	Complete	Contract Amount				
	#		incld/CO							
2020-08			\$511,096.00		0.00%	\$511,096.00				
2020-09	2	\$10,350.00	\$103,505.00	\$15,505.00	14.98%	\$89,550.50				
		\$0.00	\$614,601.00	\$15,505.00	2.52%	\$599,096.00				

• HRI, Inc. (2020-09) has submitted Application for Payment No. 2 and we are recommending payment in the amount of \$10,350.00.

Solar System – Phase II – Demolition and Site Prep (094612040)

- Fencing installation is now completed. Contractor to begin restoration efforts.
- A substantial completion inspection was held on May 7th. A tentative certificate of substantial completion was issued via separate cover.
- Stone Valley Construction (2020-10) has submitted Application for Payment No. 4 and we are

recommending payment in the amount of \$67,433.40.

Solar System- Phase II Project

• The Solar Array has been completed with minor punchlist items remaining. The Project Owner has requested Permission to Operate from First Energy/West Penn Power and it is anticipated to be operational within the next several weeks.

	Payment Requests to Date									
Contract	Application	Current	Contract Price	Total Work to	% Monetarily	Balance of				
Number	for Payment	Payment Due	to Date	Date	Complete	Contract				
	# incld/CO Amount									
2020-10	4	\$67,433.40	\$265,908.00	\$265,908.00	100.00%	\$26,590.80				
	\$67,433.40 \$265,908.00 \$265,908.00 100.00% \$26,590.80									

WWTP NPDES Permit – Phosphorus Study (094612027)

Installation of the stream monitoring instruments will begin over the next month, with continuous
monitoring of Spring Creek for part of the year to determine the level of any impairment during the
growing period, prior to undertaking an intensive study during the critical high-temp, low-flow
period.

Ozone Disinfection for Effluent (094612023)

- The application for a Water Quality Management Part II Permit has been submitted to the Pennsylvania Department of Environmental Protection for the use of ozone as the disinfectant of the plant effluent. We are in the process of completing final design for the addition of the ozone system.
- The Act 537 Plan Special Study has been prepared and distributed to the County and Regional Planning Agencies and Commissions. The Study is also undergoing a 30-day public comment period. Adoption is slated for Summer.
- RETTEW has begun final design activities and is targeting a July 2021 request for bids for the project.

Anaerobic Digestion Project (094612026)

- RETTEW is has completed the preliminary design of the proposed Biosolids Improvement project and has submitted the Water Quality Management Permit to the PA DEP.
- A separate Act 537 Plan Special Study has been prepared and distributed to the County and Regional Planning Agencies and Commissions.
- We have commenced final design activities, beginning with a comprehensive survey and geotechnical analysis of the project area.
- Negotiations have begun with several potential biosolids contributors, along with the Gas Utility for
 offtake of the Renewable Natural Gas.

High Voltage Switchgear and Cable Replacement (094612045)

 The contractor, Thoroughbred Construction Group, has begun site work, starting with the new ductbanks.

	Payment Requests to Date									
Contract	Application	Current	Contract Price	Total Work to	% Monetarily	Balance of				
Number	for Payment	Payment Due	to Date	Date	Complete	Contract				
	#	_	incld/CO		_	Amount				
2020-11 \$1,043,639.00 0.00% \$1,043,639										
	\$0.00 \$1,043,639.00 \$0.00 0.00% \$1,043,639.00									

Water Quality Instrumentation (094612033)

• We have assisted the Authority with the procurement, installation, and integration of several new instruments to monitor water quality throughout the Advance Water Treatment process. We anticipate these instruments will be online and continuously analyzing turbidity, pH, and conductivity at key points in the treatment process by the end of this month.

Modifications to GD Kissinger Meadow Stream Augmentation

• The Authority's pending NPDES permit for the discharge of beneficial reuse water to Slab Cabin Run requires a series of modifications in control and monitoring. The changes will require modulation of the flows to the stream via SCADA, to avoid abrupt changes in stream flow. Additionally, we anticipate essentially a non-detect chlorine limit which will require de-chlorination prior to stream discharge. We are working with staff to design, permit, and implement these modifications.

5.8 Executive Director's Report

None.

6 New Business

6.1 Requisitions

BRIF #547	Groff Tractor Harris Reuse Project	\$528.00
BRIF #548	Wheatfield Nursery Harris Reuse Project	\$894.83
BRIF #549	Irvin Farms, LLC Harris Reuse Project	\$1,176.00
BRIF #550	Best Line Equipment Harris Reuse Project	\$2,895.00
BRIF #551	Siteone Landscape Supply Harris Reuse Project	\$2,187.13
BRIF #552	Mayer Electric Supply Shiloh Pump Station Upgrade	\$1,522.64
BRIF #553	Schaedler Yesco Shiloh Pump Station Upgrade	\$3,827.07
BRIF #554	YBC Shiloh Pump Station Upgrade	\$3,112.83
BRIF #555	Cooper Electric Shiloh Pump Station Upgrade	\$309.43
BRIF #556	Siteone Landscape Supply Greenbriar Project	\$2,480.27

BRIF #557 Ducken Tree Farm, LLC \$5,284.00

Greenbriar Project

BRIF #558 Stelco, Inc. \$5,230.93

Sludge Tank Project- Pay App. #4

BRIF #559 Stone Valley Construction \$67,433.40

Solar Phase II- Pay App. #4

TOTAL BRIF \$96,881.53

BRIF Approved A motion was made by Mr. Guss, seconded by Mr. Daubert to approve BRIF #547, #548, #549, #550, #551, #552, #553, #554, #555, #556, #557, #558 and #559 in the amount of \$96,881.53. The motion passed unanimously.

Construction Fund #004 HRI \$10,350.00

Aeration Line- Pay App. #2

TOTAL 2020 A CONSTRUCTION FUND \$10,350.00

Construction Fund Approved A motion was made by Mr. Nucciarone, seconded by Mr. Auman to approve Construction Fund #004 in the amount of \$10,350.00. The motion passed unanimously.

Revenue Fund #177 Debt Service, Operation and \$1,000,000

Maintenance Expenses

TOTAL REVENUE FUND

\$1,000,000

Revenue Fund Approved A motion was made by Mr. Nucciarone, seconded by Mr. Dempsey to approve Revenue Fund #177 in the amount of \$1,000,000.00. The motion passed unanimously.

6.2 Residential Solar Presentation

At the April Meeting it was suggested that a work session be held for the Residential Solar Project. Due to unforeseen circumstances, it was not possible to schedule the meeting. Recognizing there is still a lot of material to digest, and likely a lot of questions, a presentation has been prepared to go through the pilot project.

The presentation will cover the legal review, risk, financing, and a projected schedule. A work session can be scheduled for the week of May 24, or, if the Board wishes, the May meeting can be adjourned until that date so action can be considered.

As of the writing of this report, 212 property owners have expressed interest in the program, so there is no question that there is sufficient demand to fill the size of the pilot program.

Recommendation: At the end of the May meeting, adjourn the meeting to a date and time in the week of May 24 to allow for action. An alternative is to schedule a work session in the week of May 24 and wait for the regular June 16 meeting for action.

7 Other Business

Mr. Gaines asked for further clarification on the segregation of duties section of the audit report, page 80 to 83 of the May packet, as he did not realize that the same individual handles many different matters. Mr. Cory Miller said there are controls built in, but they are back-end controls not front-end controls. Anything that needs to have someone else doing the second half of the transaction is done by a different individual, usually consisting of Cory or Jason.

8 Adjournment

The meeting was adjourned at 5:10 p.m. via motion by Mr. Nucciarone and second by Mr. Guss.

Respectfully submitted,
UNIVERSITY AREA JOINT AUTHORITY





UNIVERSITY AREA JOINT AUTHORITY - LIVE YEAR-TO-DATE BUDGET REPORT

P 1 |glytdbud

ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET		ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
1040410 REVENUE-SEWER 1040420 REVENUE-SOLIDS 1040425 REVENUE-BU WATER 1040430 MAINTENANCE 1040440 REVENUE-PERMIT/TAP FEES 1040450 REVENUE-ADVCD. CONSTRC FEE 1040451 REVENUE-MISC. REIMBURSEMNT 1040470 INTEREST EARNINGS-CASH ACCT 1040472 INTEREST EARNINGS-PLIGIT 1040474 INTEREST EARNINGS - TRUSTEE 1040480 REVENUES-MISCELLANEOUS 1045919 CIP-WWTP-LAB 1045921 CIP-COLLECTION MAINT I&I 1045922 CIP-COLLECTION-CONST. EQUIP 1045922 CIP-WWTP-PHYSICAL PLANT 1045928 CIP-BENEFICIAL REUSE 1045929 CIP-WWTP-DEWATERING FACILIT 1045930 CIP-WWTP-COMPOST FACILITY 1045950 CIP-GENERAL & ADMINISTRATIVE 1050050 GENERAL & ADMINISTRATIVE 1050051 G & A - INFORMATION TECHNOL 1050054 G & A - INFORMATION TECHNOL 1050055 GENERAL & ADMINISTRATIVE 1060019 WWTP - LABORATORY 1060022 TREATMENT PLANT MAINTENANCE 1060023 MAIN STATION 1060025 WWTP - IPP 1060028 WWTP - DEWATERING 1060029 WWTP - DEWATERING 1060021 TREATMENT PLANT OPERATION 1060022 TREATMENT PLANT OPERATION 1060023 TREATMENT PLANT OPERATION 1060024 COLLECTION-MAINTENANCE 1070024 CONSTRUCT EQUIP MAINTENANCE 1070024 COLLECTION-INSPECTION 1070036 COLLECTION-PUMP STATION	-14,873,932 -74,000 -25,000 -65,000 -1,114,079 -40,000 -272,914 -1,410 -375 -90,555 -95,000 14,700 2,070,500 379,776 6,589,060 242,250 10,330,000 1,757,627 94,265 197,000 1,757,627 94,265 197,000 6,655,882 323,063 1,120,589 89,000 117,018 848,408 476,278 917,004 1,896,631 1,757,721 65,000		-14,873,932 -74,000 -25,000 -65,000 -1,114,079 -40,000 -272,914 -1,410 -375 -90,555 -95,000 14,700 2,070,500 379,776 6,589,060 242,250 10,330,000 1,757,627 94,265 197,000 1,757,627 94,265 197,000 1,757,627 94,265 197,000 1,757,627 94,265 197,000 1,757,627 94,265 197,000 1,757,627 94,265 197,000 1,757,627 94,265 197,000 1,757,627 94,265	-3,626,284.89 -55,835.58 -10,394.00 -83,424.50 -382,569.52 -15,910.97 -8,546.27 -211.19 -1.02 -73,651.68 -14,390.35 13,833.93 301,203.71 -00 585,893.10 271,542.80 47,155.59 230,666.01 -00 789,333.22 1,597,627.44 123,324.78 426,065.81 10,614.83 75,743.22 1,597,627.44 123,324.78 426,065.81 20,810.08 42,337.76 326,002.69 140,567.11 394,436.20 709,202.29 691,234.07 50,015.31 176,939.52 30,648.68	.00 .00 .00 .00 .00 .00 .00 .00 .00 .00	-11,247,647.11	24.4% 75.6% 128.3% 39.1% 15.3% 15.3% 81.1% 100.2% 14.5% 12.1% 100.2% 44.9% 11.3% 100.2% 44.9% 11.3% 38.4% 38
1070034 COLLECTION-INSPECTION 1070036 COLLECTION-PUMP STATION	157,600	0	157,600	30,648.68	.00	126,951.32	39.3%
TOTAL OPERATING FUND TOTAL REVENUES TOTAL EXPENSES							13.9%



UNIVERSITY AREA JOINT AUTHORITY - LIVE YEAR-TO-DATE BUDGET REPORT

P 1 |glytdbud

ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
1040410 REVENUE-SEWER	_						
1040410 4101 UAJA TOTAL SEWER R 1040410 4102 BORO SEWER TOTAL R 1040410 4103 PGM TOTAL SEWER RE 1040410 4104 PSU TOTAL SEWER RE 1040410 4105 SURCHARGES TOTAL R	-10,324,932 -3,800,000 -379,000 -220,000 -150,000		-10,324,932 -3,800,000 -379,000 -220,000 -150,000	-2,581,611.23 -909,929.18 -84,244.24 -16,544.24 -33,956.00	.00 .00 .00 .00	-2,890,070.82 -294,755.76 -203,455.76	25.0%* 23.9%* 22.2%* 7.5%* 22.6%*
TOTAL REVENUE-SEWER	-14,873,932	0	-14,873,932	-3,626,284.89	.00	-11,247,647.11	24.4%
1040420 REVENUE-SOLIDS	_						
1040420 4201 N5001 NONTAXABLE 1040420 4201 N5002 TAXABLE COMPO 1040420 4203 SLUDGE DISPOSAL	-45,000 -6,000 -23,000	0 0 0	-45,000 -6,000 -23,000	-18,037.50 -6,731.93 -31,066.15	.00	731.93	40.1%* 112.2% 135.1%
TOTAL REVENUE-SOLIDS	-74,000	0	-74,000	-55,835.58	.00	-18,164.42	75.5%
1040425 REVENUE-BU WATER	_						
1040425 4251 REVENUE-BU WATER	-25,000	0	-25,000	-10,394.00	.00	-14,606.00	41.6%*
TOTAL REVENUE-BU WATER	-25,000	0	-25,000	-10,394.00	.00	-14,606.00	41.6%
1040430 MAINTENANCE	_						
1040430 4301 REVENUE-MAINT BORO	-65,000	0	-65,000	-83,424.50	.00	18,424.50	128.3%
TOTAL MAINTENANCE	-65,000	0	-65,000	-83,424.50	.00	18,424.50	128.3%
1040440 REVENUE-PERMIT/TAP FEES	-						
1040440 4401 PERMIT/CONNECTION 1040440 4402 TAP FEE-TREATMENT	-20,250 -846,400	0	-20,250 -846,400	-11,073.23 -342,295.85	.00		54.7%* 40.4%*



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ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
1040440 4403 GHANER TAP FEE 1040440 4404 TAP FEE-PGM COLLEC 1040440 4405 IPP USER FEES 1040440 4409 WATER QUALITY MNGT 1040440 4410 REPAIR PERMIT 1040440 4411 TAP FEE - ROUTE 26 1040440 4412 CIRCLEVILLE TAP FE 1040440 4413 VALLEY VISTA TAP F	-18,550 -4,428 -4,750 -500 -1,550 -109,850 -79,306 -28,495	0 0 0 0 0	-18,550 -4,428 -4,750 -500 -1,550 -109,850 -79,306 -28,495	-9,331.00 .00 .00 -200.00 -475.00 .00 -1,062.54 -18,131.90	.00 .00 .00 .00 .00 .00	-9,219.00 -4,428.00 -4,750.00 -300.00 -1,075.00 -109,850.00 -78,243.46 -10,363.10	50.3%* .0%* .0%* 40.0%* 30.6%* 1.3%* 63.6%*
TOTAL REVENUE-PERMIT/TAP FEES	-1,114,079	0	-1,114,079	-382,569.52	.00	-731,509.48	34.3%
1040450 REVENUE-ADVCD. CONSTRC FEE							
1040450 4407 INSPECTION FEES 1040450 4407 B5026 GRAYSWOOD BRY 1040450 4407 B5353 INSPECTION FE 1040450 4407 B5457 INSPECTION FE 1040450 4407 B5472 INSPECTION FE	-40,000 0 0 0	0 0 0 0	-40,000 0 0 0	.00 -6,304.69 -2,936.59 -2,199.39 -4,470.30	.00 .00 .00 .00	-40,000.00 6,304.69 2,936.59 2,199.39 4,470.30	.0%* 100.0% 100.0% 100.0%
TOTAL REVENUE-ADVCD. CONSTRC FEE	-40,000	0	-40,000	-15,910.97	.00	-24,089.03	39.8%
1040451 REVENUE-MISC. REIMBURSEMNT							
1040451 4503 EMPLOYEE GROUP INS 1040451 4508 SALE OF ASSETS	-22,914 -250,000	0	-22,914 -250,000	-8,546.27 .00	.00	-14,367.41 -250,000.00	37.3%* .0%*
TOTAL REVENUE-MISC. REIMBURSEMNT	-272,914	0	-272,914	-8,546.27	.00	-264,367.41	3.1%
1040470 INTEREST EARNINGS-CASH ACCTS							
1040470 4701 GENERAL CHECKING-I 1040470 4702 PAYROLL-INTEREST E 1040470 4717 SWEEP CHECKING-INT	-10 -400 -1,000	0 0 0	-10 -400 -1,000	.00 -45.54 -165.65	.00 .00 .00	-10.00 -354.46 -834.35	.0%* 11.4%* 16.6%*
TOTAL INTEREST EARNINGS-CASH ACCTS	-1,410	0	-1,410	-211.19	.00	-1,198.81	15.0%
1040472 INTEREST EARNINGS-PLIGIT							
1040472 4703 PLIGIT-INTEREST EA	-30	0	-30	06	.00	-29.94	.2%*



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ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
1040472 4711 PLIGIT-EMMAUS-INTE 1040472 4719 PLIGIT PLUS - INTE	-200 -145	0	-200 -145	21 75	.00	-199.79 -144.25	.1%* .5%*
TOTAL INTEREST EARNINGS-PLIGIT	-375	0	-375	-1.02	.00	-373.98	.3%
1040474 INTEREST EARNINGS - TRUSTEE							
1040474 4706 BOND REMP/IMP-INTE 1040474 4707 BRIF/EMMAUS-INTERE 1040474 4724 INTEREST 93 DEBT S 1040474 4725 INT 93 OPERATING E 1040474 4726 INT 93 DEBT SERVIC 1040474 4727 INT REVENUE FUND 1040474 4733 2020A CONSTRUCTION 1040474 4734 2021 CONSTRUCTION	-30,000 -555 -50,000 -2,000 -5,000 -3,000	0 0 0 0 0 0	-30,000 -555 -50,000 -2,000 -5,000 -3,000	-23,695.36 -4.48 -319,049.57 -2,326.33 271,735.37 -61.52 -161.60 -88.19	.00 .00 .00 .00 .00 .00	-6,304.64 -550.52 269,049.57 326.33 -276,735.37- -2,938.48 161.60 88.19	79.0%* .8%* 638.1% 116.3% 5434.7%* 2.1%* 100.0%
TOTAL INTEREST EARNINGS - TRUSTEE	-90,555	0	-90,555	-73,651.68	.00	-16,903.32	81.3%
1040480 REVENUES-MISCELLANEOUS							
1040480 4899 MISCELLANEOUS RECE 1040480 4909 SOLAR MAINTENANCE	-50,000 -45,000	0	-50,000 -45,000	609.65 -15,000.00	.00	-50,609.65 -30,000.00	-1.2%* 33.3%*
TOTAL REVENUES-MISCELLANEOUS	-95,000	0	-95,000	-14,390.35	.00	-80,609.65	15.1%
1045919 CIP-WWTP-LAB							
1045919 0019 6318 BOD INCUBATOR 1045919 0019 6319 ANALYTICAL BAL	6,200 8,500	0	6,200 8,500	5,682.43 8,151.50	.00	517.57 348.50	91.7% 95.9%
TOTAL CIP-WWTP-LAB	14,700	0	14,700	13,833.93	.00	866.07	94.1%
1045921 CIP-COLLECTION MAINT I&I							
1045921 0021 6271 SHILOH RELOCAT 1045921 0021 6272 GREENBRIAR ENG	70,000 50,000	0	70,000 50,000	93,177.52 8,931.97	.00	-23,177.52 41,068.03	133.1%* 17.9%



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ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
1043921 FV01 031/ DAGA CONDUIT I	35,000 516,000 35,000 91,000 15,000 10,000 177,000 19,200 16,800 24,000 749,000 75,000 25,000 30,000 17,500 25,000	0 0 0 0 0 0 0 0 0 0 0	35,000 516,000 35,000 91,000 15,000 10,000 177,000 19,200 16,800 24,000 749,000 75,000 25,000 30,000 15,000 17,500 25,000	.00 .00 .00 67,126.27 .00 998.45 7,237.50 82,775.00 5,200.00 .00 .00 .00 .00 .00	.00 .00 .00 .00 .00 .00 .00 .00 .00 .00	35,000.00 516,000.00 35,000.00 23,873.73 15,000.00 4,001.55 2,762.50 94,225.00 14,000.00 16,800.00 -11,087.00 749,000.00 4,330.00 75,000.00 25,000.00 15,000.00 17,500.00 25,000.00	.0% .0% .0% 73.8% .0% 20.0% 72.4% 46.8% 27.1% .0% .0% .0% .0% .0%
1045921 PV02 6271 SHILOH BIKE PA TOTAL CIP-COLLECTION MAINT I&I	65,000 2,070,500	0	65,000 2,070,500	.00 301,203.71	.00	65,000.00 1,769,296.29	.0% 14.5%
1045922 CIP-COLLECTION-CONST. EQUIPM 1045922 0021 6288 NEW COLLECTION 1045922 0021 6328 NEW UNIT 22 1045922 0021 6329 NEW T-TAG 1045922 0021 6330 NEW JET TRUCK 1045922 0021 6331 NEW STORAGE BU	20.000	0 0 0 0	20,000 11,821 20,860 172,095 155,000	.00 .00 .00 .00	.00 .00 .00 .00	20,000.00 11,821.00 20,860.00 172,095.00 155,000.00	. 0% . 0% . 0% . 0%
	379,776	0	379,776	.00	.00	379,776.00	.0%
1045924 CIP-WWTP-PHYSICAL PLANT							
1045924 0024 6256 ENR/AWT PROJEC 1045924 0024 6260 SOLAR PROJECT 1045924 0024 6294 NEW TRUCK PLAN 1045924 0024 6304 AERATION SYSTE 1045924 0024 6320 5000 LB FORKLI	98,000 15,300 725,000 10,083	0 0 0 0	98,000 15,300 725,000 10,083	170,542.58 97,097.79 .00 25,844.75	.00 .00 .00 .00	-170,542.58 902.21 15,300.00 699,155.25 10,083.00	100.0%* 99.1% .0% 3.6% .0%



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ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
1045924 0024 6321 NEW TRUCK WITH 1045924 0024 6322 UAJA ENTRANCE 1045924 0024 6323 UAJA ENTRANCE 1045924 0024 6323 UAJA ENTRANCE 1045924 0024 6325 OZONE DISINFEC 1045924 0024 6325 OZONE DISINFEC 1045924 0024 6333 DISSOLVED PHOS 1045924 0024 6334 HIGH VOLTAGE S	22,773 350,404 22,500 115,000 4,050,000 180,000 1,000,000	0 0 0 0 0	22,773 350,404 22,500 115,000 4,050,000 180,000 1,000,000	.00 2,100.00 17,784.55 49,462.25 8,078.09 130,657.45 84,325.64	.00 .00 .00 .00 .00	22,773.00 348,304.00 4,715.45 65,537.75 4,041,921.91 49,342.55 915,674.36	.0% .6% 79.0% 43.0% .2% 72.6% 8.4%
TOTAL CIP-WWTP-PHYSICAL PLANT	6,589,060	0	6,589,060	585,893.10	.00	6,003,166.90	8.9%
1045928 CIP-BENEFICIAL REUSE							
1045928 0028 6239 MF MEMBRANE RE 1045928 0028 6262 WATERLINE PH 2 1045928 0028 6332 KISSINGER MEAD 1045928 5405 6261 WATERLINE PH 2 1045928 5405 6332 KISSINGER MEAD 1045928 ER05 6262 HARRIS REUSE T	90,000 20,000 110,000 7,250 15,000	0 0 0 0 0	90,000 20,000 110,000 7,250 15,000	74,080.00 178,331.79 10,016.36 3,721.90 4,585.25 807.50	.00 .00 .00 .00 .00	15,920.00 -158,331.79 99,983.64 3,528.10 10,414.75 -807.50	82.3% 891.7%* 9.1% 51.3% 30.6% 100.0%*
TOTAL CIP-BENEFICIAL REUSE	242,250	0	242,250	271,542.80	.00	-29,292.80	112.1%
1045929 CIP-WWTP-DEWATERING FACILITY							
1045929 0029 6309 BIG BERTHA MIX	0	0	0	47,155.59	.00	-47,155.59	100.0%*
TOTAL CIP-WWTP-DEWATERING FACILITY	0	0	0	47,155.59	.00	-47,155.59	100.0%
1045930 CIP-WWTP-COMPOST FACILITY							
1045930 0030 6245 ODOR CONTROL 1045930 0030 6295 NEW COMPOST LO 1045930 0030 6326 SOLIDS DRYING 1045930 0030 6327 SOLIDS DRYING 1045930 5405 6245 ODOR CONTROL E	40,000 690,000 9,600,000	0 0 0 0	40,000 690,000 9,600,000	29,648.50 .00 199,735.01 .00 1,282.50	.00 .00 .00 .00	-29,648.50 40,000.00 490,264.99 9,600,000.00 -1,282.50	100.0%* .0% 28.9% .0% 100.0%*
TOTAL CIP-WWTP-COMPOST FACILITY	10,330,000	0	10,330,000	230,666.01	.00	10,099,333.99	2.2%
1045950 CIP-GENERAL & ADMINISTRATIVE							
1045950 0050 6043 COMPUTER HARDW	90,000	0	90,000	.00	.00	90,000.00	.0%



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ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
1045950 0050 6047 COMPUTER SOFTW	100,000	0	100,000	.00	.00	100,000.00	.0%
TOTAL CIP-GENERAL & ADMINISTRATIVE	190,000	0	190,000	.00	.00	190,000.00	.0%
1050050 GENERAL & ADMINISTRATIVE							
1050050 5001 SUPERVISOR LABOR 1050050 5002 REGULAR LABOR 1050050 5006 VACATION 1050050 5008 PERSONAL 1050050 5009 JURY/CIVIL/VOLUNTE 1050050 5010 HOLIDAY 1050050 5101 FICA EXPENSE 1050050 5201 UNEMPLOYMENT EXPEN 1050050 5201 UNEMPLOYMENT EXPEN 1050050 5202 GROUP HEALTH INSUR 1050050 5203 PENSION (401) UAJA 1050050 5205 COBRA EMPLOYEE INS 1050050 5207 GROUP LIFE INSURAN 1050050 5208 HEALTH DEDUCTIBLE 1050050 5208 HEALTH DEDUCTIBLE 1050050 5301 OFFICE SUPPLIES 1050050 5301 OFFICE SUPPLIES 1050050 5302 POSTAGE/SHIPPING 1050050 5303 JANITORIAL SUPPLIE 1050050 5307 PETTY CASH EXPENDI 1050050 5401 ADVERTISING 1050050 5402 AUDIT 1050050 5404 ADVERTISING 1050050 5405 ENGINEERING-RETAIN 1050050 5406 LEGAL 1050050 5407 MISCELLANEOUS OUTS 1050050 5501 1054 O & M - COPIER 1050050 5501 TRAINING, SEMINARS 1050050 5701 TRAINING, SEMINARS 1050050 5704 VACCINATIONS 1050050 5705 MEAL ALLOWANCE 1050050 5706 EMPLOYEE/EMPLOYER 1050050 5707 MEAL ALLOWANCE 1050050 5709 SAFETY TRAINING 1050050 5709 DRUG/ALCOHOL TESTI	256,417 355,201 0 0 0 37,920 8,868 23,000 154,661 86,804 10,000 175,000 30,000 20,000 23,000 23,000 23,000 23,000 20,000 60,000 15,000 40,000 5,000 18,000 1,500 1,500 1,500 1,500 1,500 2,500 8,000 3,000 2,500 1,500 3,000 2,500 1,500 2,500 3,000 2,500 5,000 5		256,417 355,201 0 0 0 37,920 8,868 23,000 154,661 86,804 10,000 175,000 30,000 20,000 20,000 60,000 23,000 23,000 23,000 20,000 60,000 15,000 40,000 5,000 18,000 1,500 2,500 18,000 3,000 2,500 8,000 3,000 2,500 6,500 18,000 3,000 2,500 6,500 18,000 3,000 5,000 6,000 5,000 6,000 5,000 6,0	86,773.43 109,922.83 23,879.55 2,375.04 4,051.91 2,014.24 9,335.43 14,777.87 3,456.02 16,226.24 55,396.36 22,049.34 6,885.76 43,368.62 46,512.59 11,650.50 13,679.45 2,894.33 17.98 1,066.33 22,310.30 10,326.01 27,310.00 198,915.00 9,394.50 2,464.72 15,243.47 800.00 6,695.00 5,604.12 830.80 1,519.15 .00 293.00	.00 .00 .00 .00 .00 .00 .00 .00 .00 .00	169,643.57 245,278.17 -23,879.55 -2,375.04 -4,051.91 -2,014.24 -9,335.43 23,142.13 5,411.98 6,773.76 99,264.66 3,114.24 37,031.38 128,487.41 3,349.50 16,320.55 4,105.67 182.02 1,933.67 9,673.99 32,690.00 81,085.50 2,5355.28 24,756.53 4,200.00 -1,95.08 1,500.00 1,5669.20 5000.00 6,480.85 3,000.00 207.00	33.8% 30.0%** 100.0%** 100.0%** 100.0%* 39.0%* 41.3



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ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
1050050 6006 MISCELLANEOUS EXPE 1050050 6015 WATER-CTWA 1050050 6017 GARBAGE 1050050 6019 CNET	1,000 6,000 10,000 8,656	0 0 0 0	1,000 6,000 10,000 8,656	.00 1,814.00 5,172.89 4,306.50	.00 .00 .00	1,000.00 4,186.00 4,827.11 4,349.50	.0% 30.2% 51.7% 49.8%
TOTAL GENERAL & ADMINISTRATIVE	1,757,627	0	1,757,627	789,333.28	.00	968,293.72	44.9%
1050053 G & A - INFORMATION TECHNOLOGY							
1050053 IT71 INTERNET SERVICE 1050053 IT72 HARDWARE-DATA PROC 1050053 IT73 SOFTWARE-DATA PROC 1050053 IT74 TRAINING-DATA PROC	5,000 18,365 69,900 1,000	0 0 0 0	5,000 18,365 69,900 1,000	1,516.32 .00 9,098.51 .00	.00 .00 .00	3,483.68 18,365.00 60,801.49 1,000.00	30.3% .0% 13.0%
TOTAL G & A - INFORMATION TECHNOLOGY	94,265	0	94,265	10,614.83	.00	83,650.17	11.3%
1050054 G & A - FLEET/FUEL							
1050054 5502 VEHICLE MAINTENANC 1050054 5603 1006 GASOLINE. 1050054 5603 1008 DIESEL FUEL	75,000 35,000 87,000	0 0 0	75,000 35,000 87,000	18,205.50 14,527.39 43,010.33	.00	56,794.50 20,472.61 43,989.67	24.3% 41.5% 49.4%
TOTAL G & A - FLEET/FUEL	197,000	0	197,000	75,743.22	.00	121,256.78	38.4%
1052052 DEBT SERVICE							
1052052 5801 INTEREST PAID-1993 1052052 5802 INTEREST PAID - EM 1052052 5804 BOND ISSUANCE COST 1052052 5901 PRINCIPAL PAID-199 1052052 5903 PRINCIPAL PAID-EMM 1052052 6106 TRUSTEE FEES EMMAU 1052052 6120 TRUSTEE FEE 12 1052052 6122 2015 TRUSTEE FEES 1052052 6123 TRUSTEE FEE 2016 1052052 6124 TRUSTEE FEE 2017 1052052 6125 TRUSTEE FEE 2017 1052052 6126 TRUSTEE FEE 2017 1052052 6126 TRUSTEE FEE 2017	2,678,441 500 0 3,865,000 95,000 2,100 1,886 1,750 1,750 1,750 2,520	0 0 0 0 0 0 0 0 0	2,678,441 500 0 3,865,000 95,000 2,100 1,886 1,750 1,750 1,750 2,520	1,155,859.85 124.55 339,570.04 .00 95,000.00 2,123.00 .00 1,650.00 .00 1,650.00 .00	.00 .00 .00 .00 .00 .00 .00 .00	1,522,581.15 375.45 -339,570.04 3,865,000.00 -23.00 1,885.63 235.63 1,750.00 100.00 1,750.00 2,520.00	43.2% 24.9% 100.0%* .0% 101.1%* .0% 87.5% .0% 94.3% .0%



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ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
1052052 6127 TRUSTEE FEE 2018 1052052 6128 TRUSTEE FEE 2020	1,650 1,650	0	1,650 1,650	.00 1,650.00	.00	1,650.00	.0% 100.0%
TOTAL DEBT SERVICE	6,655,882	0	6,655,882	1,597,627.44	.00	5,058,254.82	24.0%
1060019 WWTP - LABORATORY							
1060019 5001 SUPERVISOR LABOR 1060019 5002 REGULAR LABOR 1060019 5003 OVERTIME LABOR 1060019 5006 VACATION 1060019 5007 SICK 1060019 5008 PERSONAL DAY 1060019 5010 HOLIDAY 1060019 5101 FICA EXPENSE 1060019 5102 MEDICARE EXPENSE 1060019 5202 GROUP HEALTH INSUR 1060019 5203 PENSION (401) UAJA 1060019 5305 SMALL EQUIPMT/TOOL 1060019 5306 LAB SUPPLIES 1060019 5501 EQUIPMENT MAINTENA	82,847 140,638 500 0 0 14,000 3,241 41,270 15,317 250 22,000 3,000	0 0 0 0 0	82,847 140,638 500 0 0 14,000 3,241 41,270 15,317 250 22,000 3,000		.00 .00 .00 .00 .00 .00 .00 .00 .00	-2,547.51 8,716.72 2,005.73 24,404.53 9,632.79 207.26 13,479.07 1,293.06	37.7% 38.1% 40.9% 37.1% 17.1% 38.7% 56.9%
TOTAL WWTP - LABORATORY	323,063	0	323,063	123,324.78	.00	199,738.01	38.2%
1060022 TREATMENT PLANT MAINTENANCE							
1060022 5001 SUPERVISOR LABOR 1060022 5002 REGULAR LABOR 1060022 5003 OVERTIME LABOR 1060022 5006 VACATION 1060022 5007 SICK 1060022 5008 PERSONAL DAY 1060022 5009 JURY/CIVIL/VOLUNTE 1060022 5010 HOLIDAY 1060022 5101 FICA EXPENSE 1060022 5102 MEDICARE EXPENSE 1060022 5202 GROUP HEALTH INSUR 1060022 5203 PENSION (401) UAJA 1060022 5304 OPERATIONAL SUPPLI 1060022 5305 SMALL EQUIPMT/TOOL	37,815 462,062 5,000 0 0 0 31,000 7,250 98,577 26,885 5,000 14,000	0 0 0 0 0 0 0 0 0 0	37,815 462,062 5,000 0 0 0 31,000 7,250 98,577 26,885 5,000 14,000	13,876.56 126,998.76 3,285.37 32,345.95 17,784.70 8,963.65 256.18 5,766.11 10,669.71 2,495.33 41,954.96 9,051.59 1,388.71 4,298.71	.00 .00 .00 .00 .00 .00 .00 .00 .00	23,938.44 335,063.24 1,714.63 -32,345.95 -17,784.70 -8,963.65 -256.18 -5,766.11 20,330.29 4,754.67 56,622.04 17,833.41 3,611.29 9,701.29	36.7% 27.5% 65.7% 100.0%* 100.0%* 100.0%* 100.0%* 34.4% 34.4% 42.6% 33.7% 27.8% 30.7%



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ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
1060022 5501 EQUIPMENT MAINTENA 1060022 5501 6174 SCADIA MAINT 1060022 5501 6175 UV MAINT 1060022 5501 6283 SOLAR MAINTENA 1060022 5503 BUILDING & GROUND 1060022 5508 GRIT REMOVAL-PLANT 1060022 5603 FUEL, OIL, LUBRICA 1060022 7511 LANDSCAPE	190,000 40,000 55,000 21,000 52,000 22,000 18,000 35,000	0 0 0 0 0 0	190,000 40,000 55,000 21,000 52,000 22,000 18,000 35,000	63,243.18 19,673.06 4,879.14 18,383.50 14,892.26 15,008.76 8,344.61 2,505.00	.00 .00 .00 .00 .00 .00	126,756.82 20,326.94 50,120.86 2,616.50 37,107.74 6,991.24 9,655.39 32,495.00	33.3% 49.2% 8.9% 87.5% 28.6% 68.2% 46.4% 7.2%
TOTAL TREATMENT PLANT MAINTENANCE		0	1,120,589	426,065.80	.00	694,523.20	38.0%
1060023 MAIN STATION							
1060023 5002 B5001 REGULAR LABOR 1060023 5101 B5001 FICA EXPENSE 1060023 5102 B5001 MEDICARE EXPE 1060023 5202 B5001 GROUP HEALTH 1060023 5203 B5001 PENSION (401) 1060023 5505 B5001 PUMP STATION 1060023 5602 B5001 O&M MAIN STAT	0 0 0 0 0 50,000 39,000	0 0 0 0 0	0 0 0 0 0 50,000 39,000	6,444.81 399.56 93.46 1,012.50 322.18 .00 12,537.57	.00 .00 .00 .00 .00	-6,444.81 -399.56 -93.46 -1,012.50 -322.18 50,000.00 26,462.43	100.0%* 100.0%* 100.0%* 100.0%* 100.0%* 32.1%
TOTAL MAIN STATION		0	89,000	20,810.08		68,189.92	23.4%
1060025 WWTP - IPP							
1060025 5001 SUPERVISOR LABOR 1060025 5006 VACATION 1060025 5010 HOLIDAY 1060025 5101 FICA EXPENSE 1060025 5102 MEDICARE EXPENSE 1060025 5202 GROUP HEALTH INSUR 1060025 5203 PENSION (401) UAJA 1060025 5304 OPERATION SUPPLIES 1060025 5305 SMALL EQUIPMT/TOOL 1060025 5410 ANALYSIS 1060025 5501 EQUIPMENT MAINTENA	81,347 0 0 5,044 1,180 17,162 8,135 0 150 3,500 500 117,018	0 0 0			.00		36.3% 100.0%* 100.0%* 37.0% 40.5% 37.0% 40.5% .0% .0% .0%
1060028 WWTP - BENEFICIAL REUSE							
1060028 5001 SUPERVISOR LABOR	37,815	0	37,815	13,876.56	.00	23,938.44	36.7%



UNIVERSITY AREA JOINT AUTHORITY - LIVE YEAR-TO-DATE BUDGET REPORT

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ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
1060028 5006 VACATION 1060028 5010 HOLIDAY 1060028 5101 FICA EXPENSE 1060028 5102 MEDICARE EXPENSE 1060028 5202 GROUP HEALTH INSUR 1060028 5203 PENSION (401) UAJA 1060028 5304 OPERATIONAL SUPPLI 1060028 5304 1065 OPERATIONAL SU 1060028 5305 SMALL EQUIPMT/TOOL 1060028 5410 LAB ANALYSIS 1060028 5501 EQUIPMENT MAINTENA 1060028 5602 1064 POWER 1060028 5605 CTWA REIMBURSE	0 0 2,345 548 7,918 3,782 15,000 15,000 15,000 125,000 200,000 65,000	0 0 0 0 0 0 0 0	0 0 2,345 548 7,918 3,782 15,000 1,000 1,000 15,000 125,000 200,000 65,000	96.38 406.73 891.60 208.60 3,303.76 1,437.90 1,304.37 160,405.21 .00 8,806.02 54,636.07 68,177.39 12,452.10	.00 .00 .00 .00 .00 .00 .00 .00	-96.38 -406.73 1,453.40 4,614.24 2,344.10 13,695.63 214,594.79 1,000.00 6,193.98 70,363.93 131,822.61 52,547.90	100.0%* 100.0%* 38.0% 38.1% 41.7% 38.0% 8.7% 42.8% .0% 58.7% 43.7% 34.1% 19.2%
TOTAL WWTP - BENEFICIAL REUSE		0	848,408	326,002.69	.00	522,405.31	38.4%
1060029 WWTP - DEWATERING 1060029 5001 SUPERVISOR LABOR 1060029 5002 REGULAR LABOR 1060029 5003 OVERTIME LABOR 1060029 5006 VACATION 1060029 5007 SICK 1060029 5008 PERSONAL 1060029 5010 HOLIDAY 1060029 5101 FICA EXPENSE 1060029 5102 MEDICARE EXPENSE 1060029 5202 GROUP HEALTH INSUR 1060029 5203 PENSION (401) UAJA 1060029 5304 OPERATIONAL SUPPLI 1060029 5304 OPERATIONAL SUPPLI 1060029 5501 EQUIPMENT MAINTENA 1060029 5602 1042 POWER-DEWATERI	37,815 134,339 2,000 0 0 0 10,674 2,496 24,956 10,498 55,000 125,000 73,000		37,815 134,339 2,000 0 0 0 10,674 2,496 24,956 10,498 500 55,000 125,000 73,000	13,873.62 44,787.72 279.39 8.88 1,586.49 1,522.94 412.47 1,400.14 4,001.95 935.99 15,086.02 3,897.94 34.47 19,040.00 2,709.37 30,989.72 140,567.11	.00 .00 .00 .00 .00 .00 .00 .00 .00 .00	23,941.38 89,551.28 1,720.61 -8.88 -1,586.49 -1,522.94 -412.47 -1,400.14 6,672.05 1,560.01 9,869.98 6,600.06 465.53 35,960.00 122,290.63 42,010.28 335,710.89	36.7% 33.3% 14.0%* 100.0%* 100.0%* 100.0%* 100.0%* 37.5% 60.5% 37.1% 6.6% 2.2% 42.5% 29.5%
TOTAL WWTP - DEWATERING	476,278	0	476,278	140,567.11	.00	335,710.89	29.5%
1060030 WWTP - COMPOST							
1060030 5001 SUPERVISOR LABOR	37,815	0	37,815	13,873.62	.00	23,941.38	36.7%



UNIVERSITY AREA JOINT AUTHORITY - LIVE YEAR-TO-DATE BUDGET REPORT

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ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
1060030 5002 REGULAR LABOR 1060030 5003 OVERTIME LABOR 1060030 5006 VACATION 1060030 5007 SICK 1060030 5010 HOLIDAY 1060030 5101 FICA EXPENSE 1060030 5102 MEDICARE EXPENSE 1060030 5202 GROUP HEALTH INSUR 1060030 5203 PENSION (401) UAJA 1060030 5304 OPERATIONAL SUPPLI 1060030 5304 OPERATIONAL SUPPLI 1060030 5304 SMALL EQUIPMT/TOOL 1060030 5410 LAB ANALYSIS 1060030 5410 LAB ANALYSIS 1060030 5411 MARKETING 1060030 5501 EQUIPMENT MAINTENA 1060030 5506 1032 SKID STEER 184 1060030 5506 1032 SKID STEER 184 1060030 5506 1033 FRONT END LOAD 1060030 5506 1055 STREET SWEEPER 1060030 5506 1071 LOADER MAINT 6 1060030 5506 1072 TROMMEL 1060030 5506 1072 TROMMEL 1060030 5602 1041 POWER-COMPOST 1060030 5603 1007 NATURAL GAS -	258,231 10,000 0 0 18,355 4,293 82,230 16,693 2,000 120,000 2,500 5,500 11,500 4,887 50,000 10,000 4,000 7,500 10,00		500 4,887 50,000 5,000	84,159.74 9,168.09 6,034.87 1,436.23 352.78 3,924.43 7,495.83 1,753.11 18,901.05 6,168.90 172.37 17,132.50 400.77 1,263.25 2,880.00 4,886.50 16,702.89 676.20 534.32 1,866.30 11,701.08 3,406.98 7,160.39 55,781.51 116,602.49	.00 .00 .00 .00 .00 .00 .00 .00 .00 .00	-3,924.43 10,859.17 2,539.89 63,328.95 10,524.10 1,827.63 102,867.50 2,099.23 4,236.75 8,620.00	32.6% 91.7% 100.0%* 100.0%* 100.0%* 40.8% 40.8% 40.8% 14.3% 16.0% 23.0% 100.0% 33.4% 16.7% 13.53% 46.7% 156.0% 34.1% 143.2%* 42.66% 97.2%
TOTAL WWTP - COMPOST	917,004	0	917,004	394,436.20	.00	522,567.80	43.0%
1060032 TREATMENT PLANT OPERATION							
1060032 5001 SUPERVISOR LABOR 1060032 5002 REGULAR LABOR 1060032 5003 OVERTIME LABOR 1060032 5004 SHIFT LABOR 1060032 5006 VACATION 1060032 5007 SICK 1060032 5008 PERSONAL DAY 1060032 5009 JURY/CIVIL/VOLUNTE 1060032 5010 HOLIDAY 1060032 5101 FICA EXPENSE 1060032 5102 MEDICARE EXPENSE	37,815 623,915 60,000 12,000 0 0 0 41,027 9,595	0 0 0 0 0 0 0	37,815 623,915 60,000 12,000 0 0 0 41,027 9,595	13,873.62 201,150.77 14,426.43 4,375.27 11,198.24 7,779.42 4,010.16 480.49 9,131.24 16,643.48 3,892.45	.00 .00 .00 .00 .00 .00 .00		36.7% 32.2% 24.0% 36.5% 100.0%* 100.0%* 100.0%* 40.6% 40.6%



UNIVERSITY AREA JOINT AUTHORITY - LIVE YEAR-TO-DATE BUDGET REPORT

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ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
1060032 5202 GROUP HEALTH INSUR 1060032 5203 PENSION (401) UAJA 1060032 5304 OPERATION SUPPLIES 1060032 5304 1034 ALUM 1060032 5304 1070 CARBON SUPPLEM 1060032 5405 1053 STREAM MONITOR 1060032 5409 LICENSE & FEES 1060032 5410 ANALYSIS 1060032 5499 MISCELLANEOUS OUTS 1060032 5602 1043 POWER-PLANT	174,552 34,977 500 200,000 225,000 14,250 9,000 10,000 40,000 404,000	0 0 0 0 0 0 0	174,552 34,977 500 200,000 225,000 14,250 9,000 10,000 40,000 404,000	80,366.03 10,867.30 .00 86,745.61 47,295.36 .00 2,800.00 17,225.82 21,992.00 154,948.60	.00 .00 .00 .00 .00 .00 .00	94,185.97 24,109.70 500.00 113,254.39 177,704.64 14,250.00 6,200.00 -7,225.82 18,008.00 249,051.40	46.0% 31.1% .0% 43.4% 21.0% .0% 31.1% 172.3%* 55.0% 38.4%
TOTAL TREATMENT PLANT OPERATION	1,896,631	0	1,896,631	709,202.29	.00	1,187,428.71	37.4%
1070021 COLLECTION-MAINTENANCE							
1070021 5001 SUPERVISOR LABOR 1070021 5002 REGULAR LABOR 1070021 5002 6172 REGULAR LABOR 1070021 5002 6262 WATERLINE PH 2 1070021 5002 6277 REGULAR LABOR 1070021 5002 6272 REGULAR LABOR 1070021 5002 6315 REGULAR LABOR 1070021 5002 B5001 REGULAR LABOR 1070021 5002 B5001 REGULAR LABOR 1070021 5002 B5003 REGULAR LABOR 1070021 5002 B5003 REGULAR LABOR 1070021 5002 B5004 REGULAR LABOR 1070021 5002 B5472 REGULAR LABOR 1070021 5002 B5472 REGULAR LABOR 1070021 5003 OVERTIME LABOR 1070021 5006 VACATION 1070021 5007 SICK 1070021 5008 PERSONAL 1070021 5009 JURY/CIVIL/VOLUNTE 1070021 5010 HOLIDAY 1070021 5010 HOLIDAY 1070021 5101 B5001 FICA EXPENSE 1070021 5101 B5001 FICA-O & M MA 1070021 5102 MEDICARE EXPENSE 1070021 5102 G172 MEDICARE EXPENSE 1070021 5102 B5001 MEDICARE O & 1070021 5202 GROUP HEALTH IN	133,058 1,008,605 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		133,058 1,008,605 0 0 0 0 0 0 0 0 0 0 0 15,000 0 70,803 0 16,554 0 0 332,465	44,667.33 51,548.10 37,324.40 79,710.01 114,216.04 12,193.32 10,418.11 64.05 3,279.47 3,239.21 2,767.88 1,001.39 9,495.27 18,928.76 24,301.56 3,499.10 387.48 20,418.05 25,078.70 2,314.10 3,97 5,865.16 541.38 .93 134,145.56 14,108.55 20.92	.00 .00 .00 .00 .00 .00 .00 .00 .00 .00	-14,100.33	33.6% 5.1% 100.0%*



UNIVERSITY AREA JOINT AUTHORITY - LIVE YEAR-TO-DATE BUDGET REPORT

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ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
1070021 5203 PENSION (401) UAJA 1070021 5203 6172 PENSION (401) 1070021 5203 B5001 PENSION-O&M M 1070021 5305 SMALL EQUIPMT/TOOL 1070021 5504 SEWER LINE MAINTEN 1070021 ER01 RENTAL OF EQUIPMEN 1070021 ER14 RENTAL LOWBOY 1070021 PV01 TRENCH PAVING-CONT	63,736 0 0 13,000 90,000 1,000 3,500 10,000	0 0 0 0 0 0	63,736 0 0 13,000 90,000 1,000 3,500 10,000	20,415.54 1,672.93 3.20 2,312.00 43,554.85 .00 3,736.75	.00 .00 .00 .00 .00 .00	43,320.46 -1,672.93 -3.20 10,688.00 46,445.15 1,000.00 -236.75 10,000.00	32.0% 100.0%* 100.0%* 17.8% 48.4% .0% 106.8%*
TOTAL COLLECTION-MAINTENANCE	1,757,721	0	1,757,721	691,234.07	.00	1,066,486.93	39.3%
1070022 CONSTRUCT EQUIP MAINTENANCE							
1070022 5501 SMALL EQUIPMENT MA 1070022 5506 LG. CONSTRC. EQUIP	5,000 60,000	0	5,000 60,000	2,571.61 47,443.70	.00	2,428.39 12,556.30	51.4% 79.1%
TOTAL CONSTRUCT EQUIP MAINTENANCE	65,000	0	65,000	50,015.31	.00	14,984.69	76.9%
1070034 COLLECTION-INSPECTION							
1070034 5001 SUPERVISOR LABOR 1070034 5002 REGULAR LABOR 1070034 5002 B5026 GRAYSWOODS 1070034 5002 B5387 CANTERBURY CR 1070034 5002 B5466 HARNER FARM S 1070034 5002 B5468 REGULAR LABOR 1070034 5006 VACATION 1070034 5007 SICK 1070034 5008 PERSONAL 1070034 5009 JURY/CIVIL/VOLUNTE 1070034 5010 HOLIDAY 1070034 5101 FICA EXPENSE 1070034 5102 MEDICARE EXPENSE 1070034 5202 GROUP HEALTH INSUR 1070034 5304 OPERATIONAL SUPPLI 1070034 5305 SMALL EQUIPMT/TOOL 1070034 5507 SEWER LINE INSPEC/ 1070034 5507 B5026 GRAYSWOODS	133,058 208,723 0 0 0 0 11,000 0 0 0 0 0 0 21,190 4,956 45,470 23,742 1,600 500 0	0 0 0 0 0 0 0 0 0 0 0 0	133,058 208,723 0 0 0 11,000 11,000 0 0 0 21,190 4,956 45,470 23,742 1,600 500 0	44,667.49 55,896.58 1,701.96 33.13 2,467.84 2,398.83 3,131.63 2,938.19 9,841.45 1,009.32 787.76 3,940.90 8,070.33 1,887.45 19,669.87 8,599.15 206.50 30.20 1,143.93 1,566.50	.00 .00 .00 .00 .00 .00 .00 .00 .00 .00	88,390.51 152,826.42 -1,701.96 -33.13 -2,467.84 -2,398.83 7,868.37 -2,938.19 -9,841.45 -1,009.32 -787.76 -3,940.90 13,119.67 3,068.55 25,800.13 15,142.85 1,393.50 469.80 -1,143.93 -1,566.50	33.6% 26.8% 100.0%*



UNIVERSITY AREA JOINT AUTHORITY - LIVE YEAR-TO-DATE BUDGET REPORT

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ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
1070034 5507 B5342 HAWK RIDGE 1070034 5507 B5353 INSPECTION EN 1070034 5507 B5387 CANTERBURY CR 1070034 5507 B5457 GRACE HILLS C 1070034 5507 B5468 INSPECTION EN 1070034 5507 B5473 INSPECTION EN 1070034 5507 B5474 INSPECTION EN	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	910.00 905.55 1,053.06 561.00 783.06 1,764.78 973.06	.00 .00 .00 .00 .00	-910.00 -905.55 -1,053.06 -561.00 -783.06 -1,764.78 -973.06	100.0%* 100.0%* 100.0%* 100.0%* 100.0%* 100.0%*
TOTAL COLLECTION-INSPECTION	450,239	0	450,239	176,939.52	.00	273,299.48	39.3%
1070036 COLLECTION-PUMP STATION							
1070036 5305 SMALL EQUIPMT/TOOL 1070036 5501 EQUIPMENT MAINTENA 1070036 5505 O & M PUMP STATION 1070036 5505 B5002 O & M CLASTER 1070036 5505 B5003 O & M NORTH M 1070036 5502 B5004 O & M SOUTH M 1070036 5602 POWER 1070036 5602 B5002 POWER-CLASTER 1070036 5602 B5004 POWER-SOUTH M 1070036 5603 PUMP STATION PROPA	1,000 22,000 70,000 200 200 200 62,000 500 1,000	0 0 0 0 0 0 0 0	1,000 22,000 70,000 200 200 200 62,000 500 1,000	243.31 .00 8,086.80 .00 .00 .00 21,588.82 .35.06 241.63 453.06	.00 .00 .00 .00 .00 .00 .00	756.69 22,000.00 61,913.20 200.00 200.00 200.00 40,411.18 464.94 258.37 546.94	24.3% .0% 11.6% .0% .0% .0% 34.8% 7.0% 48.3% 45.3%
TOTAL COLLECTION-PUMP STATION	157,600	0	157,600	30,648.68	.00	126,951.32	19.4%
TOTAL OPERATING FUND	20,087,346	0	20,087,346	2,783,978.23	.00	17,303,368.14	13.9%
TOTAL REVENUES TOTAL EXPENSES	-16,652,265 36,739,611	0	-16,652,265 36,739,611	-4,271,219.97 7,055,198.20		-12,381,044.71 29,684,412.85	



To: UAJA Board From: Jason Brown

Re: Financial Report - End of May 2021

Cach	Accounts
Casii	Accounts

General Checking	\$384,168.01
Payroll Checking	\$5,915.24
PLIGIT Checking	\$1,521.28
Petty Cash	\$99.56

Revenue Fund Accounts

Revenue Sweep	\$67,044.77
Revenue Trustee	\$4,264,944.73

Savings Accounts

PLIGIT Plus	\$8,486.35
93 BRIF	\$6,234,956.45
Emmaus BRIF	\$217,095.38

TOTAL LIQUID ASSETS

\$11,185,055.98

|--|

2015 DSF	\$237.90
2016 DSF	\$0.00
2017 DSF	\$160.57
2017A DSF	\$154.72
2017 B & C DSF	\$761.72
2018 DSF	\$302.55
2020 DSF	\$6,526.27
2020A DSF	\$0.86
2021 DSF	\$0.33
2021A DSF	\$1,011.41
2020A Construction Fund	\$8,996,129.59
2021 Construction Fund	\$8,818,690.87
2020A Capitalized Interest Fund	\$354,231.82
2021 Capitalized Interest Fund	\$452,829.46

TOTAL DEDICATED ASSETS

\$18,631,038.07

Restricted Accounts

93 Oper. Expense Reserve	\$305,608.45
93 Debt Service Reserve	\$6,730,084.97

\$7,035,693.42

Receivables Outstanding (1st quarter 2021)

UAJA Sewer	\$266,011.05
UAJA Surcharge	\$52.00
Borough Sewer	\$0.00
PGM Sewer	\$17,226.56
PSU Sewer	\$0.00

TOTAL OUTSTANDING

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COMPOST & SEPTAGE OPERATIONS REPORT

May 2021

COMPOST PRODUCTION AND DISTRIBUTION

	Dec. 2020	<u>Jan. 2021</u>	Feb. 2021	Mar. 2021	Apr. 2021	May 2021
Production	848 cu/yds.	716 cu/yds.	673 cu/yds.	897 cu/yds.	848 cu/yds.	1,004 cu/yds.
YTD. Production	12,079 cu/yds.	716 cu/yds.	1,389 cu/yds.	2,286cu/yds.	3,134 cu/yds.	4,138cu/yds.
Distribution	0 cu/yds.	120cu/yds.	11 cu/yds.	978 cu/yds.	963cu/yds.	2,132cu/yds.
YTD. Distribution	12,512 cu/yds.	120 cu/yds.	131 cu/yds.	1,109 cu/yds.	2,072cu/yds.	4,204cu/yds.
Immediate Sale	1,684 cu/yds.	2,412 cu/yds.	3,117 cu/yds.	2,812 cu/yds.	2,746 cu/yds.	1,462cu/yds.
Currently in Storage	2,532 cu/yds.	3,128 cu/yds.	3,790 cu/yds.	3,709 cu/yds.	3,594 cu/yds.	2,466 cu/yds.

SEPTAGE OPERATIONS

	<u>Dec. 2020</u>	<u>Jan. 2021</u>	<u>Feb. 2021</u>	Mar. 2021	Apr. 2021	May 2021
Res./Comm.	78,350 gals.	55,000 gals.	57,530 gals.	71,300 gals.	74,400 gals.	69,800 gals.
CH/Potter	5,041.53	5,421.00	3,923.97	2,777.22	0.00	0.00
	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids
Port Matilda	1,601.28	834.00	1,434.48	1,684.68	500.40	1,434.48
	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids
Huston Twp.	733.92	717.24	617.16	533.76	600.48	683.88
	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids
Total Flow	133,250 gals.	116,000 gals.	114,030gals.	113,800 gals.	88,400 gals.	95,800 gals.

Phone: (814) 238-5361 Fax: (814) 238-1531

UNIVERSITY AREA JOINT AUTHORITY

1576 Spring Valley Road State College, PA 16801

SUPERINTENDENT'S REPORT

June 10, 2021 Arthur G. Brant

PLANT OPERATION

The treatment plant is operating well with one exception. The 12-month rolling average flow for May was 3.22mgd with the average for the month being 3.09mgd. The average monthly **influent** flow was 4.87mgd. Treatment units online are as follows: primary clarifiers #1, #5 and #6; aeration basins #1 and #3; secondary clarifiers *1, #2, #3 and #4; all eight tertiary filters are online.

Below is the chart for Reuse Distribution and Temperature Data:

	May-21	YTD	Plant Effl. Temp	Wetland Effl. Temp.
Best Western	30,000	108,000		
Centre Hills	4,685,000	5,875,000	May-21	May-21
Cintas	482,000	2,343,000	62.4	62.1
Red Line	616,000	2,819,000	_	
Uaja Wetland	5,486,000	19,648,000		
GDK Vault	33,534,000	112,060,000		
Kissingers	1,879,000	9,843,000		
Stewarts/M.C.	2,000	12,000		
TOTAL	46,714,000	152,708,000		

PLANT MAINTENANCE

- Replaced wiring for limit switches on all 6 primary tanks. All were tested.
- Changed oil in #2 Primary air compressor.
- Re-installed Landia mixers in #2 Aeration basin.
- Bearing is noisy in Main Station Pump #1. RAM was in to inspect and replace bearing under warranty.
- Repaired lighting and conduit that was damaged in bunker of Compost (corrosion).
- Replaced hydraulic hose on 621E loader.
- Replaced faulty thermal couplers in zones 8C, 9D, and 10D.
- Made an entry into Primary tank #5 to clean out duck-bills on aeration lines.
- CIP on both RO's.
- Replaced fuel pump and filter on 98 service truck.

Phone: (814) 238-5361 Fax: (814) 238-1531 Page 29 of 61

UNIVERSITY AREA JOINT AUTHORITY

1576 Spring Valley Road State College, PA 16801

COLLECTION SYSTEM SUPERINTENDENT'S REPORT

Activities for the month of May 2021 Mark Harter, Superintendent

MAINLINE MAINTENANCE:

Shiloh Pump Station Project – Installed fence, poured concrete curb, started restoration.

Conduit Project – 2,904 ft of conduit, 23,550 ft of interduct, and 23 pull boxes were installed.

Completed restoration at the Solar fields project.

Installed new lateral at -743 Henszey street.

Mainline repair – 262 Dale street.

Main Line Televising – 5,724 ft televised - 32 manholes inspected.

Mainline Cleaning – 1,996 ft cleaned – 13 manholes inspected.

LIFT STATION MAINTENANCE

Replaced transducer at Outer drive station.

Replaced off float at Haymarket station.

Repalced contact and relay at Persia station.

Cleaned (8) lift station wet wells.

NEXT MONTH PROJECTS:

Complete the Shiloh Rd. pump station upgrade project.

Complete phase 1 of the conduit project.

Casting adjustments for Township paving projects.

Cleaning wet wells.

Start the Scott road upgrade project.

INSPECTION: Final As-Builts Approved: None

Mainline Construction:

- a. Harner Farms Awaiting As-Builts.
- b. Grays Pointe phase 6 sec D.1 Constuction is approximately (80%) complete.
- c. Canterbury Crossing 4&5 phase 1C Construction is approximately (80%) complete.

New Connections:

a.	Single-Family Residential	5	c.	Commercial	0
b.	Multi-Family Residential	0	d.	Non-Residential	0

TOTAL 5

PA One-Calls Responded to 05/1-31/21: 394





ENGINEER'S REPORT

University Area Joint Authority

June 16, 2021

The following summarizes our recent services performed on behalf of the University Area Joint Authority (Authority):

Consulting Engineer Services (R001178.0693)

The annual inspection was completed for discharges of stormwater.

Odor Control System Upgrades (R001178.0597)

- Contract No. 17-03: General Construction (Global Heavy Corporation) Complaint against the UAJA and HRG.
- An inventory of air emissions for the entire facility is being compiled as required by DEP to transition form an air quality plan approval to an operating permit.
- It has been discovered that the spare recirculation pump was returned to Global Heavy and not to the site. The return of the pump is being coordinated by the Authority's solicitor.

Extension of Beneficial Reuse Water to Harris Township (R001178.0637)

 Contract 2020-02 (Ligonier) - A value of \$3,000.00 is being retained as a punch list item until restoration can be confirmed. The Contractor is scheduled to complete the restoration requirements on June 12th.

Scott Road Pump Station and Bristol Interceptor (R001178.0682)

- Final design and contract documents have been prepared.
- Ferguson Township provided review comments to the Zoning Permit submission. A variance requested will need to be made to be presented to the Zoning Hearing Board. The request must be submitted by the fourth Monday of June to be heard on the fourth Tuesday of July.
- The NPDES permit was submitted.
- Proposed Easement Exhibits have been prepared and were provided to the Authority's solicitor.

Meeks Lane Pump Station – Act 537 Plan Special Study (R001178.0663)

 A meeting with staff to establish project goals, discuss updates to the plan and develop a schedule for coordinate with Centre Region Planning Agency is scheduled for June 16th.

Beneficial Reuse Service Area Designation – Act 537 Plan Special Study (R001178.0666)

Completion of the Special Study has been paused while a Risk Assessment is conducted.

Fiber Optic Conduit – (R001178.0687)

- Columbia Gas provided a letter of no objection which was executed by the Authority for encroachment in the right-of-way near Premier Drive. An easement exhibit was prepared and provided to the Authority's solicitor.
- Drawings are being prepared for the second fiber optic conduit alignment (Trout Road to Hartman Farm Lane to Short Lane, near SR 0026).

Entry Road Storm Water Improvements – (R001178.0688)

- Permit applications have been prepared and submitted.
- A preliminary right-of-way exhibit was provided to the Authority's solicitor to begin discussions with the property owner.
- Relocation of the utility poles is being coordinated with First Energy, which will require evidence of a right-of-way or an acknowledgement signature from the property owner.

Whitehall Road Low Pressure Sanitary Sewer - (R001178.0692)

- Preliminary design drawings have been prepared. The system is proposed as two zones, consisting
 of 1.5 inch and 2-inch diameter low pressure sewer.
- A Component 3M Sewage Facilities Planning Module is being prepared.

Princeton Drive Sanitary Sewer Replacement – (R001178.0699)

- Sanitary sewer profiles were generated using field data and proposed drawings provided by Ferguson Township's consultant. The proposed stream restoration improvements will remove any available cover on the existing sanitary line. As discussed, the sanitary line will need to be replaced at a lower slope in order to gain appropriate cover.
- Replacement of the sewer will require separate permitting, involving a GP-5 or GP-11.
- An engineering services agreement will be prepared.

Developer Plan Reviews:

- The Contractor's (GOH/Hawbaker Eng) as-built drawings for the sanitary system associated with the PennDOT work in North Atherton St. was recommended to Staff; May 11, 2021 (1178.0686).
- There are no Developer plans under review at this time.

Respectfully Submitted,

HERBERT, ROWLAND & GRUBIC, INC.

Team Leader | Water & Wastewater

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E-mail: rettew@rettew.com • Website: rettew.com

Engineers

Environmental Consultants

Surveyors

Landscape Architects

Safety Consultants

University Area Joint Authority Summation of Project Activities

June 2021

ENR/AWT Upgrade Project (094612009)

 We continue to work with the Contractor (HRI, Inc.) to resolve the remaining defective work. The Authority is currently retaining \$83,500.94 for these items.

Sludge Storage Tank Mixer (094612034)

• Final closeout document packages have been issued to 4-M Construction Services LLC (2020-01) and Stelco, Inc. (2020-05) under separate cover.

Aeration Line Improvements (094612035)

Construction is proceeding with both contractors, GM McCrossin (2020-08) and HRI (2020-09). The
pipe bridge is expected to begin the week of June 21st.

Payment Requests To Date							
			Contract Price		%	Balance of	
Contract	Application for	Current	To Date	Total Work To	Monetarily	Contract	
Number	Payment #	Payment Due	incld/CO	Date	Complete	Amount	
2020-08	1	\$47,917.63	\$511,096.00	\$57,722.28	11.29%	\$463,178.37	
2020-09	3	\$22,950.00	\$103,505.00	\$41,005.00	39.62%	\$66,600.50	
		\$70,867.63	\$614,601.00	\$98,727.28	16.06%	\$515,873.72	

- GM McCrossin (2020-08) has submitted Application for Payment No. 1 and we are recommending payment in the amount of \$47,917.63.
- HRI, Inc. (2020-09) has submitted Application for Payment No. 3 and we are recommending payment in the amount of \$22,950.00.

<u>Solar System – Phase II – Demolition and Site Prep (094612040)</u>

 Stone Valley Construction (2020-10) has completed all punchlist items and has submitted Application for Payment No. 5-Final. We are recommending payment in the amount of \$26,590.80.

Solar System – Phase II Project

 We are working with West Penn Power to obtain approval to begin operation of the second phase of the solar array. We expect the new battery to be operational by mid-July.

Payment Requests To Date						
			Contract Price		%	Balance of
Contract	Application for	Current	To Date	Total Work To	Monetarily	Contract
Number	Payment #	Payment Due	incld/CO	Date	Complete	Amount
2020-10	5-Final	\$26,590.80	\$265,908.00	\$265,908.00	100.00%	\$0.00
		\$26,590.80	\$265,908.00	\$265,908.00	100.00%	\$0.00

WWTP NPDES Permit – Phosphorus Study (094612027)

Installation of the stream monitoring instruments and data collection has begun, with continuous monitoring of Spring Creek for part of the year to determine the level of any impairment during the growing period, prior to undertaking an intensive study during the critical high-temp, low-flow period.

Ozone Disinfection for Effluent (094612023)

 RETTEW is completing final design activities and is targeting a July 2021 request for bids for the project, pending approval of the Act 537 Special Study and issuance of the Water Quality Management Permit by the DEP.

Anaerobic Digestion Project (094612026)

- The Act 537 Special Study for Biosolids is working its way through the planning agency review and public comment periods.
- The Water Quality Management Part II Permit is under review by the DEP.
- RETTEW has begun final design of the proposed improvements to biosolids handling and treatment and will begin requesting bids later this fall.

High Voltage Switchgear Replacement (094612045)

- Thoroughbred Construction Group has been installing new high voltage manholes and ductbanks in anticipation of the new switchgear. We have provided a Work Change Directive with an estimated cost of \$16,000 due to the relocation of the service to the AWT Building. The routing of this feed to the building's transformer was not as shown on the plant's record drawings and was subsequently located directly beneath the main West Penn Power feed serving the plant. Due to the hazard associated with intercepting these existing conduits to pull new wires, a new conduit routing will be placed through the parking lot, next to the AWT Building.
- Thoroughbred Construction Group (2020-11) has submitted Application for Payment No. 1 and we are recommending payment in the amount of \$150,318.00.

Payment Requests To Date						
			Contract Price		%	Balance of
Contract	Application for	Current	To Date	Total Work To	Monetarily	Contract
Number	Payment #	Payment Due	incld/CO	Date	Complete	Amount
2020-11	1	\$150,318.00	\$1,043,639.00	\$167,020.00	16.00%	\$893,321.00
		\$150,318.00	\$1,043,639.00	\$167,020.00	16.00%	\$893,321.00

Page 3 of 3 University Area Joint Authority June Board Meeting

Water Quality Instrumentation (094612033)

• We have completed the integration of several new instruments to monitor water quality throughout the Advance Water Treatment process. The instruments are now online and continuously analyzing turbidity, pH, and conductivity at key points in the treatment process.

Modifications to GD Kissinger Meadow Stream Augmentation

The Authority's pending NPDES permit for the discharge of beneficial reuse water to Slab Cabin Run requires a series of modifications in control and monitoring. The changes will require modulation of the flows to the stream via SCADA, to avoid abrupt changes in stream flow. Additionally, we anticipate essentially a non-detect chlorine limit which will require de-chlorination prior to stream discharge. We are working with staff to design, permit, and implement these modifications.

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UNIVERSITY AREA JOINT AUTHORITY

EXECUTIVE DIRECTOR'S REPORT

June 16, 2021

ACTION ITEMS

3. Public Comment

3.1 Other items not on the agenda

4. Old Business

4.1 Purchase of Vactor Sewer Cleaner

Staff proposes to purchase a 2100i Vactor Sewer Cleaner with Hydrostatic Vacuum System Truck for \$471,541.44 from A&H Equipment. The price includes a trade in value of \$45,000.00 for our existing sewer cleaner. The equipment is under the State contract, so no bids are required. UAJA has over 20 years of experience with our current sewer cleaner, as well as an inventory of parts and equipment that matches the new cleaner.

Recommendation: Purchase the sewer cleaner from A&H Equipment for \$471,541.44, including a credit of \$45,000 for the existing sewer cleaner.

5. New Business

5.1 2020 Summation of Capacity Report Presentation

Each year after the Chapter 94 Report is approved, RETTEW updates the Summation of Capacity Report. The Summation of Capacity Report provides much more detail and adds effluent hydraulic capacity and nutrient capacity to the analysis. It is an important document for both UAJA and the Centre Region Municipalities for tracking the allocation of capacity and being aware of what is the limiting factor to capacity, as well as what potential threats exist to the capacity.

A representative of RETTEW will present a summary of the report.

Recommendation: Presentation, no action required.

5.2 Residential Solar Pilot Project

UAJA continues to work through the remaining legal issues for the residential solar pilot project. It is apparent that it may take a long time, possibly a year, to resolve the issues, which may require legislative action. Therefore, staff recommends notifying all of the property owners that have expressed interest that it may be a long time before we solve the problem, and that they may want to consider more traditional financing options.

Recommendation: Instruct staff to notify property owners of the legal delay and the possible need for legislative action.

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5.3 Requisitions

BRIF #560	Rettew Phosphorus Study	\$2,521.79
BRIF #561	Rettew AWT Control Panel Upgrade	\$22,469.97
BRIF #562	Rettew Switchgear Replacement Project	\$7,032.25
BRIF #563	Rettew AWT Instrumentation	\$6,718.92
BRIF #564	Rettew Sludge Storage Tank Project	\$1,567.50
BRIF #565	HRG Entry Road Project	\$2,009.31
BRIF #566	Mayer Electric Supply Co. Conduit Project	\$1,962.41
BRIF #567	Siteone Landscape Supply Conduit Project	\$980.43
BRIF #568	Glossner's Concrete Shiloh Pump Station Upgrade	\$1,195.00
BRIF #569	Stone Valley Construction Pay App. No. 5- Solar Phase II	\$26,590.80
BRIF #570	Thoroughbred Construction Pay App. No. 1- Switchgear Project	\$150,318.00
TOTAL BRIF		\$223,366.38
Construction Fund #005	HRI Pay App. No. 3- Aeration Line Proje	\$22,950.00 ect
Construction Fund #006	G.M. McCrossin Pay App. No. 1- Aeration Line Proje	\$47,917.63
Construction Fund #007	Rettew Aeration Line Project	\$2,140.00 Page 3

Executive Direct Page 4	ctor's Report		June	16, 2021
	Construction Fund #008	Rettew Biosolids Upgrade Project		\$36,864.99
	Construction Fund #009	Rettew Ozone Disinfection Project		\$36,258.25
	TOTAL 2020 A CONSTRU	JCTION FUND		\$146,130.87
	Revenue Fund #178	Debt Service, Operation and Maintenance Expenses		\$1,000,000
	TOTAL REVENUE FUND			\$1,000,000

- 6. Reports of Officers
- 7. Other Business
- 8. Adjournment

CAPACITY SUMMATION

FOR

SPRING CREEK POLLUTION CONTROL FACILITY

UNIVERSITY AREA JOINT AUTHORITY
CENTRE COUNTY, PENNSYLVANIA

RETTEW Project No. 094612050



Prepared by RETTEW Associates, Inc. 330 Innovation Boulevard State College, PA 16803 (800) 738-8395 rettew.com

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EXECUTIVE SUMMARY

To assist the Authority, and outside agencies that may rely upon planning estimations, this report summarizes the Authority's capacity limitations at the existing Spring Creek Pollution Control Facility ("Facility"). The report reviews the four major capacity limitations at the Facility:

- Influent Hydraulic Capacity Capacity for the Facility to treat the liquid portion of the wastewater
- Effluent Hydraulic Capacity Capacity for the facility to discharge the treated water to the environment
- Organic Capacity Capacity for the Facility to remove the organic fraction of the wastewater
- Nutrient Capacity Capacity for the Facility to remove the nutrient fraction of the wastewater

The following report outlines the various capacity components, current conditions, and calculates the remaining capacity in consideration of the physical assets (tankage, equipment, etc.), but also reasonable assumptions on operations and regulatory requirements. A detailed review of the following report provides context to the numbers presented below. All figures are converted to Equivalent Dwelling Units ("EDU's") to be consistent with Authority and Regional Planning figures.

RETTEW estimates that the remaining Authority capacity for the Spring Creek Pollution Control Facility is currently limited by Effluent Hydraulic Capacity and is reflective of approximately 14,087 EDUs, which includes a safety factor for the Authority to have a greater chance of operating within its permit limits.

The future capacity is as likely to be limited by nutrient capacity, specifically, nitrogen. The Phase III Watershed Improvements Plan provided by the PA DEP and actual water quality indicators project that Pennsylvania will not meet the 2025 requirements for the Chesapeake Bay TMDL, which increases the likelihood of backstop limits being imposed by EPA that would affect the Authority's maximum discharge. Based on the 2020 loadings to the plant, the remaining capacity under this scenario is 15,921 EDU's. Since it is not possible to further improve treatment to increase this capacity, the Centre Region and Authority should begin planning for significant environmental projects to produce the future nutrient capacity needed to support the current zoning within the sewer service area.

The table below shows each of the types of capacity and the theoretical remaining capacity. The table accounts for an already allocated capacity for approved developments which have not yet connected to the sewer system. The Authority tracks the allocated capacity for College, Ferguson, Harris and Patton Townships. The Authority does not track allocated EDUs in the State College Borough sewer system. As of January 2021, there were 653 EDUs in progress.



CATEGORY	REMAINING TOTAL EDUs	REMAINING EDUS w/ RESERVED CAPACITY	REMAINING EDUS W/ 10% OPERATIONAL SAFETY FACTOR FOR WATER QUALITY PRESERVATION
Influent Hydraulic Capacity	27,257	26,605	23,944
Effluent Hydraulic Capacity	16,305	15,652	14,087
Effluent Hydraulic Capacity w/ Reduced GDK Meadow Discharge (1.50 MGD)	13.985	13,332	11,999
Organic Capacity	89,178	88,525	79,673
Total Nitrogen Capacity	28,514	27,862	25,076
Total Nitrogen Capacity at EPA Backstop Levels	18,343	17,690	15,921

INTRODUCTION

The University Area Joint Authority ("Authority") provides sanitary sewage collection, treatment, reuse and biosolids stabilization for the Centre Region, comprising the Townships of College, Ferguson, Harris and Patton, along with portions of the Borough of State College and the Pennsylvania State University. The current Authority facility, the Spring Creek Pollution Control Facility, has been operational since the late 1960's, and underwent significant upgrades in 2005 and 2019. These upgrades significantly modified the biological process and incorporated water reuse into the facility.

In 2008, the PA Department of Environmental Protection ("Department") issued annual, mass based effluent limits to the Authority that required the management of Total Nitrogen and Total Phosphorus in the facility discharge. Having effluent phosphorus limits since the 1970's, the Authority can manage the Total Phosphorus discharge and routinely sells Total Phosphorus Credits on the open market. Total Nitrogen limits however are challenging and much of the facility operations focus on managing the Total Nitrogen Mass Load.

Continued growth and regulatory tightening have created conditions where it is foreseeable that the Authority could be severely limited under the Total Nitrogen Mass Load. As such, the Authority has been proactively planning for methods and capital upgrades to increase the available nutrient capacity of the facility or increase performance for Total Nitrogen removal. Construction of these most recent improvements at the Authority's facility were completed in 2019, which added denitrification filters and



doubled the water reuse capacity. However, it should be noted that the Authority has also pursued and constructed several non-point source improvements within the watershed and looked to collaborate on nutrient best management practices that would result in offsets to the treatment facility. Some examples of this include the elimination of septic systems (Greenbriar Project), installation of solar generation at the wastewater plant (NOx reductions), and various stormwater BMPs as part of collection system improvements. There are regulatory hurdles to this approach and the Authority continues to work with the PA DEP and Environmental Protection Agency (EPA) to attempt to get a pilot program in place. The Authority prefers to invest in environmentally beneficial projects within the watershed that improve the health and resilience of the watershed, rather than just meet the Chesapeake Bay requirements through engineered improvements at the treatment facility that are complex, costly, and difficult to operate at the low levels required for discharge. The nutrient credit market provides an alternative, but pricing and availability remain volatile, reducing its effectiveness as a tool for long-term compliance and any improvements in water quality are conducted outside the region.

To assist the Authority, and outside agencies that may rely upon planning estimations, this report summarizes the Authority's capacity limitations at the existing Spring Creek Pollution Control Facility ("Facility"). The report reviews the four major capacity limitations at the Facility:

- Influent Hydraulic Capacity Capacity for the Facility to treat the liquid portion of the wastewater
- Effluent Hydraulic Capacity Capacity for the facility to produce and discharge treated water to the environment
- Organic Capacity Capacity for the Facility to remove the organic fraction of the wastewater
- Nutrient Capacity Capacity for the Facility to remove the nutrient fraction of the wastewater

Also, to aid Policy Makers and Influencers, the report also has converted the capacity figures to relevant Equivalent Dwelling Units ("EDUs") based upon the Authority's historic planning figures:

- 175 gallons per day wastewater per EDU
- 0.4 lbs of organic load (BOD₅) per day per EDU
- 25 lbs of Nitrogen per year per EDU
- 3 lbs of Phosphorus per year per EDU

COMMITTED CAPACITY

The figures presented below in the various capacity sections are representative of the current conditions at the Authority's facility. However, the Centre Region Municipalities and the Authority have made existing commitments to developers and property owners throughout the Centre Region and there are a significant number of committed but "unconnected" EDUs. These are planned community expansions, future phases of existing developments, or projects already under construction. The Authority estimates there are approximately 653 EDUs that are unconnected but have reserved capacity with the Authority. This does not include committed capacity EDU's from within the Borough of State College.



COMMENTARY ON OPERATIONAL PREDICTIONS

The treatment and reuse of wastewater is a complex, interrelated series of processes that rely upon a combination of science, engineering and operations expertise to achieve the stringent regulatory goals imposed upon the Authority by local, state and federal agencies. The capacity figures, and predictions of remaining capacity, are dependent upon these processes and operations meeting the Authority's standards and procedures. There are events (climate, precipitation, water temperature, equipment failures, etc.) that influence operational decisions and can inevitably impact water quality and capacities at the Authority's facilities.

Notably, in 2020, the impact of the COVID-19 pandemic was felt at the treatment facility due to decreased influent flows and organic loadings because of lower University student populations in the Centre Region between March and September. The "stay at home" aspect of the past year further contributed to decreased loadings as people did not travel to the Centre Region for work, restaurants were closed or reduced service, and major events within the region were canceled.

In addition, as the facility approaches its capacity limits, the treatment and operations are less forgiving, and at the low levels the Authority is required to meet for compliance, the combination of factors can be very challenging to meet consistently. Lastly, several of the newer improvements have only recently been completed and are currently undergoing system optimization. Though the initial performance data have been very promising in terms of total nitrogen discharged to the stream, the actual long-term performance of these systems (such as the Denitrification Filters) is unknown and will have a significant impact on the capacity of the Authority's facility as the plant performance is optimized.

As a planning document, these factors must be considered in evaluating the remaining capacity of the Authority's facilities. While this current capacity summation utilizes the best available information, no prudent operation should choose to operate consistently above 80% of available capacity without considering capacity improvements or expansions. The figures presented below do not contain a marginal safety factor or other modification and are representative of current operations and known regulatory environment. The summary table included in the executive summary suggests a ten percent environmental safety factor to help protect the watershed from the impact of operational events.

INFLUENT AND EFFLUENT HYDRAULIC CAPACITY

The Authority's facilities are unique in that the hydraulic capacity of the Facility varies by influent and effluent measurement. Most wastewater treatment facilities would cite the facility capacity as the amount of wastewater hydraulically or organically that can be accepted through the influent sewer system to the facility. However, in the case of the Authority and the regulatory process that culminated in the 316A Temperature Study and Beneficial Reuse Project, the Authority has separate capacity limitations for influent and effluent wastewater hydraulic flow. These are:



Influent Capacity (As Measured as Maximum Monthly Average Flow) 10.56 MGD
Effluent Capacity (As Measured as Annual 365 Day Average) 6.00 MGD

Wastewater is measured through several different mechanisms at the Authority, but all are meters that measure volume of flow. Pollutant concentrations are also measured at various locations, and, when combined with the flow measurements, result in pollutant loadings. The community and Authority utilize EDUs for evaluating growth and capacity limitations. The flow and pollutant concentrations are converted to an EDU basis to ensure commonality.

The Authority reports to the PA DEP the Influent Capacity situation through an annual regulatory document known as the Chapter 94 Report. This report summarizes influent flow measurement and organic loading at the facility over a five-year period. The Authority's most recent annual Chapter 94 Report determined a five-year average flow per EDU of 132 gpd and a Total Estimated EDU's of 36,612 for the entire Authority system for Calendar Year 2020 (the lowest number calculated in more than 10 years). The Authority utilizes a stable rate of 175 gpd per EDU as the planning figure for capacity as the annual Chapter 94 Report varies with climate and age of infrastructure. For example, the figure was over 150 gpd per EDU in 2018 (a 22% variance year of year).

Based upon the Water Quality Management Permits issued for the Facility (including the Facility Re-Rate conducted in 2014) that establishes the influent capacity and the Peak Month Flow for 2020, the Facility has the following influent hydraulic conditions:

Influent Flow (As Measured as Maximum Monthly Average Flow)	5.79 MGD
Influent Capacity (As Measured as Maximum Monthly Average Flow)	10.56 MGD
Facility Loading	54.8%
Remaining Total EDU Capacity	27,257 EDUs
Remaining EDU Capacity with Reserved Capacity Allocations	26,605 EDUs

The Authority reports to the PA DEP the Effluent Capacity situation through a monthly regulatory document known as the Discharge Monitoring Report ("DMR"). To assist the Authority in evaluation of effluent capacity, the Authority Staff provide a summation monthly to the Authority Board. Based on the March 2021 Report, the Facility has the following effluent hydraulic conditions:

Effluent Flow (As Measured as Rolling Average of Previous 12 Months)	3.15 MGD
Effluent Capacity (As Measured as Annual 365 Day Average)	6.00 MGD
Facility Loading	52.4%
Remaining Total EDU Capacity	16,305 EDUs
Remaining EDU Capacity with Reserved Capacity Allocations	15,652 EDUs



It should be noted that the Facility Effluent Capacity is interlinked to the Beneficial Reuse Process and the production and reuse of the beneficial reuse water in the Centre Region. With the ENR/AWT Capital Project completed in 2019, the Authority expanded the Beneficial Reuse System to a total capacity of 2.0 MGD (As Measured as Annual 365 Day Average). This allows for increased reuse water distribution to environmental augmentation sites such as the Gordon D. Kissinger Meadow and Constructed Wetland. This also increases operational "uptime" as the Authority installed a second Reverse Osmosis Unit which allows for cleaning and maintenance while still operating at a reduced flow of 1.0 MGD. In 2020, the Authority distributed an average of 1.55 MGD of reuse water to the system.

It must be highlighted that the May 22, 2019 NPDES Permit for the environmental augmentation sites at the Gordon D. Kissinger Meadow and Constructed Wetland contains new hydraulic limitations (reduction of 0.9 MGD to a total of 2.1 MGD) and a requirement for DEP to conduct a study to review the stream classification and resulting temperature limitations that might be imposed on beneficial reuse water. This limits the Authority's primary year-round reuse site to slightly more than the ENR/AWT Project Capacity and if the study finds a negative effect from temperature, further potential limitations could restrict or curtail reuse water use at that location. Combined, these detrimentally impact the effluent capacity of the Authority's facilities. The DEP's initial draft recommendations include the redesignation of the entire Slab Cabin Run basin to High Quality stream from the basin source to the confluence with Spring Creek. DEP anticipates the study being finalized in 2021.

There is ongoing litigation between the Pennsylvania Fish and Boat Commission and PA DEP that may result in temperature limits being imposed upon the GDK Meadow immediately upon completion of the litigation. Should this happen, the remaining EDU capacity could be affected as follows, assuming a hypothetical reduced discharge limit of 1.5 MGD, current average non-GDK (i.e. uses that are unrelated to the GDK wetland discharge) Beneficial Reuse usage of 0.259 MGD, and a projected annual usage of 0.094 MGD at the Mountainview facilities (to be connected in 2021):

Estimated Effluent Flow without GDK Discharge Reduction	3.15 MGD
Loss of Beneficial Reuse Flow at GDK with a theoretical 1.5 MGD limit	0.50 MGD
Estimated Net Beneficial Reuse Loss with GDK Limit and Mountainview	0.41 MGD
Estimated Effluent Flow after Limitations at GDK	3.55 MGD
Effluent Capacity (As Measured as Annual 365 Day Average) Facility Loading	6.00 MGD 59.2%
Remaining Total EDU Capacity	13,985 EDUs
Remaining EDU Capacity with Reserved Capacity Allocations	13,332 EDUs

The example above is solely dependent on the results of the on-going litigation. If the limit is reduced beyond 1.5 MGD, then the corresponding effluent capacity would be further reduced.





ORGANIC CAPACITY

The Authority's facilities were rerated for Organic Capacity in 2013 and took effect in 2014. Similar to the Influent Hydraulic Capacity, the Authority reports the current Organic Capacity and Loading in its Annual Chapter 94 Report. Based on the 2020 Chapter 94 Report, summarizing the calendar years of 2016 - 2020, the Facility has the following organic conditions:

Organic Loading (As Measured as Peak Monthly Average)	14,329 lbs/day
Organic Capacity (As Measured as Peak Monthly Average)	50,000 lbs/day
Facility Loading	28.7%
Remaining Total EDU Capacity	89,178 EDUs
Remaining EDU Capacity with Reserved Capacity Allocations	88,525 EDUs

The above figures illustrate that the Authority's facility is carbon deficient for Nutrient Removal and necessitates the addition of a carbon supplement to meet discharge limitations. Carbon addition has a detrimental impact to the operation of the Authority facility and the addition of higher strength organic wastewaters within the Authority customer base would have long-term benefits. Given the operational impact of carbon supplementation, the above figures should be considered approximate given the current carbon-nitrogen ratio within the Authority influent wastewater.

Additionally, the above organic loading further demonstrates the impact the COVID-19 pandemic had on the plant as the organic loading during 2020 was the lowest in 12 years. As the Centre Region's typical population returns in 2021, the remaining organic capacity is in actuality much less than that shown above.

NUTRIENT CAPACITY

Nutrient limits are unique at the Authority's Facility as they are the only pollutants that has a permanent, mass cap load that is independent of the actual facility effluent flow. As the community grows, the concentrations of nitrogen and phosphorus become more stringent as the total mass of nutrients that the Authority can discharge remains unchanged as a result of the Chesapeake Bay Tributary Strategy. All major wastewater treatment facilities in the Susquehanna River Basin struggle with this limitation, but many were significantly underloaded at the time of the regulatory change, providing decades of nutrient capacity with limited growth in the service area.

The impact of nutrient limits on the Authority Facility have been the subject of several separate reports (for example, see May 2016 "Summation of Nutrient Management Alternatives" for University Area Joint Authority prepared by RETTEW) and is a complex subject. Prior to the initiation of the ENR/AWT Upgrade Capital Project by the Authority, the impact of the nutrient loading and current operational constraints would have limited the Authority to an influent flow of approximately 7.65 MGD (reduction of 28% over



current Influent Hydraulic Capacity). However, with the completion of the construction of the improved biological process, denitrification filters, and AWT expansion for further Beneficial Reuse, the Authority anticipates having sufficient nutrient capacity to coincide with its Influent and Effluent Hydraulic constraints (See Commentary on Operational Predictions).

Operation of the Denitrification Filters began in summer 2019, with effluent total nitrogen concentrations reported in the range of 1.97 to 5.34 mg/L, with an average of 3.82 mg/L from mid-July to mid-August of that year, confirming that the improvements completed during the ENR/AWT Upgrade result in the capability to achieve 5 mg/l of Total Nitrogen concentration year-round. This capability will be further verified through on-going performance optimization of the denitrification process by UAJA Staff. Assuming a 5.0 mg/L TN concentration year-round and that 1.8 MGD of Reuse Water was distributed to the community on an annual average basis, the facility would have the following capacity for Total Nitrogen:

Total Nitrogen Capacity (As Measured as Annual Mass Loading)	164,381 lbs/yr
Maximum Effluent Flow to Spring Creek at Capacity (Annual Average)	6.00 MGD*
*Limited by NPDES Permit (See Hydraulic Capacity Section)	
Maximum Influent Flow to Facility (Based on Actual Performance)	10.78 MGD
2020 Influent Flow (As Measured as Maximum Monthly Average Flow)	5.79 MGD
Remaining Total EDU Capacity	28,514 EDUs
Remaining EDU Capacity with Reserved Capacity Allocations	27,862 EDUs

With continued development of the denitrification process, a 4.0 mg/L TN concentration year-round is achievable to result in the following capacity for Total Nitrogen:

Total Nitrogen Capacity (As Measured as Annual Mass Loading)	164,381 lbs/yr
Maximum Effluent Flow to Spring Creek at Capacity (Annual Average)	6.00 MGD*
*Limited by NPDES Permit (See Hydraulic Capacity Section)	
Maximum Influent Flow to Facility (Based on Predicted Performance)	13.5 MGD
Remaining Total EDU Capacity	44,057 EDUs
Remaining EDU Capacity with Reserved Capacity Allocations	43,405 EDUs

This level of Total Nitrogen Removal will require a significant volume of carbon supplementation to meet these requirements year-round. Based upon the historical Carbon to Nitrogen ratio needed in the Aeration Tanks and the results of the Pilot Testing of the Denitrification Filters, it is estimated that annual carbon supplementation will be approximately \$670,000 (at a prevailing price of \$2.00 per gal of glycerin equivalent). If considering current EDU volume and carbon costs versus future volumes, the approximate cost in carbon supplementation is \$11.90 per year per new EDU added to the system.



However, it should be again noted that this is dependent upon the successful optimization of the technology and the current regulatory framework of an annual average mass limitation based upon a Total Nitrogen concentration of 6.0 mg/l and a Total Phosphorus concentration of 0.8 mg/l. The PA DEP released the Chesapeake Bay Tributary Strategy Phase III Watershed Improvement Plan in April 2019, and while current indications are that no further reductions from the wastewater sector will be required by the PA DEP, this will require US EPA approval. The improvements in the ENR/AWT Upgrade Project allow the Authority to remove Total Nitrogen and Total Phosphorus down to levels that would be consistent with a further reduction in mass loading limits, however, these improvements are both operational and hydraulically sensitive. If there are further tightening of nutrient limits beyond the current levels, it will have an impact on the Authority's Nutrient Capacity and related Hydraulic and Organic Capacities.

For example, if a mass based limit was implemented that resulted in a Total Nitrogen concentration of 4.0 mg/l at Design Flow (109,588 lbs/year), the resulting remaining capacity for the Authority Facility is as follows:

Total Nitrogen Capacity (As Measured as Annual Mass Loading)	109,588 lbs/yr
Maximum Effluent Flow to Spring Creek at Capacity (Annual Average)	6.00 MGD*
*Limited by NPDES Permit (See Hydraulic Capacity Section)	
Maximum Influent Flow to Facility (Based on Predicted Performance)	9.00 MGD
2020 Influent Flow (As Measured as Maximum Monthly Average Flow)	5.79 MGD
Remaining Total EDU Capacity	18,343 EDUs
Remaining EDU Capacity with Reserved Capacity Allocations	17,690 EDUs



CONCLUSIONS

The summation of the various capacities and remaining EDUs of the University Area Joint Authority Spring Creek Pollution Control Facility are as follows:

CATEGORY	REMAINING TOTAL EDUs	REMAINING EDUS w/ RESERVED CAPACITY	REMAINING EDUS W/ 10% OPERATIONAL SAFETY FACTOR FOR WATER QUALITY PRESERVATION
Influent Hydraulic Capacity	27,257	26,605	23,944
Effluent Hydraulic Capacity	16,305	15,652	14,087
Effluent Hydraulic Capacity w/ Reduced GDK Meadow Discharge	13,985	13,332	11,999
Organic Capacity	89,178	88,525	79,673
Total Nitrogen Capacity	28,514	27,862	25,076
Total Nitrogen Capacity at EPA Backstop Levels	18,343	17,690	15,921

¹The Authority adjusts Carbon Supplementation to meet the limits required. Remaining EDU capacity is based on estimated year-round full utilization of various processes to optimize the lowest value of Total Nitrogen.

RETTEW estimates that the remaining Authority capacity for the Spring Creek Pollution Control Facility is currently limited by Effluent Capacity and is reflective of approximately 14,087 EDUs. This is a direct correlation of usage of Beneficial Reuse water for Customers and Environmental Enhancement and the expanded capacity of the Advanced Water Treatment Process. If the regulatory litigation at the GDK Wetland and Meadow reduces the available environmental reuse capacity of the site, the overall capacity of the Authority system will also be correspondingly reduced.

Aside from Effluent Capacity, Nutrient Capacity (specifically Nitrogen) remains the long-term challenge. The Authority currently has more capacity in Nutrient Load than Effluent Hydraulic Capacity, however, solutions remain to expand Effluent Hydraulic Capacity easily. If the PA Chesapeake Bay requirements are not met and EPA backstop nutrient limits are imposed, capacity will be limited by nitrogen, resulting in the effective remaining capacity of 15,921 EDUs. Pennsylvania's continued non-compliance with the TMDL increases the likelihood of the implementation of the backstops and limitation on the Authority's nutrient capacity.

To add additional nutrient capacity, either credits must be purchased annually, or watershed projects which produce nutrient credits must be constructed and managed, with the resulting credits transferred



to Authority. There are regulatory hurdles to this approach and the Authority continues to work with the PA DEP to attempt to get a pilot program in place. The Authority prefers to invest in Spring Creek watershed projects that produce nutrient credits as opposed to purchasing credits from the market that have no benefit to the Spring Creek Watershed.

It should be noted that the Influent, Effluent, and Organic Capacity are figures that can be altered through capital upgrades to the facility, including a third expansion to Beneficial Reuse Project to produce 3.0 MGD of Reuse Water. The Total Nitrogen Capacity is more limited, with the Authority approaching the limit of current technology through the ENR/AWT Project. As noted earlier, the long-term performance of this system, is undergoing optimization, and assuming successful removal levels consistent with those in this report, these capacity estimates represent long-term limitations to the capacity of the facility that are not easily altered under current regulatory limits or through further capital upgrades.

Lastly, as this has become a continuing document for the Authority to provide policy makers and stakeholders with guidance for remaining capacity at the Spring Creek Pollution Control Facility. Weather, precipitation, new developments, and operational changes can impact these figures and RETTEW has provided a summation table that summarizes the remaining EDU Capacity by Category and Year to illustrate the changing conditions within the region. This also provides a levelized analysis with the ability to trend these changes in future years.

CATEGORY	REMAINING EDU CAPACITY w/ 10% OPERATIONAL SAFETY FACTOR FOR WATER QUALITY PRESERVATION			
	2018	2019	2020	2018 - 2020 Average
Influent Hydraulic Capacity	12,983	16,111	23,944	17,679
Effluent Hydraulic Capacity	7,223	13,877	14,087	11,729
Organic Capacity	73,779	68,030	79,673	73,827
Total Nitrogen Capacity	14,114	17,242	25,076	18,811
Total Nitrogen Capacity at EPA Backstop Levels	4,960	8,088	15,921	9,656

Appendix A Excerpt from Authority 2020 Chapter 94 Report

UNIVERSITY AREA JOINT AUTHORITY

CENTRE COUNTY, PENNSYLVANIA

2020 ANNUAL CHAPTER 94 WASTELOAD MANAGEMENT REPORT

Submitted by:

Cory R. Miller Executive Director

Prepared by:

Jason D. Brown Assistant Executive Director

Jason W. Brown

Exhibit A



PADEP Chapter 94 Spreads Sewage Treatment Pl

Reporting Year:

2020

Facility Name:

University Area Joint Authority

Permit No.:

Max: Avg Ratio

Existing EDUs

Load/EDU

Load/Capita

Exist. Overload?

1.12

43,472

0.322

0.092

NO

PA0026239

Persons/EDU:

lbs BOD5/day

3.5

Existing Hydraulic Design Capacity: Upgrade Planned in Next 5 Years? Future Hydraulic Design Capacity:

10.62 YES

MGD 2020 Year:

Existing Organic Design Capacity: Upgrade Planned in Next 5 Years? Future Organic Design Capacity:

50,000 YES 50,000 lbs BOD5/day Year:

2020

1.22

33,612

0.350

0.100

NO

MGD

Monthly Average Flows for Fast Five Tears (MGD)								
Month	2016	2017	2018	2019	2020			
January	5.55	4.99	5.07	7.08	5.03			
February	6.36	5.33	6.71	7.27	5.79			
March	5.44	5.08	5.72	6.72	5.17			
April	5.6	5.72	6.24	6.67	5.02			
May	4.78	5.46	5.51	6.22	4.88			
June	4.06	4.8	5.26	5.58	4.69			
July	3.87	4.49	5.41	4.94	4.27			
August	4.49	4.44	6.95	4.85	4.39			
September	5.11	4.91	7.84	5.6	5.15			
October	5.17	4.97	6.57	5.5	5.01			
November	4.53	4.98	6.61	4.91	4.62			
December	4.5	4.08	6.35	5.04	5.23			
Annual Avg	4.96	4.94	6.19	5.87	4.94			
lax 3-Mo Avo	5.8	5.42	7 12	7.02	5 33			

December	4.5	4.00	0.33	5.04	5.25
Annual Avg	4.96	4.94	6.19	5.87	4.94
Max 3-Mo Avg	5.8	5.42	7.12	7.02	5.33
Max : Avg Ratio	1.17	1.10	1.15	1.20	1.08
Existing EDUs	43,472.0	45,441.0	40,058.0	42,822.0	33,612.0
Flow/EDU (GPD)	114.1	108.7	154.5	137.1	147.0
Flow/Capita (GPD)	32.6	31.1	44.2	39.2	42.0
Exist. Overload?	NO	NO	NO	NO	NO

Monthly Average BOD5 Loads for Past Five Years (lbs/da								
Month	2016	2017	2018	2019	2020			
January	14,367	17,150	13,148	17,925	11,703			
February	15,145	14,427	14,922	19,067	13,795			
March	15,406	12,771	13,578	18,131	11,825			
April	15,628	13,766	16,094	19,405	10,070			
May	13,858	13,004	13,837	14,644	9,829			
June	13,078	12,461	12,599	16,639	10,540			
July	12,014	11,622	12,979	13,464	10,525			
August	11,673	11,645	14,257	13,988	12,475			
September	14,415	13,897	16,762	15,860	14,329			
October	14,769	15,675	16,036	17,816	12,293			
November	14,285	14,562	16,186	15,807	10,938			
December	13,318	12,187	15,458	12,107	12,830			
Annual Avg	13,996	13,597	14,655	16,238	11,763			
Max Mo Avg	15,628	17,150	16,762	19,405	14,329			

	,	Projected Flov	us for Novt Ein	o Voors (MGF	11	
	2021	2022	2023	2024	2025	
New EDUs	220.0	220.0	220.0	220.0	220.0	
New EDU Flow	0.0291	0.0291	0.0291	0.0291	0.0291	
Proj. Annual Avg	5.41	5.4391	5.4682	5.4973	5.5264	
Proj. Max 3-Mo Avg	6.16	6.19	6.22	6.26	6.29	

NO

	Projected BOD5 Loads for Next Five Years (Ibs/day)										
	2021	2021 2022 2023 2024 2025									
New EDUs	220	220	220	220	220						
New EDU Load	75.512	75.512	75.512	75.512	75.512						
Proj. Annual Avg	14,125	14,201	14,276	14,352	14,427						
Proj. Max Avg	16,766	16,856	16,946	17,035	17,125						
Proj. Overload?	NO	NO	NO	NO	NO						

1.26

45,441

0.299

0.085

NO

1.14

40,058

0.366

0.105

NO

1.20

42,822

0.379

0.108

NO

Show Precipitation Data on Hydraulic Graph?

NO

Proj. Overload?

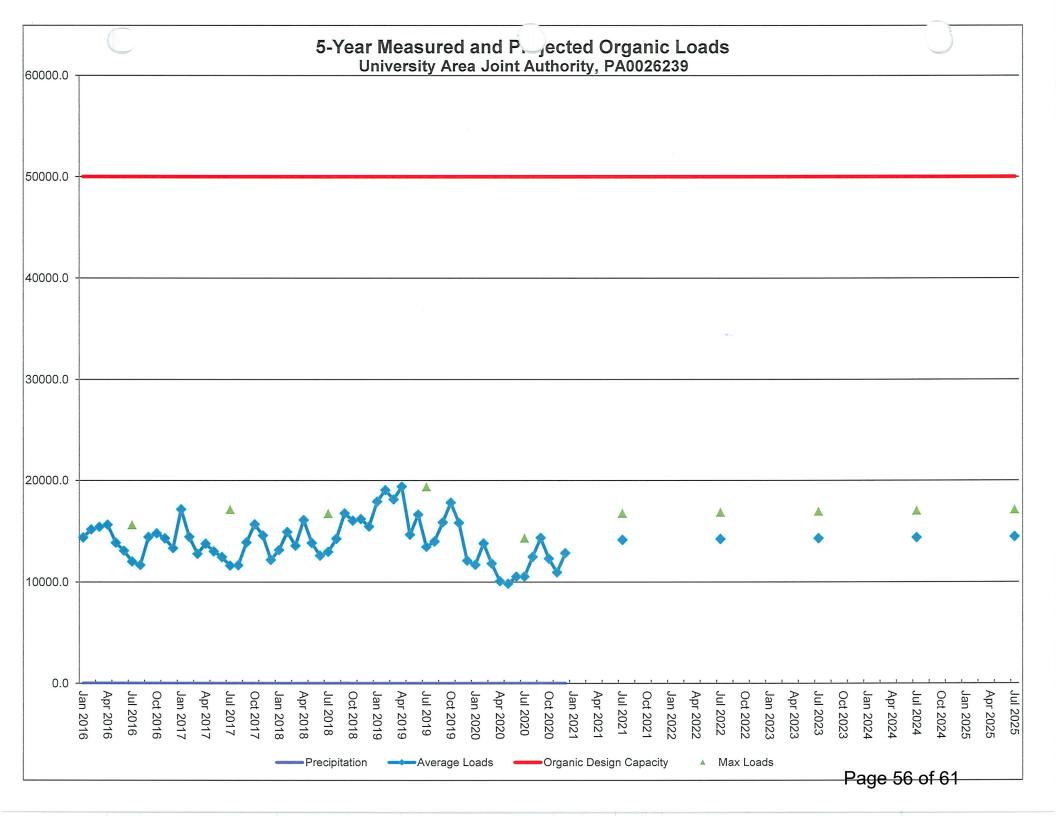
Total Monthly Precipitation for Past Five Years (Inches)

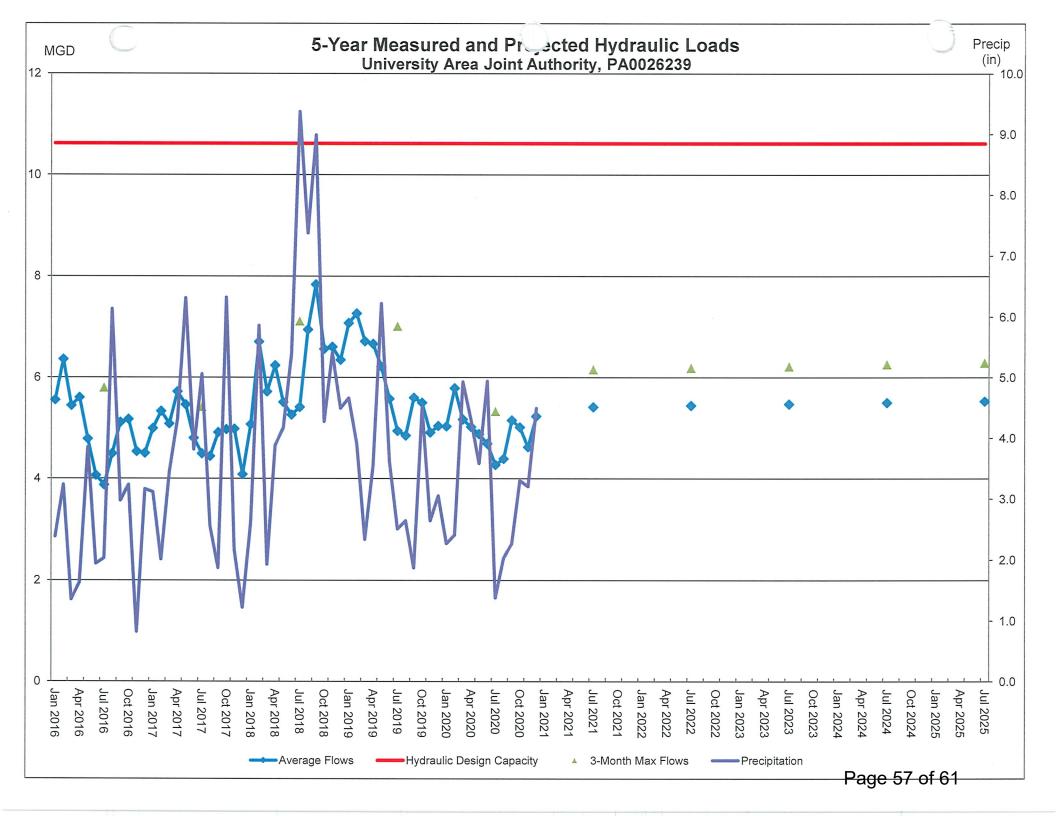
NO

NO

NO

Month	2016	2017	2018	2019	2020					
January	2.38	3.11	2.61	4.66	2.27					
February	3.23	2.01	5.86	3.91	2.41					
March	1.35	3.44	1.93	2.34	4.93					
April	1.63	4.31	3.88	3.55	4.3					
May	3.85	6.31	4.17	6.22	3.58					
June	1.94	3.81	5.4	3.61	4.94					
July	2.03	5.06	9.37	2.51	1.38					
August	6.13	2.56	7.37	2.64	2.03					
September	2.97	1.87	8.99	1.87	2.27					
October	3.23	6.32	4.27	4.5	3.3					
November	0.82	2.17	5.41	2.64	3.2					
December	3.16	1.22	4.49	3.05	4.49					





e describer e confesti men me empete statte e conf	Monthly Total Precipitation for STATE COLLEGE, PA												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2016	2.38	3.23	1.35	1.63	3.85	1.94	2.03	6.13	2.97	3.23	0.82	3.16	32.72
2017	3.11	2,01	3,44	4.31	6.31	3.81	5,06	2.56	1.87	6.32	2.17	1.22	42.19
2018	2.61	5.86	1.93	3.88	4.17	5.40	9.37	7.37	8.99	4.27	5.41	4.49	63.75
2019	4.66	3.91	2,34	3.55	6.22	3.61	2.51	2.64	1.87	4.50	2.64	3.05	41.50
2020	2.27	2.41	4.93	4.30	3.58	4.94	1.38	2.03	2.27	3.30	3.20	4.49	39.10
2021	1.40	М	М	М	М	М	М	М	М	М	М	М	М
Mean	2.74	3.48	2.80	3.53	4.83	3.94	4.07	4.15	3.59	4.32	2.85	3.28	43.85
Max	4.66 2019	5.86 2018	4.93 2020	4.31 2017	6.31 2017	5.40 2018	9.37 2018	7.37 2018	8.99 2018	6.32 2017	5.41 2018	4.49 2018	63.75 2018
Min	1.40 2021	2.01 2017	1.35 2016	1,63 2016	3.58 2020	1.94 2016	1.38 2020	2.03 2020	1.87 2019	3.23 2016	0.82 2016	1.22 2017	32.72 2016

Exhibit B



PADEP Chapter 94 Spreads Sewage Treatment Pl

Reporting Year:

2020

Facility Name:

University Area Joint Authority

Permit No.:

Load/EDU

Load/Capita

Exist. Overload?

0.322

0.092

NO

PA0026239

Persons/EDU:

3.5

Existing Hydraulic Design Capacity: Upgrade Planned in Next 5 Years? Future Hydraulic Design Capacity: 10.62 YES MGD
Year: 2020
MGD

Existing Organic Design Capacity: Upgrade Planned in Next 5 Years? Future Organic Design Capacity: 50,000 YES 50,000 Ibs BOD5/day
Year: 2020
Ibs BOD5/day

Monthly Average Flows for Past Five Years (MGD)

Monthly Average Flows for Past Five Years (MGD)								
Month	2016	2017	2018	2019	2020			
January	5.55	4.99	5.07	7.08	5.03			
February	6.36	5.33	6.71	7.27	5.79			
March	5.44	5.08	5.72	6.72	5.17			
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May	4.78	5.46	5.51	6.22	4.88			
June	4.06	4.8	5.26	5.58	4.69			
July	3.87	4.49	5.41	4.94	4.27			
August	4.49	4.44	6.95	4.85	4.39			
September	5.11	4.91	7.84	5.6	5.15			
October	5.17	4.97	6.57	5.5	5.01			
November	4.53	4.98	6.61	4.91	4.62			
December	4.5	4.08	6.35	5.04	5.23			

Annual Avg	4.96	4.94	6.19	5.87	4.94
Max 3-Mo Avg	5.8	5.42	7.12	7.02	5.33
Max : Avg Ratio	1.17	1.10	1.15	1.20	1.08
Existing EDUs	43,472.0	45,441.0	40,058.0	42,822.0	33,612.0
Flow/EDU (GPD)	114.1	108.7	154.5	137.1	147.0
Flow/Capita (GPD)	32.6	31.1	44.2	39.2	42.0
Exist. Overload?	NO	NO	NO	NO	NO

Projected	Flows	for	Next	Five	Years	(MGD)

	-				
	2021	2022	2023	2024	2025
New EDUs	220.0	220.0	220.0	220.0	220.0
New EDU Flow	0.0291	0.0291	0.0291	0.0291	0.0291
Proj. Annual Avg	5.41	5.4391	5.4682	5.4973	5.5264
Proj. Max 3-Mo Avg	6.16	6.19	6.22	6.26	6.29
Proj. Overload?	NO	NO	NO	NO	NO

Show Precipitation Da	ta on F	lydraulic (Graph?
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Total Monthly Precipitation for Past Five Years (Inches)

Month	2016	2017	2018	2019	2020	
January	2.38	3.11	2.61	4.66	2.27	
February	3.23	2.01	5.86	3.91	2.41	
March	1.35	3.44	1.93	2.34	4.93	
April	1.63	4.31	3.88	3.55	4.3	
May	3.85	6.31	4.17	6.22	3.58	
June	1.94	3.81	5.4	3.61	4.94	
July	2.03	5.06	9.37	2.51	1.38	
August	6.13	2.56	7.37	2.64	2.03	
September	2.97	1.87	8.99	1.87	2.27	
October	3.23	6.32	4.27	4.5	3.3	
November	0.82	2.17	5.41	2.64	3.2	
December	3.16	1.22	4.49	3.05	4.49	

Monthly Avera	age BOD5 Lo	oads for Past	Five Years	(lbs/day)
---------------	-------------	---------------	------------	-----------

Month	2016	2017	2018	2019	2020
January	14,367	17,150	13,148	17,925	11,703
February	15,145	14,427	14,922	19,067	13,795
March	15,406	12,771	13,578	18,131	11,825
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Max Mo Avg	15,628	17,150	16,762	19,405	14,329
Max : Avg Ratio	1.12	1.26	1.14	1.20	1.22
Existing EDUs	43,472	45,441	40,058	42,822	33,612

	Projected BOD5 Loads for Next Five Years (lbs/day)					
	2021	2022	2023	2024	2025	
New EDUs	220	220	220	220	220	
New EDU Load	75.512	75.512	75.512	75.512	75.512	
D	11105	44004	44.070	44050	44.407	

0.366

0.105

NO

0.379

0.108

NO

0.350

0.100

NO

Proj. Annual Avg 14,276 14,352 14,427 Proj. Max Avg 16,766 16,856 16,946 17,035 17,125 Proj. Overload? NO NO NO NO NO

0.299

0.085

NO

