UNIVERSITY AREA JOINT AUTHORITY

AGENDA
Regular Meeting - 4:00 pm – May 20, 2026

1. **Call to Order**

2. **Approval of the Minutes:** Regular Meeting- April 15, 2026 *(Page 2)*

3. **Public Comment**
   - **3.1** Other items not on the agenda

4. **Old Business**
   - **4.1** 2025 Audit *(Page 40, addt'l 44)*
   - **4.2** UAJA Mission Statement *(Page 40, addt'l 105)*

5. **New Business**
   - **5.1** Organics Processing Contract New Freedom Resources, LLC *(Page 41, addt'l 153)*
   - **5.2** Requisitions *(Page 41)*

6. **Reports of Officers**
   - **6.1** Financial Report *(Page 31, YTD 15)*
   - **6.2** Chairman's Report
   - **6.3** Plant Superintendent's Report *(Page 32)*
   - **6.4** Collection Systems Superintendent's Report *(Page 33)*
   - **6.5** Consulting Engineer's Report *(Page 34)*
   - **6.6** Construction Engineer's Report *(Page 36)*
   - **6.7** Executive Directors Report *(Page 39)*

7. **Other Business**

   Executive Session – legal discussions.

8. **Adjournment**

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

Regular Meeting – April 15, 2026

1. Call to Order

Mr. Lapinski, Chairman, called the regular meeting to order at 4:00 p.m., Wednesday, April 15, 2026. The meeting was held in the Board Room in the office of the Authority with the following in attendance in person: Messrs. Lapinski, Auman, Glebe, Kunkle, Marshall, Derr, Guss, Nucciarone and Ulbrecht; Cory Miller, Executive Director; Jason Brown, Assistant Executive Director; Sierra Weight, Administrative Assistant; Daren Brown, Collection System Superintendent; Andy Breon, Plant Superintendent; Holly Martinchek, Assistant Plant Superintendent; Michele Aukerman, Rettew; Jason Wert, Rettew; C-NET; Ben Burns, HRG; Steve Morra, Quandel; Justin Bickel, Quandel; David Gaines, Solicitor; Emma Cherubini, Penn State; Jacob Godshall, Penn State. The following were in attendance via Zoom: Messrs. Daubert; Olivia Lopatofsky, State College Borough Engineer; Michael G, Centre Region Planning Agency.

2. Approval of the Minutes

UAJA Regular Meeting – March 18, 2026

UAJA Meeting Minutes Approved	A motion was made by Mr. Nucciarone, second by Mr. Guss, to approve the meeting minutes of the UAJA regular meeting held on March 18, 2026. The motion passed unanimously.

3. Public Comment

3.1 Other items not on the agenda

None.

4. Old Business

4.1 UAJA Mission Statement

It has been more than 20 years since the UAJA Board discussed the UAJA mission statement. There are no board members on the board that were here when the mission statement was proposed by staff. The mission statement:

"UAJA – Improving the environment, economy and quality of life of the Centre Region, now and in the future."

It is fairly obvious that UAJA, or any sewer authority, should be concerned about the environment. Staff did not see UAJA's role limited to just meeting regulatory requirements. UAJA is different – we strive to improve, not just protect. We go beyond what is required.

There needs to be limits on how UAJA improves the environment. That is where economy and quality of life come into play. UAJA needs to improve the environment while also improving the economy and the quality of life. Without those two conditions, environmental spending is unconstrained.

UAJA needs to do these things in a sustainable way. UAJA is not just improving now and placing the burden of improvement on future customers. UAJA's culture needs to always be looking to the future, creating an engine of continuous improvement that works now and in the future.

Staff believes this mission statement still describes what UAJA does. It is important for the staff and the board to share the same mission.

The board was never asked to adopt the mission. At the time, it was a discussion between staff and the board. UAJA has been living this mission for more than 25 years.

Recommendation: Adopt the UAJA Mission Statement as presented by staff.

UAJA Mission Statement as Presented	A motion was made by Mr. Nucciarone, second by Mr. Guss, to adopt the UAJA Mission Statement as presented in the Executive Director's Report. No action was taken.
Alternate UAJA Mission Statement Approved	A motion was made by Mr. Ulbrecht, second by Mr. Derr, to adopt an alternate UAJA Mission Statement as modified by Mr. Ulbrecht: Providing high quality wastewater and other resource recovery services that improve the environment, economy, and quality of life of the Centre Region, now and in the future. The motion passed unanimously.

4.2 Contract 2026-01 Mountain Tank Rehabilitation

Bids were received February 13, 2026. A total of four bids were received:

Worldwide Industries Corp.
470 Mitchell Hill Road
Butler, PA 16002
$ 363,875.00

Minoan Industrial LLC
3151 Cape Hord Rd #2100
Red Lion, PA 17356
$ 469,100.00

Brace Industrial Paint LLC
177 Elmwood Ave
Long Branch, NJ 07740
$ 645,000.00

Ridgeline Industries
406 E State Ave
Terra Alta, WV 26764
$ 978,837.00

The low bid is for $363,875.00 from Worldwide Industries Corp. The bid has been reviewed, references checked and all insurance and bonds have been provided.

Recommendation: Award Contract 2026-01 to Worldwide Industries Corp. in the amount of $363,875.00.

Contract 2026-01 to Worldwide Industries Corp. Approved	A motion was made by Mr. Ulbrecht, second by Mr. Marshall, to award Contract 2026-01 in the amount of $363,875.00 to Worldwide Industries Corp. The motion passed unanimously.

5. New Business

5.1 Consent Assessment of Civil Penalty

Included in the agenda report is a Consent Assessment of Civil Penalty issued by the Pennsylvania Department of Environmental Protection. This is a routine assessment of penalty to close out the list of self-reported minor permit violations that have occurred from 2021 through 2025. The violations were minor, and did not harm Spring Creek or the environment.

UAJA has one of the most challenging permits in the State because of the fact that UAJA discharges to Spring Creek, which is a high-quality, cold-water fishery. UAJA is a leader in adopting new technologies to continuously improve the environment. Adopting new technologies is not without risk. Often during construction and start up, unforeseen conditions are encountered. Many of the minor violations are attributable to those actions.

UAJA is relentless about reporting any accidental spill from a sewer line, no matter how small. UAJA staff contains the spills rapidly, and in almost all cases, the spill never reaches a stream. They are still documented and reported.

Sometimes laboratory errors occur. UAJA documents the errors and reports them. Sometimes laboratory equipment fails, and there is no time to resample and report within the time allowable in the permit. Everything is documented and reported.

The public has access to all of these self-reported occurrences through the DEP website. To move the occurrences from pending to closed, they must be included in a Consent Assessment of Civil Penalty.

The total amount of the penalty is $16,456.00.

Recommendation: Authorize the Executive Director and UAJA Attorney to execute the document as presented.

Consent Assessment of Civil Penalty Approved	A motion was made by Mr. Ulbrecht, second by Mr. Nucciarone, to approve the authorization of the Executive Director and the UAJA Attorney to execute the Consent Assessment of Civil Penalty document as presented. The motion passed unanimously.

5.2 Change Order No. 12 Contract 2022-04 Hayden Power Group

This change order is to add an additional 480-volt panel board to the thickening building. With additions that have been made through the project, more capacity was needed at this location. The amount is an increase of $23,179.75 and no additional days.

Recommendation: Approve Change order No. 12 Contract 2022-04 for an increase of $23,179.75.

Change Order No. 12 Contract 2022-04 Approved	A motion was made by Mr. Marshall, second by Mr. Auman, to approve Change Order No. 12 for Contract 2022-04 in the amount of $23,179.75. The motion passed unanimously.

5.3 Change Order No. 14 Contract 2022-01Quandel Construction Group

This change order is for a collection of items as noted in the Change order request included in the agenda report. Several items are to improve safety. The net amount is an increase of $31,512.00 and no additional days.

Recommendation: Approve Change Order No. 14 Contract 2022-01 for a net increase of $31,512.00.

Change Order No. 14 Contract 2022-01 Approved	A motion was made by Mr. Marshall, second by Mr. Nucciarone, to approve Change Order No. 14 Contract 2022-01 for a net increase of $31,512.00 and no additional days. The motion passed unanimously.

5.4 Final Design: Crew 814

Final design drawings for the Crew 814 sewer extension (College Township) have been received and reviewed by staff and our consulting engineer. The sewer extension will serve 709 EDUs. The review comments have been addressed.

Recommendation: Approve the drawings as submitted.

Final Design: Crew 814 Approved	A motion was made by Mr. Nucciarone, second by Mr. Derr, to approve the final design drawings for Crew 814 sewer extension in College Township. The motion passed unanimously.

5.5 2025 Audit Subcommittee

The 2025 audit field work is coming to a close. As in past years, staff would like an audit subcommittee to review the draft audit with our auditors (Maher Duessel) and staff in early May. The 2025 audit will be presented for approval at the May board meeting.

Recommendation: Appoint a subcommittee and establish a firm date for meeting with Maher Duessel and staff.

Appointment of Audit Subcommittee	Jeff Nucciarone, Peter Marshall and Jan Ulbrecht were appointed to the 2025 audit subcommittee. The subcommittee will plan to meet in early May. No motions were made.

5.6 Requisitions

BRIF #1069	East End Sales Tandem Axle Box Trailer	$9,122.26
BRIF #1070	HRG Reuse Water Storage Tank Project	$3,219.00
BRIF #1071	L/B Water 2nd Street Project (Misc. Supplies)	$12,051.95
BRIF #1072	Heidelberg Materials 2nd Street Project (Stone)	$6,069.11

BRIF #1073	Robinson Septic Service 2nd Street Project	$150.00
TOTAL BRIF-		**$30,612.32**

BRIF Fund Approved

A motion was made by Mr. Kunkle, second by Mr. Daubert, to approve BRIF Fund #1069, #1070, #1071, #1072 and #1073 in the amount of $30,612.32. The motion passed unanimously.

Construction Fund #071	Rettew Sludge Drying Project- Engineering	$82,197.90
Construction Fund #072	Nature's Cover Sludge Drying Project- Fiber Optic Lines	$148.00
Construction Fund #073	Grainger Sludge Drying Project- Start Up Supplies	$3,342.14
Construction Fund #074	Sunbelt Rentals Sludge Drying Project- Fiber Optic Lines	$702.25
Construction Fund #075	Rothrock Equipment Rental Sludge Drying Project- Fiber Optic Lines	$534.38
Construction Fund #076	ULINE Sludge Drying Project- Start Up Supplies	$18,492.45
Construction Fund #077	Hite Company Sludge Drying Project- Fiber Optic Lines	$582.71
Construction Fund #078	Schaedler Yesco Sludge Drying Project- Fiber Optic Lines	$2,242.39
Construction Fund #079	Heidelberg Materials Sludge Drying Project- Fiber Optic Lines	$3,283.38
Construction Fund #080	Siteone Landscape Sludge Drying Project- Fiber Optic Lines	$170.42
Construction Fund #081	Construction Tool Service Sludge Drying Project- Fiber Optic Lines	$166.16
Construction Fund #082	Keystone Engineering Sludge Drying Project- SCADA/Network	$118,053.38
Construction Fund #083	WG Malden Sludge Drying Project- Headworks Calibration	$1,000.00
Construction Fund #084	Morefield	$3,595.14

	Sludge Drying Project- SCADA Upgrade	
Construction Fund #085	Irvin Farms Sludge Drying Project- Fiber Optic Lines	$120.00
Construction Fund #086	Quandel Construction Group Pay App. #28- Sludge Drying Project-General	$2,711,054.55
Construction Fund #087	Myco Mechanical Pay App. #18- Sludge Drying Project-Plumbing	$22,591.00
Construction Fund #088	Myco Mechanical Pay App. #23- Sludge Drying Project-HVAC	$3,933.28
Construction Fund #089	Hayden Power Group Pay App. #24- Sludge Drying Project-Electrical	$521,058.65
TOTAL 2025 CONSTRUCTION FUND (Biosolids)-		**$3,493,268.18**

Construction Fund Approved	A motion was made by Mr. Guss, second by Mr. Derr, to approve Construction Fund #071, #072, #073, #074, #075, #076, #077, #078, #079, #080, #081, #082, #083, #084, #085, #086, #087, #088 and #089 in the amount of $3,493,268.18. The motion passed unanimously.

Revenue Fund #227	Debt Service, Operation and Maintenance Expenses	$1,250,000.00
TOTAL REVENUE FUND-		**$1,250,000.00**

Revenue Fund Approved	A motion was made by Mr. Ulbrecht, second by Mr. Nucciarone, to approve Revenue Fund #227 in the amount of $1,250,000.00. The motion passed unanimously.

6. Reports to Officers

6.1 Financial Report

The different cost centers of the YTD budget report for the period ending March 31, 2026, were reviewed with the Board by Jason Brown.

6.2 Chairman's Report

Mr. Lapinski addressed the need for an executive session to be held at the end of May's board meeting.

6.3 Plant Superintendent's Report

Septage Operations Report

The following comments are as presented to the Board in the written report prepared by Andy Breon,

Plant Superintendent.

SEPTAGE OPERATIONS

LBS/SOLIDS

	October 2025	November 2025	December 2025	January 2026	February 2026	March 2026
PORT MATILDA	2469	2339	1009	734	963	3002
HUSTON TOWNSHIP	434	584	267	600	534	583
EAGLE CREEK MOBILE PARK	0	0	0	0	0	0

TOTAL GALLONS

	October 2025	November 2025	December 2025	January 2026	February 2026	March 2026
RESIDENTIAL/COMMERCIAL	37,345	20,075	10,195	5,450	1,200	8,075
EAGLE CREEK MOBILE HOME	0	0	0	0	0	0
PORT MATILDA	10,500	11,000	5,500	5,500	5,500	18,500
HUSTON TOWNSHIP	6,000	8,000	8,000	6,000	8,000	8,000
MILLHEIM BOROUGH	0	0	0	0	79,600	731,748
TOTAL GALLONS	53,845	39,075	23,695	16,950	94,300	766,323

PLANT OPERATIONS:

- Total Monthly Influent Flow: 185.12 MG
- Monthly Average Influent Flow: 5.97 MGD
- Highest Daily Influent Flow (3/23): 7.85 MGD
- Lowest Daily Influent Flow (3/10): 4.52 MGD
- 12-Month Rolling Effluent Average: 3.10 MGD
- Current Year Effluent Average: 3.77 MGD

On-line Treatment Units:

4- Primary Clarifiers
2- Aeration Basins
4- Secondary Clarifiers
8- De-nitrification Filters

Reuse Water Distribution Data

	March	Year to date gallons
Best Western Hotel	3,300	50,300
Centre Hills Country Club	0	0
Stewart Drive Hydrant	0	0
Collections Maintenance Garage	3,000	5,000

CINTAS	660,219	1,824,765
Red Line Car Wash	485,000	1,677,000
Centre Concrete	0	360,000
Plant Site Wetlands	5,614,000	17,001,000
Plant Ozone Heat Exchanger	3,150,770	9,605,692
Plant Usage	28,000	105,000
GDK Park Vault	20,359,000	67,721,000
Mountain View Country Club	9,000	9,000
Total Gallons	30,312,289	98,358,757
Plant effluent temperature monthly average	57.1°	
Wetland temperature monthly average	53.1º	

Plant Maintenance

- Replaced the Cl2 mixing pump at AWT.
- Replaced valves on Primary Tanks #1, #2, #3, and #4.
- Replaced the VFD for RO Feed Pump #3.
- Replaced the modulating actuators on Ozone Injector Skids #1 and #2.
- Replaced the diaphragm in Primary Pumps #9 and #10.

6.4 Collection Systems Superintendent's Report

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

Mainline Maintenance:

Mainline Cleaning – 34,615 ft cleaned/cut with root cutter.
Mainline televising – 0 ft televised – 56 manholes inspected.
Started the 2nd Avenue Project on 3/30
Installed fence at Persia lift station
Locating cleanouts for GIS

Lift Station Maintenance:

Cleaned (10) wet wells.
Replaced E-One grinder pump at 101 Ramsey Way (Huntridge Manor)
Replaced E-One grinder pump at 643 Rosslyn Rd (Huntridge Manor)

Next Month Projects:

Main line replacement on 2nd Ave. project
GIS for mapping
New Lateral installation at Ross St (Pine Grove Mills)
New lateral installation at 3759 S. Atherton St.

Inspection:

335 Innovation Park (90% complete)
Shiloh Commercial Park (held pre-construction meeting)
Patton Crossings (Cava Restaurant) waiting on final as-builts
Blaise Alexander Hyundai (10% complete)
Blue Spring Enclave (held pre-construction meeting)
Grayspoint 7B (held pre-construction meeting)

Mainline Construction:

a. Summit Park (waiting on pre-construction meeting)

New Connections:

a. Single-Family Residential	3	c. Commercial	1
b. Multi-Family Residential	0	d. Non-Residential	0

TOTAL 4

PA One-Calls Responded March 1 thru March 31, 2026: 553

6.5 Consulting Engineer's Report

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

Retainer Services (001178.0693)

- HRG prepared the pump station capacity tables and the sewer extension map for the Chapter 94 Report.

Puddintown Interceptor Act 537 Special Study (P001178.0725

- The CRPA submitted compiled comments from various stakeholders consisting of local organizations, municipalities and agencies.
- Comment responses have been drafted, and input is being obtained from the Authority Staff and the Auhtority's Solicitor.
- The special study has been updated to account for the proposed Greystar Development and sewer segment capacities based on a third-party survey.

West Patton (Meeks Lane) Pump Station Basis of Design (R001178.0730)

- HRG is working with Developer (S&A Homes) to design the proposed pump station and force main.
- The special study will now be discussed at the COG General Forum meeting on April 27, 2026.

Reclaimed Water Storage Tanks Rehabilitation (R001178.0742)

- It is recommended that the contract be awarded to Worldwide Industries Corp. ($363,875.00)

Oakwood Trunk Sewer Relocation and Upgrade (R001178.0749)

- Design drawings were updated to address comments from PSU.
- The Component 3 Sewage Facilities Planning Module has been prepared and was submitted to College Township. A notice was published on March 29, 2026, commencing the 30-day public comment

period.

- The Component 3 will be presented at the May 7th meeting of College Township.

Developer Plan Reviews:

- Crew 814 Phase 1, Design (R001178.752): Revised design drawings were submitted and have been recommended for approval.

6.6 Construction Engineer's Report

WWTP NPDES Permit – Phosphorus Study (094612027)

- We are working with a firm to develop a scope to model Spring Creek based on data collected.

Ozone Disinfection for Effluent (094612023)

- The Contractor and the manufacturer (Aqua Aerobics) are completing punchlist items, including additional training for the operators.

Payment Requests to Date						
Contract Number	Application for Payment #	Current Payment Due	Contract Price to Date incld/CO	Total Work to Date	% Monetarily Complete	Balance of Contract Amount
2021-05 GC			$5,458,723.91	$5,323,473.91	97.52%	$401,423.70
2021-06 EC			$350,000.00	$326,500.00	93.29%	$39,825.00
2021-07 MC			$223,000.00	$223,000.00	100.00%	$0.00
		$0.00	$6,031,723.91	$5,872,973.91	97.37%	$441,248.70

- No applications to process this month.

Ozone Disinfection for Effluent Project Schedule

Milestone	Date
Notice to Proceed Issued	12/27/2021
Substantial Completion	03/27/2023
Requested Substantial Completion Date	11/10/2025

Anaerobic Digestion Project (094612026)

- Major construction over the past month has included delivery and installation of the belt conveyors, biogas holder, and dry silos as well as finishing of the truck scale. Representatives from Veolia have been on site working through pre-commissioning activities in preparation for start-up of the Dryer and Anaerobic Digestion processes. All parties are meeting on a daily basis to review commissioning activities. RETTEW will provide an update on the progress schedule at the Board meeting.

- Contract 2022-01 (GC) – Change Order No. 14 – RETTEW has prepared and recommends Change Order No. 14 in the amount of $31,512.00 and an increase of 0 days to the Contract. This Change Order includes modifications to the Headworks control panel pad and flow channel demolition, truck hopper, Dewatering Building Changes, addition of drip trap at the flare, Owner credit for Inland rubber roof coating, existing conveyor support, truck scale drain and addition of oxygen sensor for the thermal fluid room.

- Contract 2022-04 (EC) – Change Order No. 12 – RETTEW has prepared and recommends Change Order No. 12 in the amount of $23,179.75 and an increase of 0 days to the Contract. This Change Order includes the work associated with Work Change Directive No. 10 to provide and install new 480V panelboard in the Thickening Building electrical room and relocate feeds.

Payment Requests to Date						
Contract Number	Application for Payment #	Current Payment Due	Contract Price to Date incld/CO	Total Work to Date	% Monetarily Complete	Balance of Contract Amount
2022-01	28	$2,711,054.55	$69,437,183.42	$66,524,825.73	95.81%	$6,238,599.00
2022-02	18	$22,591.00	$892,290.99	$879,160.98	98.53%	$57,088.05
2022-03	23	$3,933.26	$1,204,119.12	$950,498.86	78.94%	$301,145.43
2022-04	24	$521,058.65	$7,587,952.04	$6,028,308.64	79.45%	$1,861,058.83
		$3,258,637.46	$79,121,545.57	$74,382,794.01	94.01%	$8,457,891.31

- Application for Payment No. 28 has been received for Contract 2022-01 (General Construction) in the amount of $2,711,054.55. RETTEW recommends payment of Application for Payment No. 28 in the amount of $2,711,054.55.
- Application for Payment No. 18 has been received for Contract 2022-02 (Plumbing Construction) in the amount of $22,591.00. RETTEW recommends payment of Application for Payment No. 18 in the amount of $22,591.00.
- Application for Payment No. 23 has been received for Contract 2022-03 (HVAC Construction) in the amount of $3,933.26. RETTEW recommends payment of Application for Payment No. 23 in the amount of $3,933.26.
- Application for Payment No. 24 has been received for Contract 2022-04 (Electrical Construction) in the amount of $521,058.65. RETTEW recommends payment of Application for Payment No. 24 in the amount of $521,058.65.

Anaerobic Digestion Project Schedule

Milestone	Date
Notice to Proceed Issued	January 8, 2024
Revised Substantial Completion	March 31, 2026

College-Harris Pump Station

- Project has been closed out; documentation was issued via separate cover.

6.7 Executive Director's Report

- The Rate Resolution has been updated to reflect the changes made regarding the questionnaires.
- Mr. Miller expects to have a report prepared to share with the Board members at the June 2026 meeting, summarizing the findings between UAJA accounts and the water authority accounts.

7. Other Business

None.

Executive Session

A motion was made by Mr. Nucciarone, second by Mr. Derr, to go into an executive session at 5:16 pm, to discuss real estate negotiations. A motion was then made by Mr. Nucciarone, second by Mr. Derr to come out of executive session at 5:49 pm. Both motions passed unanimously.

8. Adjournment

A motion was made by Mr. Nucciarone, second by Mr. Derr, to adjourn the meeting at 5:49 pm. The motion was passed unanimously.

Respectfully submitted,

UNIVERSITY AREA JOINT AUTHORITY

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Secretary/Assistant Secretary

UNIVERSITY AREA JOINT AUTHORITY

YEAR-TO-DATE BUDGET REPORT

FOR 2026 04

ACCOUNTS FOR: 10 OPERATING FUND		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
1040410	REVENUE-SEWER	-18,961,852	0	-18,961,852	-4,943,679.60	.00	-14,018,172.40	26.1%
1040420	REVENUE-SOLIDS	-908,000	0	-908,000	-4,988.95	.00	-903,011.05	.5%
1040425	REVENUE-BU WATER	-30,000	0	-30,000	-13,774.00	.00	-16,226.00	45.9%
1040440	REVENUE-PERMIT/TAP FEES	-1,850,200	0	-1,850,200	-2,231,988.41	.00	381,788.41	120.6%
1040450	REVENUE-ADVCD. CONSTRC FEE	-45,000	0	-45,000	-21,502.25	.00	-23,497.75	47.8%
1040451	REVENUE-MISC. REIMBURSEMNT	-10,000	0	-10,000	-8,670.46	.00	-1,329.54	86.7%
1040470	INTEREST EARNINGS-CASH ACCT	-1,950	0	-1,950	-603.36	.00	-1,346.64	30.9%
1040472	INTEREST EARNINGS-PLIGIT	-500	0	-500	-138.90	.00	-361.10	27.8%
1040474	INTEREST EARNINGS - TRUSTEE	-690,000	0	-690,000	-323,836.30	.00	-366,163.70	46.9%
1040480	REVENUES-MISCELLANEOUS	-202,000	0	-202,000	-36,811.88	.00	-165,188.12	18.2%
1045919	CIP-WWTP-LAB	74,000	0	74,000	.00	.00	74,000.00	.0%
1045921	CIP-COLLECTION MAINT I&I	594,300	0	594,300	132,118.28	.00	462,181.72	22.2%
1045922	CIP-COLLECTION-CONST. EQUIP	342,957	0	342,957	38,322.34	.00	304,634.66	11.2%
1045924	CIP-WWTP-PHYSICAL PLANT	3,581,400	0	3,581,400	868,780.25	.00	2,712,619.75	24.3%
1045928	CIP-BENEFICIAL REUSE	200,000	0	200,000	.00	.00	200,000.00	.0%
1045930	CIP-WWTP-COMPOST FACILITY	20,422,959	0	20,422,959	7,827,145.48	.00	12,595,813.52	38.3%
1050050	GENERAL & ADMINISTRATIVE	2,184,265	0	2,184,265	686,848.14	.00	1,497,416.86	31.4%
1050053	G & A - INFORMATION TECHNOL	322,941	0	322,941	73,246.72	.00	249,694.28	22.7%
1050054	G & A - FLEET/FUEL	215,000	0	215,000	42,578.66	.00	172,421.34	19.8%
1052052	DEBT SERVICE	10,596,420	0	10,596,420	155,437.50	.00	10,440,982.50	1.5%
1060019	WWTP - LABORATORY	389,908	0	389,908	111,357.82	.00	278,550.18	28.6%
1060022	TREATMENT PLANT MAINTENANCE	1,572,467	0	1,572,467	354,654.97	.00	1,217,812.03	22.6%
1060023	MAIN STATION	140,000	0	140,000	28,653.36	.00	111,346.64	20.5%
1060025	WWTP - IPP	143,709	0	143,709	38,587.95	.00	105,121.05	26.9%
1060028	WWTP - BENEFICIAL REUSE	1,257,527	0	1,257,527	436,532.12	.00	820,994.88	34.7%
1060029	WWTP - DEWATERING	479,772	0	479,772	110,271.33	.00	369,500.67	23.0%
1060030	WWTP - COMPOST	553,772	0	553,772	127,180.98	.00	426,591.02	23.0%
1060032	TREATMENT PLANT OPERATION	3,768,952	0	3,768,952	1,000,848.92	.00	2,768,103.08	26.6%
1070021	COLLECTION-MAINTENANCE	2,032,930	0	2,032,930	574,240.56	.00	1,458,689.44	28.2%
1070022	CONSTRUCT EQUIP MAINTENANCE	88,000	0	88,000	13,135.17	.00	74,864.83	14.9%
1070034	COLLECTION-INSPECTION	648,104	0	648,104	168,129.17	.00	479,974.83	25.9%
1070036	COLLECTION-PUMP STATION	165,900	0	165,900	38,415.73	.00	127,484.27	23.2%
	TOTAL OPERATING FUND	27,075,781	0	27,075,781	5,240,491.34	.00	21,835,289.66	19.4%
	TOTAL REVENUES	-22,699,502	0	-22,699,502	-7,585,994.11	.00	-15,113,507.89	
	TOTAL EXPENSES	49,775,283	0	49,775,283	12,826,485.45	.00	36,948,797.55	

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	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
GRAND TOTAL	27,075,781	0	27,075,781	5,240,491.34	.00	21,835,289.66	19.4%

** END OF REPORT - Generated by Sierra Weight **

UNIVERSITY AREA JOINT AUTHORITY

YEAR-TO-DATE BUDGET REPORT

FOR 2026 04

ACCOUNTS FOR: 10 OPERATING FUND		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
1040410 REVENUE-SEWER								
1040410 4101	UAJA TOTAL SEWER R	-13,272,732	0	-13,272,732	-3,340,912.39	.00	-9,931,819.61	25.2%*
1040410 4102	BORO SEWER TOTAL R	-5,469,120	0	-5,469,120	-1,467,374.14	.00	-4,001,745.86	26.8%*
1040410 4103	PGM TOTAL SEWER RE	0	0	0	-82,551.47	.00	82,551.47	100.0%
1040410 4104	PSU TOTAL SEWER RE	-70,000	0	-70,000	-11,580.60	.00	-58,419.40	16.5%*
1040410 4105	SURCHARGES TOTAL R	-150,000	0	-150,000	-41,261.00	.00	-108,739.00	27.5%*
TOTAL REVENUE-SEWER		-18,961,852	0	-18,961,852	-4,943,679.60	.00	-14,018,172.40	26.1%
1040420 REVENUE-SOLIDS								
1040420 4203	SLUDGE DISPOSAL	-20,000	0	-20,000	-4,988.95	.00	-15,011.05	24.9%*
1040420 4204	TIPPING FEES	-888,000	0	-888,000	.00	.00	-888,000.00	.0%*
TOTAL REVENUE-SOLIDS		-908,000	0	-908,000	-4,988.95	.00	-903,011.05	.5%
1040425 REVENUE-BU WATER								
1040425 4251	REVENUE-BU WATER	-30,000	0	-30,000	-13,774.00	.00	-16,226.00	45.9%*
TOTAL REVENUE-BU WATER		-30,000	0	-30,000	-13,774.00	.00	-16,226.00	45.9%
1040440 REVENUE-PERMIT/TAP FEES								
1040440 4401	PERMIT/CONNECTION	-12,000	0	-12,000	-5,000.00	.00	-7,000.00	41.7%*
1040440 4402	TAP FEE-TREATMENT	-1,800,000	0	-1,800,000	-2,079,833.65	.00	279,833.65	115.5%
1040440 4403	GHANER TAP FEE	-10,000	0	-10,000	-126,238.00	.00	116,238.00	1262.4%
1040440 4405	IPP USER FEES	-3,800	0	-3,800	.00	.00	-3,800.00	.0%*
1040440 4409	WATER QUALITY MNGT	-900	0	-900	-100.00	.00	-800.00	11.1%*
1040440 4410	REPAIR PERMIT	-1,500	0	-1,500	-375.00	.00	-1,125.00	25.0%*
1040440 4411	TAP FEE - ROUTE 26	-5,000	0	-5,000	-8,475.00	.00	3,475.00	169.5%
1040440 4412	CIRCLEVILLE TAP FE	-2,000	0	-2,000	-6,117.76	.00	4,117.76	305.9%
1040440 4413	VALLEY VISTA TAP F	-15,000	0	-15,000	-5,849.00	.00	-9,151.00	39.0%*
TOTAL REVENUE-PERMIT/TAP FEES		-1,850,200	0	-1,850,200	-2,231,988.41	.00	381,788.41	120.6%
1040450 REVENUE-ADVCD. CONSTRC FEE								

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ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
1040450 4407 INSPECTION FEES	-45,000	0	-45,000	.00	.00	-45,000.00	.0%*
1040450 4407 B5506 INSPECTION FE	0	0	0	-7,653.46	.00	7,653.46	100.0%
1040450 4407 B5513 INSPECTION FE	0	0	0	-2,441.40	.00	2,441.40	100.0%
1040450 4407 B5519 INSPECTION FE	0	0	0	-1,951.83	.00	1,951.83	100.0%
1040450 4407 B5520 INSPECTION FE	0	0	0	-2,199.62	.00	2,199.62	100.0%
1040450 4407 B5527 INSPECTION FE	0	0	0	-1,130.52	.00	1,130.52	100.0%
1040450 4407 B5528 INSPECTION FE	0	0	0	-2,070.72	.00	2,070.72	100.0%
1040450 4407 B5529 INSPECTION FE	0	0	0	-1,049.41	.00	1,049.41	100.0%
1040450 4407 B5530 INSPECTION FE	0	0	0	-3,005.29	.00	3,005.29	100.0%
TOTAL REVENUE-ADVCD. CONSTRC FEE	-45,000	0	-45,000	-21,502.25	.00	-23,497.75	47.8%
1040451 REVENUE-MISC. REIMBURSEMNT							
1040451 4503 EMPLOYEE GR0UP INS	-10,000	0	-10,000	-8,670.46	.00	-1,329.54	86.7%*
TOTAL REVENUE-MISC. REIMBURSEMNT	-10,000	0	-10,000	-8,670.46	.00	-1,329.54	86.7%
1040470 INTEREST EARNINGS-CASH ACCTS							
1040470 4701 GENERAL CHECKING-I	-1,000	0	-1,000	-297.57	.00	-702.43	29.8%*
1040470 4702 PAYROLL-INTEREST E	-150	0	-150	-52.94	.00	-97.06	35.3%*
1040470 4717 SWEEP CHECKING-INT	-800	0	-800	-252.85	.00	-547.15	31.6%*
TOTAL INTEREST EARNINGS-CASH ACCTS	-1,950	0	-1,950	-603.36	.00	-1,346.64	30.9%
1040472 INTEREST EARNINGS-PLIGIT							
1040472 4703 PLIGIT-INTEREST EA	-100	0	-100	-20.62	.00	-79.38	20.6%*
1040472 4719 PLIGIT PLUS - INTE	-400	0	-400	-118.28	.00	-281.72	29.6%*
TOTAL INTEREST EARNINGS-PLIGIT	-500	0	-500	-138.90	.00	-361.10	27.8%
1040474 INTEREST EARNINGS - TRUSTEE							
1040474 4706 BOND REMP/IMP-INTE	-30,000	0	-30,000	-13,688.75	.00	-16,311.25	45.6%*

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ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
1040474 4724 INTEREST 93 DEBT S	-160,000	0	-160,000	-59,620.95	.00	-100,379.05	37.3%*
1040474 4725 INT 93 OPERATING E	-20,000	0	-20,000	-7,554.68	.00	-12,445.32	37.8%*
1040474 4726 INT 93 DEBT SERVIC	-80,000	0	-80,000	-4,237.74	.00	-75,762.26	5.3%*
1040474 4727 INT REVENUE FUND	-200,000	0	-200,000	-35,769.17	.00	-164,230.83	17.9%*
1040474 4734 2021 CONSTRUCTION	0	0	0	-15.88	.00	15.88	100.0%
1040474 4735 2024 CONSTRUCTION	0	0	0	-197.78	.00	197.78	100.0%
1040474 4736 2025 CONSTRUCTION	-200,000	0	-200,000	-202,751.35	.00	2,751.35	101.4%
TOTAL INTEREST EARNINGS - TRUSTEE	-690,000	0	-690,000	-323,836.30	.00	-366,163.70	46.9%
1040480 REVENUES-MISCELLANEOUS							
1040480 4899 MISCELLANEOUS RECE	-15,000	0	-15,000	-4,661.75	.00	-10,338.25	31.1%*
1040480 4909 SOLAR MAINTENANCE	-30,000	0	-30,000	.00	.00	-30,000.00	.0%*
1040480 4910 SREC	-157,000	0	-157,000	-32,150.13	.00	-124,849.87	20.5%*
TOTAL REVENUES-MISCELLANEOUS	-202,000	0	-202,000	-36,811.88	.00	-165,188.12	18.2%
1045919 CIP-WWTP-LAB							
1045919 0019 6454 LAB/IPP/SCADA	44,000	0	44,000	.00	.00	44,000.00	.0%
1045919 0019 6455 LAB UTILITY VE	30,000	0	30,000	.00	.00	30,000.00	.0%
TOTAL CIP-WWTP-LAB	74,000	0	74,000	.00	.00	74,000.00	.0%
1045921 CIP-COLLECTION MAINT I&I							
1045921 0021 6337 PERSIA PUMP ST	115,000	0	115,000	113,847.22	.00	1,152.78	99.0%
1045921 0021 6435 2ND STREET	49,200	0	49,200	18,271.06	.00	30,928.94	37.1%
1045921 0021 6436 STROUSE AVE	86,400	0	86,400	.00	.00	86,400.00	.0%
1045921 0021 6437 OAKWOOD TRUNK	174,900	0	174,900	.00	.00	174,900.00	.0%
1045921 0021 6439 DEEPWOOD	93,800	0	93,800	.00	.00	93,800.00	.0%
1045921 5405 6438 OAKWOOD TRUNK	75,000	0	75,000	.00	.00	75,000.00	.0%
TOTAL CIP-COLLECTION MAINT I&I	594,300	0	594,300	132,118.28	.00	462,181.72	22.2%
1045922 CIP-COLLECTION-CONST. EQUIPM							
1045922 0021 6412 PIPE RACK	0	0	0	815.33	.00	-815.33	100.0%*

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ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
1045922 0021 6415 TRUCK BED	30,054	0	30,054	403.95	.00	29,650.05	1.3%
1045922 0021 6440 TANDEM AXLE BO	11,622	0	11,622	11,577.26	.00	44.74	99.6%
1045922 0021 6441 BRUSH CUTTER	13,056	0	13,056	.00	.00	13,056.00	.0%
1045922 0021 6442 WELDER MIG W/	5,037	0	5,037	.00	.00	5,037.00	.0%
1045922 0021 6443 MORTAR MIXER S	13,405	0	13,405	.00	.00	13,405.00	.0%
1045922 0021 6444 MORTAR MIXER P	6,600	0	6,600	.00	.00	6,600.00	.0%
1045922 0021 6445 PORTABLE CAMER	119,452	0	119,452	.00	.00	119,452.00	.0%
1045922 0021 6446 FLAT BED UNIT	4,200	0	4,200	3,515.00	.00	685.00	83.7%
1045922 0021 6447 VFD ASPEN HEIG	6,385	0	6,385	.00	.00	6,385.00	.0%
1045922 0021 6448 PUMPS FOR ASPE	30,733	0	30,733	.00	.00	30,733.00	.0%
1045922 0021 6449 ASPHALT LEVELE	19,773	0	19,773	.00	.00	19,773.00	.0%
1045922 0021 6450 ROCK BUSTER SK	11,423	0	11,423	.00	.00	11,423.00	.0%
1045922 0021 6451 COMPOSITE MATS	28,582	0	28,582	21,520.00	.00	7,062.00	75.3%
1045922 0021 6452 EASEMENT MACHI	41,195	0	41,195	.00	.00	41,195.00	.0%
1045922 0021 6453 VINYL FENCE PE	1,440	0	1,440	490.80	.00	949.20	34.1%
TOTAL CIP-COLLECTION-CONST. EQUIPM	342,957	0	342,957	38,322.34	.00	304,634.66	11.2%
1045924 CIP-WWTP-PHYSICAL PLANT							
1045924 0024 6304 PRIMARY SCUM P	0	0	0	2,558.77	.00	-2,558.77	100.0%*
1045924 0024 6324 OZONE DISINFEC	0	0	0	12,000.00	.00	-12,000.00	100.0%*
1045924 0024 6333 DISSOLVED PHOS	100,000	0	100,000	.00	.00	100,000.00	.0%
1045924 0024 6338 HEADWORKS BUIL	1,351,500	0	1,351,500	722,808.00	.00	628,692.00	53.5%
1045924 0024 6347 BOOSTER STATIO	50,000	0	50,000	27,029.75	.00	22,970.25	54.1%
1045924 0024 6349 MAIN PUMP STAT	808,900	0	808,900	57,190.50	.00	751,709.50	7.1%
1045924 0024 6351 MOUNTAIN TANKS	480,000	0	480,000	.00	.00	480,000.00	.0%
1045924 0024 6353 UTILITY WATER	262,000	0	262,000	.00	.00	262,000.00	.0%
1045924 0024 6456 PRIMARY DEHUMI	75,000	0	75,000	.00	.00	75,000.00	.0%
1045924 0024 6457 A/C COLLECTION	13,000	0	13,000	.00	.00	13,000.00	.0%
1045924 0024 6458 CONTROL PANEL	255,000	0	255,000	.00	.00	255,000.00	.0%
1045924 0024 6459 BOOSTER STATIO	18,000	0	18,000	.00	.00	18,000.00	.0%
1045924 5405 6348 BOOSTER STATIO	10,100	0	10,100	.00	.00	10,100.00	.0%
1045924 5405 6350 MAIN PUMP STAT	47,500	0	47,500	4,204.00	.00	43,296.00	8.9%
1045924 5405 6352 MOUNTAIN TANKS	30,000	0	30,000	1,425.00	.00	28,575.00	4.8%
1045924 5405 6357 AERATION SYSTE	37,600	0	37,600	23,914.23	.00	13,685.77	63.6%
1045924 5405 6359 HEADWORKS BUIL	0	0	0	17,650.00	.00	-17,650.00	100.0%*
1045924 5405 6421 GENERATOR ATS	42,800	0	42,800	.00	.00	42,800.00	.0%
TOTAL CIP-WWTP-PHYSICAL PLANT	3,581,400	0	3,581,400	868,780.25	.00	2,712,619.75	24.3%
1045928 CIP-BENEFICIAL REUSE							
1045928 0028 6239 MF MEMBRANE RE	175,000	0	175,000	.00	.00	175,000.00	.0%

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ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
1045928 5405 6360 ENGINEERING	25,000	0	25,000	.00	.00	25,000.00	.0%
TOTAL CIP-BENEFICIAL REUSE	200,000	0	200,000	.00	.00	200,000.00	.0%
1045930 CIP-WWTP-COMPOST FACILITY							
1045930 0030 6326 SOLIDS DRYING	736,000	0	736,000	301,047.42	.00	434,952.58	40.9%
1045930 0030 6327 SOLIDS DRYING	18,820,000	0	18,820,000	7,398,283.40	.00	11,421,716.60	39.3%
1045930 0030 6460 STARTUP UTILIT	400,000	0	400,000	.00	.00	400,000.00	.0%
1045930 0030 6461 JLG SCISSORS L	82,000	0	82,000	81,044.00	.00	956.00	98.8%
1045930 0030 6462 BOBCAT FORKLIF	98,709	0	98,709	.00	.00	98,709.00	.0%
1045930 0030 6463 JLG TELEHANDLE	213,000	0	213,000	.00	.00	213,000.00	.0%
1045930 0030 6464 STARTUP EQUIPM	73,250	0	73,250	46,770.66	.00	26,479.34	63.9%
TOTAL CIP-WWTP-COMPOST FACILITY	20,422,959	0	20,422,959	7,827,145.48	.00	12,595,813.52	38.3%
1050050 GENERAL & ADMINISTRATIVE							
1050050 5001 SUPERVISOR LABOR	320,133	0	320,133	80,931.01	.00	239,201.99	25.3%
1050050 5002 REGULAR LABOR	409,725	0	409,725	115,267.73	.00	294,457.27	28.1%
1050050 5006 VACATION	0	0	0	12,643.11	.00	-12,643.11	100.0%*
1050050 5007 SICK	0	0	0	7,925.53	.00	-7,925.53	100.0%*
1050050 5008 PERSONAL	0	0	0	3,881.50	.00	-3,881.50	100.0%*
1050050 5010 HOLIDAY	0	0	0	14,685.78	.00	-14,685.78	100.0%*
1050050 5101 FICA EXPENSE	45,251	0	45,251	14,643.48	.00	30,607.52	32.4%
1050050 5102 MEDICARE EXPENSE	10,583	0	10,583	3,424.61	.00	7,158.39	32.4%
1050050 5201 UNEMPLOYMENT EXPEN	20,000	0	20,000	13,563.04	.00	6,436.96	67.8%
1050050 5202 GROUP HEALTH INSUR	158,116	0	158,116	37,608.09	.00	120,507.91	23.8%
1050050 5203 PENSION (401) UAJA	0	0	0	23,497.23	.00	-23,497.23	100.0%*
1050050 5203 6011 PENSION-COMPOS	72,986	0	72,986	.00	.00	72,986.00	.0%
1050050 5205 COBRA EMPLOYEE INS	15,000	0	15,000	8,074.52	.00	6,925.48	53.8%
1050050 5207 GROUP LIFE INSURAN	145,000	0	145,000	49,247.78	.00	95,752.22	34.0%
1050050 5208 HEALTH DEDUCTIBLE	165,000	0	165,000	53,079.17	.00	111,920.83	32.2%
1050050 5301 OFFICE SUPPLIES	20,000	0	20,000	8,464.12	.00	11,535.88	42.3%
1050050 5302 POSTAGE/SHIPPING	40,000	0	40,000	14,758.81	.00	25,241.19	36.9%
1050050 5303 JANITORIAL SUPPLIE	8,500	0	8,500	1,981.51	.00	6,518.49	23.3%
1050050 5307 PETTY CASH EXPENDI	100	0	100	7.61	.00	92.39	7.6%
1050050 5401 ADVERTISING	1,500	0	1,500	1,061.67	.00	438.33	70.8%
1050050 5402 AUDIT	25,000	0	25,000	22,000.00	.00	3,000.00	88.0%
1050050 5405 ENGINEERING-RETAIN	1,000	0	1,000	500.00	.00	500.00	50.0%

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ACCOUNTS FOR: 10 OPERATING FUND		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
1050050 5406	LEGAL	75,000	0	75,000	7,605.32	.00	67,394.68	10.1%
1050050 5408	INSURANCE - COMMER	403,392	0	403,392	120,720.00	.00	282,672.00	29.9%
1050050 5499	MISCELLANEOUS OUTS	60,000	0	60,000	20,193.00	.00	39,807.00	33.7%
1050050 5501 1054	O & M - COPIER	0	0	0	195.00	.00	-195.00	100.0%*
1050050 5601	COMMUNICATIONS	30,000	0	30,000	2,764.19	.00	27,235.81	9.2%
1050050 5701	TRAINING, SEMINARS	20,000	0	20,000	7,482.90	.00	12,517.10	37.4%
1050050 5702	MEMBERSHIPS, SUBSC	8,500	0	8,500	7,235.00	.00	1,265.00	85.1%
1050050 5703	UNIFORMS-BOOTS-GLO	22,000	0	22,000	7,615.06	.00	14,384.94	34.6%
1050050 5704	VACCINATIONS	4,000	0	4,000	650.00	.00	3,350.00	16.3%
1050050 5706	EMPLOYEE/EMPLOYER	3,000	0	3,000	681.69	.00	2,318.31	22.7%
1050050 5707	MEAL ALLOWANCE	250	0	250	.00	.00	250.00	.0%
1050050 5708	SAFETY EQUIPMENT	8,000	0	8,000	2,748.99	.00	5,251.01	34.4%
1050050 5710	DRUG/ALCOHOL TESTI	1,300	0	1,300	360.00	.00	940.00	27.7%
1050050 6006	MISCELLANEOUS EXPE	1,000	0	1,000	350.64	.00	649.36	35.1%
1050050 6007	BANK FEES/CHARGES	0	0	0	75.00	.00	-75.00	100.0%*
1050050 6015	WATER-CTWA	11,000	0	11,000	1,535.50	.00	9,464.50	14.0%
1050050 6017	GARBAGE	8,000	0	8,000	1,864.30	.00	6,135.70	23.3%
1050050 6019	CNET	10,029	0	10,029	5,100.25	.00	4,928.75	50.9%
1050050 6382	CUSTODIAN SERVICES	52,800	0	52,800	11,900.00	.00	40,900.00	22.5%
1050050 6383	PEST CONTROL	3,100	0	3,100	525.00	.00	2,575.00	16.9%
1050050 7512	PUDDINTOWN SPECIAL	5,000	0	5,000	.00	.00	5,000.00	.0%
TOTAL GENERAL & ADMINISTRATIVE		2,184,265	0	2,184,265	686,848.14	.00	1,497,416.86	31.4%
1050053 G & A - INFORMATION TECHNOLOGY								
1050053 IT71	INTERNET SERVICE	11,400	0	11,400	2,328.23	.00	9,071.77	20.4%
1050053 IT72	HARDWARE-DATA PROC	112,700	0	112,700	8,698.72	.00	104,001.28	7.7%
1050053 IT73	SOFTWARE-DATA PROC	169,741	0	169,741	59,071.75	.00	110,669.25	34.8%
1050053 IT74	IT MOBILE	29,100	0	29,100	3,148.02	.00	25,951.98	10.8%
TOTAL G & A - INFORMATION TECHNOLOGY		322,941	0	322,941	73,246.72	.00	249,694.28	22.7%
1050054 G & A - FLEET/FUEL								
1050054 5502	VEHICLE MAINTENANC	80,000	0	80,000	12,096.98	.00	67,903.02	15.1%
1050054 5603 1006	GASOLINE.	35,000	0	35,000	8,472.99	.00	26,527.01	24.2%
1050054 5603 1008	DIESEL FUEL	100,000	0	100,000	22,008.69	.00	77,991.31	22.0%
TOTAL G & A - FLEET/FUEL		215,000	0	215,000	42,578.66	.00	172,421.34	19.8%
1052052 DEBT SERVICE								

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1052052 5801	INTEREST PAID-1993	5,343,420	0	5,343,420	144,687.50	.00	5,198,732.50	2.7%
1052052 5901	PRINCIPAL PAID-199	5,234,500	0	5,234,500	.00	.00	5,234,500.00	.0%
1052052 6125	TRUSTEE FESS 2017A	1,850	0	1,850	.00	.00	1,850.00	.0%
1052052 6126	TRUSTEE FEE 2017B	1,850	0	1,850	.00	.00	1,850.00	.0%
1052052 6127	TRUSTEE FEE 2018	1,850	0	1,850	.00	.00	1,850.00	.0%
1052052 6128	TRUSTEE FEE 2020	1,850	0	1,850	1,825.00	.00	25.00	98.6%
1052052 6129	TRUSTEE FEE 20A	1,850	0	1,850	.00	.00	1,850.00	.0%
1052052 6130	TRUSTEE FEE 21	1,850	0	1,850	1,725.00	.00	125.00	93.2%
1052052 6131	TRUSTEE FEE 21A	1,850	0	1,850	1,750.00	.00	100.00	94.6%
1052052 6132	TRUSTEE FEE 22	1,850	0	1,850	1,750.00	.00	100.00	94.6%
1052052 6133	TRUSTEE FEE 24	1,850	0	1,850	1,850.00	.00	.00	100.0%
1052052 6134	TRUSTEE FEE 25	1,850	0	1,850	1,850.00	.00	.00	100.0%
TOTAL DEBT SERVICE		10,596,420	0	10,596,420	155,437.50	.00	10,440,982.50	1.5%
1060019 WWTP - LABORATORY								
1060019 5001	SUPERVISOR LABOR	97,980	0	97,980	24,541.60	.00	73,438.40	25.0%
1060019 5002	REGULAR LABOR	164,554	0	164,554	38,013.58	.00	126,540.42	23.1%
1060019 5003	OVERTIME LABOR	5,000	0	5,000	1,199.69	.00	3,800.31	24.0%
1060019 5006	VACATION	0	0	0	7,115.90	.00	-7,115.90	100.0%*
1060019 5007	SICK	0	0	0	2,721.10	.00	-2,721.10	100.0%*
1060019 5008	PERSONAL DAY	0	0	0	917.93	.00	-917.93	100.0%*
1060019 5010	HOLIDAY	0	0	0	4,887.35	.00	-4,887.35	100.0%*
1060019 5101	FICA EXPENSE	16,277	0	16,277	5,009.41	.00	11,267.59	30.8%
1060019 5102	MEDICARE EXPENSE	3,807	0	3,807	1,171.17	.00	2,635.83	30.8%
1060019 5202	GROUP HEALTH INSUR	36,150	0	36,150	10,599.34	.00	25,550.66	29.3%
1060019 5203	PENSION (401) UAJA	22,140	0	22,140	6,598.37	.00	15,541.63	29.8%
1060019 5305	SMALL EQUIPMT/TOOL	14,000	0	14,000	531.28	.00	13,468.72	3.8%
1060019 5306	LAB SUPPLIES	20,000	0	20,000	8,051.10	.00	11,948.90	40.3%
1060019 5501	EQUIPMENT MAINTENA	10,000	0	10,000	.00	.00	10,000.00	.0%
TOTAL WWTP - LABORATORY		389,908	0	389,908	111,357.82	.00	278,550.18	28.6%
1060022 TREATMENT PLANT MAINTENANCE								
1060022 5001	SUPERVISOR LABOR	46,725	0	46,725	12,473.86	.00	34,251.14	26.7%
1060022 5002	REGULAR LABOR	553,366	0	553,366	117,685.34	.00	435,680.66	21.3%
1060022 5003	OVERTIME LABOR	8,000	0	8,000	.00	.00	8,000.00	.0%

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1060022 5006 VACATION	0	0	0	11,178.78	.00	-11,178.78	100.0%*
1060022 5007 SICK	0	0	0	7,240.76	.00	-7,240.76	100.0%*
1060022 5008 PERSONAL DAY	0	0	0	3,169.55	.00	-3,169.55	100.0%*
1060022 5009 JURY/CIVIL/VOLUNTE	0	0	0	1,532.20	.00	-1,532.20	100.0%*
1060022 5010 HOLIDAY	0	0	0	9,753.44	.00	-9,753.44	100.0%*
1060022 5101 FICA EXPENSE	36,285	0	36,285	10,193.97	.00	26,091.03	28.1%
1060022 5102 MEDICARE EXPENSE	8,486	0	8,486	2,384.22	.00	6,101.78	28.1%
1060022 5202 GROUP HEALTH INSUR	97,250	0	97,250	27,232.98	.00	70,017.02	28.0%
1060022 5203 PENSION (401) UAJA	46,175	0	46,175	12,405.03	.00	33,769.97	26.9%
1060022 5304 OPERATIONAL SUPPLI	5,000	0	5,000	253.32	.00	4,746.68	5.1%
1060022 5305 SMALL EQUIPMT/TOOL	14,000	0	14,000	1,294.61	.00	12,705.39	9.2%
1060022 5501 EQUIPMENT MAINTENA	240,000	0	240,000	46,542.01	.00	193,457.99	19.4%
1060022 5501 6174 SCADIA MAINT	140,000	0	140,000	17,700.32	.00	122,299.68	12.6%
1060022 5501 6175 UV MAINT	40,000	0	40,000	8,053.79	.00	31,946.21	20.1%
1060022 5501 6283 SOLAR MAINTENA	120,000	0	120,000	22,545.26	.00	97,454.74	18.8%
1060022 5503 BUILDING & GROUND	75,000	0	75,000	21,597.46	.00	53,402.54	28.8%
1060022 5508 GRIT REMOVAL-PLANT	50,000	0	50,000	9,655.61	.00	40,344.39	19.3%
1060022 5603 FUEL, OIL, LUBRICA	25,000	0	25,000	3,172.46	.00	21,827.54	12.7%
1060022 6384 SOLAR GRAZING	17,180	0	17,180	8,590.00	.00	8,590.00	50.0%
1060022 7511 LANDSCAPE	50,000	0	50,000	.00	.00	50,000.00	.0%
TOTAL TREATMENT PLANT MAINTENANCE	1,572,467	0	1,572,467	354,654.97	.00	1,217,812.03	22.6%
1060023 MAIN STATION							
1060023 5002 B5001 REGULAR LABOR	0	0	0	5,029.85	.00	-5,029.85	100.0%*
1060023 5101 B5001 FICA EXPENSE	0	0	0	311.88	.00	-311.88	100.0%*
1060023 5102 B5001 MEDICARE EXPE	0	0	0	72.90	.00	-72.90	100.0%*
1060023 5202 B5001 GROUP HEALTH	0	0	0	771.44	.00	-771.44	100.0%*
1060023 5203 B5001 PENSION (401)	0	0	0	376.45	.00	-376.45	100.0%*
1060023 5505 B5001 PUMP STATION	75,000	0	75,000	7,568.67	.00	67,431.33	10.1%
1060023 5602 B5001 O&M MAIN STAT	65,000	0	65,000	14,522.17	.00	50,477.83	22.3%
TOTAL MAIN STATION	140,000	0	140,000	28,653.36	.00	111,346.64	20.5%
1060025 WWTP - IPP							
1060025 5001 SUPERVISOR LABOR	97,980	0	97,980	24,506.60	.00	73,473.40	25.0%
1060025 5006 VACATION	0	0	0	1,817.34	.00	-1,817.34	100.0%*
1060025 5007 SICK	0	0	0	1,143.29	.00	-1,143.29	100.0%*

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1060025 5010	HOLIDAY	0	0	0	1,831.15	.00	-1,831.15	100.0%*
1060025 5101	FICA EXPENSE	6,075	0	6,075	1,830.32	.00	4,244.68	30.1%
1060025 5102	MEDICARE EXPENSE	1,421	0	1,421	428.15	.00	992.85	30.1%
1060025 5202	GROUP HEALTH INSUR	14,435	0	14,435	4,101.26	.00	10,333.74	28.4%
1060025 5203	PENSION (401) UAJA	9,798	0	9,798	2,929.84	.00	6,868.16	29.9%
1060025 5305	SMALL EQUIPMT/TOOL	1,000	0	1,000	.00	.00	1,000.00	.0%
1060025 5410	ANALYSIS	12,000	0	12,000	.00	.00	12,000.00	.0%
1060025 5501	EQUIPMENT MAINTENA	1,000	0	1,000	.00	.00	1,000.00	.0%
TOTAL WWTP - IPP		143,709	0	143,709	38,587.95	.00	105,121.05	26.9%
1060028 WWTP - BENEFICIAL REUSE								
1060028 5001	SUPERVISOR LABOR	46,725	0	46,725	12,473.86	.00	34,251.14	26.7%
1060028 5006	VACATION	0	0	0	622.43	.00	-622.43	100.0%*
1060028 5007	SICK	0	0	0	31.99	.00	-31.99	100.0%*
1060028 5010	HOLIDAY	0	0	0	875.21	.00	-875.21	100.0%*
1060028 5101	FICA EXPENSE	2,897	0	2,897	868.24	.00	2,028.76	30.0%
1060028 5102	MEDICARE EXPENSE	678	0	678	203.12	.00	474.88	30.0%
1060028 5202	GROUP HEALTH INSUR	9,555	0	9,555	2,530.52	.00	7,024.48	26.5%
1060028 5203	PENSION (401) UAJA	4,672	0	4,672	1,400.32	.00	3,271.68	30.0%
1060028 5304	OPERATIONAL SUPPLI	25,000	0	25,000	5,211.54	.00	19,788.46	20.8%
1060028 5304 1065	OPERATIONAL SU	627,500	0	627,500	174,496.33	.00	453,003.67	27.8%
1060028 5305	SMALL EQUIPMT/TOOL	2,500	0	2,500	47.94	.00	2,452.06	1.9%
1060028 5410	LAB ANALYSIS	18,000	0	18,000	4,792.51	.00	13,207.49	26.6%
1060028 5501	EQUIPMENT MAINTENA	175,000	0	175,000	113,904.22	.00	61,095.78	65.1%
1060028 5602 1064	POWER	285,000	0	285,000	98,440.25	.00	186,559.75	34.5%
1060028 5605	CTWA REIMBURSE	60,000	0	60,000	20,633.64	.00	39,366.36	34.4%
TOTAL WWTP - BENEFICIAL REUSE		1,257,527	0	1,257,527	436,532.12	.00	820,994.88	34.7%
1060029 WWTP - DEWATERING								
1060029 5001	SUPERVISOR LABOR	46,725	0	46,725	12,473.86	.00	34,251.14	26.7%
1060029 5003	OVERTIME LABOR	3,500	0	3,500	6,582.88	.00	-3,082.88	188.1%*
1060029 5006	VACATION	0	0	0	622.43	.00	-622.43	100.0%*
1060029 5007	SICK	0	0	0	31.99	.00	-31.99	100.0%*
1060029 5010	HOLIDAY	0	0	0	2,225.55	.00	-2,225.55	100.0%*
1060029 5101	FICA EXPENSE	2,897	0	2,897	1,360.12	.00	1,536.88	46.9%
1060029 5102	MEDICARE EXPENSE	678	0	678	318.13	.00	359.87	46.9%

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1060029 5202 GROUP HEALTH INSUR	9,550	0	9,550	4,314.27	.00	5,235.73	45.2%
1060029 5203 PENSION (401) UAJA	4,672	0	4,672	1,501.61	.00	3,170.39	32.1%
1060029 5304 OPERATIONAL SUPPLI	500	0	500	.00	.00	500.00	.0%
1060029 5304 1036 POLYMER	164,250	0	164,250	20,394.00	.00	143,856.00	12.4%
1060029 5501 EQUIPMENT MAINTENA	125,000	0	125,000	15,700.93	.00	109,299.07	12.6%
1060029 5602 1042 POWER-DEWATERI	122,000	0	122,000	44,745.56	.00	77,254.44	36.7%
TOTAL WWTP - DEWATERING	479,772	0	479,772	110,271.33	.00	369,500.67	23.0%
1060030 WWTP - COMPOST							
1060030 5001 SUPERVISOR LABOR	46,725	0	46,725	12,473.86	.00	34,251.14	26.7%
1060030 5006 VACATION	0	0	0	622.43	.00	-622.43	100.0%*
1060030 5007 SICK	0	0	0	31.99	.00	-31.99	100.0%*
1060030 5010 HOLIDAY	0	0	0	1,129.30	.00	-1,129.30	100.0%*
1060030 5101 FICA EXPENSE	2,897	0	2,897	883.99	.00	2,013.01	30.5%
1060030 5102 MEDICARE EXPENSE	678	0	678	206.80	.00	471.20	30.5%
1060030 5202 GROUP HEALTH INSUR	9,550	0	9,550	2,592.11	.00	6,957.89	27.1%
1060030 5203 PENSION (401) UAJA	4,672	0	4,672	1,419.38	.00	3,252.62	30.4%
1060030 5304 OPERATIONAL SUPPLI	2,000	0	2,000	.00	.00	2,000.00	.0%
1060030 5305 SMALL EQUIPMT/TOOL	2,000	0	2,000	.00	.00	2,000.00	.0%
1060030 5409 LICENSE & FEES	1,000	0	1,000	500.00	.00	500.00	50.0%
1060030 5410 LAB ANALYSIS	15,000	0	15,000	.00	.00	15,000.00	.0%
1060030 5501 EQUIPMENT MAINTENA	20,000	0	20,000	5,345.60	.00	14,654.40	26.7%
1060030 5602 1041 POWER-COMPOST	210,000	0	210,000	80,542.03	.00	129,457.97	38.4%
1060030 5603 1007 NATURAL GAS -	120,000	0	120,000	21,433.49	.00	98,566.51	17.9%
1060030 5607 DIGESTER SUPPLEMEN	12,000	0	12,000	.00	.00	12,000.00	.0%
1060030 5608 BOILER TREATMENT C	3,750	0	3,750	.00	.00	3,750.00	.0%
1060030 5609 SCALE CERTIFICATIO	5,000	0	5,000	.00	.00	5,000.00	.0%
1060030 5610 GARBAGE DISPOSAL	30,000	0	30,000	.00	.00	30,000.00	.0%
1060030 5611 THERMAL OIL/NITROG	1,500	0	1,500	.00	.00	1,500.00	.0%
1060030 5612 SOLIDS SOFTWARE	15,000	0	15,000	.00	.00	15,000.00	.0%
1060030 5613 RNG SERVICE CONTRA	37,500	0	37,500	.00	.00	37,500.00	.0%
1060030 5614 MISC SERVICE CONTR	12,500	0	12,500	.00	.00	12,500.00	.0%
1060030 5708 SAFETY EQUIPMENT	2,000	0	2,000	.00	.00	2,000.00	.0%
TOTAL WWTP - COMPOST	553,772	0	553,772	127,180.98	.00	426,591.02	23.0%
1060032 TREATMENT PLANT OPERATION							
1060032 5001 SUPERVISOR LABOR	46,725	0	46,725	12,473.86	.00	34,251.14	26.7%

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1060032 5002 REGULAR LABOR	983,830	0	983,830	228,283.63	.00	755,546.37	23.2%
1060032 5003 OVERTIME LABOR	162,000	0	162,000	52,849.11	.00	109,150.89	32.6%
1060032 5004 SHIFT LABOR	15,000	0	15,000	5,166.27	.00	9,833.73	34.4%
1060032 5006 VACATION	0	0	0	3,994.58	.00	-3,994.58	100.0%*
1060032 5007 SICK	0	0	0	7,382.51	.00	-7,382.51	100.0%*
1060032 5008 PERSONAL DAY	0	0	0	1,470.96	.00	-1,470.96	100.0%*
1060032 5010 HOLIDAY	0	0	0	16,276.09	.00	-16,276.09	100.0%*
1060032 5101 FICA EXPENSE	63,894	0	63,894	20,453.95	.00	43,440.05	32.0%
1060032 5102 MEDICARE EXPENSE	14,943	0	14,943	4,783.65	.00	10,159.35	32.0%
1060032 5202 GROUP HEALTH INSUR	255,060	0	255,060	46,465.76	.00	208,594.24	18.2%
1060032 5203 PENSION (401) UAJA	78,460	0	78,460	13,601.43	.00	64,858.57	17.3%
1060032 5304 OPERATION SUPPLIES	14,000	0	14,000	2,325.61	.00	11,674.39	16.6%
1060032 5304 1034 ALUM	368,000	0	368,000	126,867.32	.00	241,132.68	34.5%
1060032 5304 1070 CARBON SUPPLEM	354,000	0	354,000	53,007.44	.00	300,992.56	15.0%
1060032 5304 6397 OXYGEN BISULFI	284,000	0	284,000	64,175.89	.00	219,824.11	22.6%
1060032 5405 1053 STREAM MONITOR	14,040	0	14,040	14,040.00	.00	.00	100.0%
1060032 5409 LICENSE & FEES	14,000	0	14,000	3,182.50	.00	10,817.50	22.7%
1060032 5410 ANALYSIS	40,000	0	40,000	6,096.60	.00	33,903.40	15.2%
1060032 5499 MISCELLANEOUS OUTS	50,000	0	50,000	2,778.50	.00	47,221.50	5.6%
1060032 5602 1043 POWER-PLANT	1,011,000	0	1,011,000	315,173.26	.00	695,826.74	31.2%
TOTAL TREATMENT PLANT OPERATION	3,768,952	0	3,768,952	1,000,848.92	.00	2,768,103.08	26.6%
1070021 COLLECTION-MAINTENANCE							
1070021 5001 SUPERVISOR LABOR	165,248	0	165,248	40,788.80	.00	124,459.20	24.7%
1070021 5002 REGULAR LABOR	1,116,252	0	1,116,252	228,545.15	.00	887,706.85	20.5%
1070021 5002 6172 REGULAR LABOR	0	0	0	25,448.92	.00	-25,448.92	100.0%*
1070021 5002 6337 REGULAR LABOR	0	0	0	2,114.85	.00	-2,114.85	100.0%*
1070021 5002 6435 REGULAR LABOR	0	0	0	13,493.27	.00	-13,493.27	100.0%*
1070021 5002 B5002 REGULAR LABOR	0	0	0	3,390.68	.00	-3,390.68	100.0%*
1070021 5002 B5003 REGULAR LABOR	0	0	0	3,390.68	.00	-3,390.68	100.0%*
1070021 5002 B5004 REGULAR LABOR	0	0	0	3,390.60	.00	-3,390.60	100.0%*
1070021 5002 B5519 REGULAR LABOR	0	0	0	1,224.38	.00	-1,224.38	100.0%*
1070021 5002 B5527 REGULAR LABOR	0	0	0	600.91	.00	-600.91	100.0%*
1070021 5002 B5529 REGULAR LABOR	0	0	0	607.87	.00	-607.87	100.0%*
1070021 5002 B5530 REGULAR LABOR	0	0	0	1,404.91	.00	-1,404.91	100.0%*
1070021 5003 OVERTIME LABOR	31,500	0	31,500	10,002.14	.00	21,497.86	31.8%
1070021 5006 VACATION	0	0	0	18,013.74	.00	-18,013.74	100.0%*
1070021 5007 SICK	0	0	0	11,545.36	.00	-11,545.36	100.0%*
1070021 5008 PERSONAL	0	0	0	4,439.47	.00	-4,439.47	100.0%*
1070021 5009 JURY/CIVIL/VOLUNTE	0	0	0	2,081.77	.00	-2,081.77	100.0%*

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1070021 5010 HOLIDAY	0	0	0	24,010.65	.00	-24,010.65	100.0%*
1070021 5101 FICA EXPENSE	77,659	0	77,659	23,213.93	.00	54,445.07	29.9%
1070021 5101 6172 FICA EXPENSE	0	0	0	1,577.84	.00	-1,577.84	100.0%*
1070021 5102 MEDICARE EXPENSE	18,162	0	18,162	5,428.99	.00	12,733.01	29.9%
1070021 5102 6172 MEDICARE EXPEN	0	0	0	369.03	.00	-369.03	100.0%*
1070021 5202 GROUP HEALTH INSUR	259,365	0	259,365	62,711.20	.00	196,653.80	24.2%
1070021 5202 6172 GROUP HEALTH I	0	0	0	4,476.03	.00	-4,476.03	100.0%*
1070021 5203 PENSION (401) UAJA	100,244	0	100,244	27,492.60	.00	72,751.40	27.4%
1070021 5203 6172 PENSION (401)	0	0	0	1,879.20	.00	-1,879.20	100.0%*
1070021 5305 SMALL EQUIPMT/TOOL	20,000	0	20,000	5,633.22	.00	14,366.78	28.2%
1070021 5504 SEWER LINE MAINTEN	150,000	0	150,000	27,488.33	.00	122,511.67	18.3%
1070021 6385 GIS AND MAPPING	64,500	0	64,500	19,025.54	.00	45,474.46	29.5%
1070021 ER01 RENTAL OF EQUIPMEN	5,000	0	5,000	1,300.50	.00	3,699.50	26.0%
1070021 ER14 RENTAL LOWBOY	5,000	0	5,000	.00	.00	5,000.00	.0%
1070021 PV01 TRENCH PAVING-CONT	20,000	0	20,000	-850.00	.00	20,850.00	-4.3%
TOTAL COLLECTION-MAINTENANCE	2,032,930	0	2,032,930	574,240.56	.00	1,458,689.44	28.2%
1070022 CONSTRUCT EQUIP MAINTENANCE							
1070022 5501 SMALL EQUIPMENT MA	8,000	0	8,000	1,189.04	.00	6,810.96	14.9%
1070022 5506 LG. CONSTRC. EQUIP	80,000	0	80,000	11,946.13	.00	68,053.87	14.9%
TOTAL CONSTRUCT EQUIP MAINTENANCE	88,000	0	88,000	13,135.17	.00	74,864.83	14.9%
1070034 COLLECTION-INSPECTION							
1070034 5001 SUPERVISOR LABOR	165,248	0	165,248	40,788.91	.00	124,459.09	24.7%
1070034 5001 B5511 SUPERVISOR LA	0	0	0	759.80	.00	-759.80	100.0%*
1070034 5002 REGULAR LABOR	321,920	0	321,920	54,719.71	.00	267,200.29	17.0%
1070034 5002 B5504 REGULAR LABOR	0	0	0	359.90	.00	-359.90	100.0%*
1070034 5002 B5510 REGULAR LABOR	0	0	0	199.95	.00	-199.95	100.0%*
1070034 5002 B5511 REGULAR LABOR	0	0	0	2,619.31	.00	-2,619.31	100.0%*
1070034 5003 OVERTIME LABOR	15,000	0	15,000	1,017.63	.00	13,982.37	6.8%
1070034 5006 VACATION	0	0	0	8,300.90	.00	-8,300.90	100.0%*
1070034 5007 SICK	0	0	0	6,009.72	.00	-6,009.72	100.0%*
1070034 5008 PERSONAL	0	0	0	2,039.46	.00	-2,039.46	100.0%*
1070034 5009 JURY/CIVIL/VOLUNTE	0	0	0	577.72	.00	-577.72	100.0%*
1070034 5010 HOLIDAY	0	0	0	7,882.55	.00	-7,882.55	100.0%*
1070034 5101 FICA EXPENSE	30,204	0	30,204	7,858.34	.00	22,345.66	26.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 04

ACCOUNTS FOR: 10 OPERATING FUND	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
1070034 5102 MEDICARE EXPENSE	7,063	0	7,063	1,837.92	.00	5,225.08	26.0%
1070034 5202 GROUP HEALTH INSUR	63,500	0	63,500	17,005.69	.00	46,494.31	26.8%
1070034 5203 PENSION (401) UAJA	40,669	0	40,669	9,966.20	.00	30,702.80	24.5%
1070034 5304 OPERATIONAL SUPPLI	4,000	0	4,000	536.57	.00	3,463.43	13.4%
1070034 5305 SMALL EQUIPMT/TOOL	500	0	500	.00	.00	500.00	.0%
1070034 5507 B5354 MT NITTANY EL	0	0	0	-850.00	.00	850.00	100.0%
1070034 5507 B5506 INSPECTION EN	0	0	0	1,597.50	.00	-1,597.50	100.0%*
1070034 5507 B5510 INSPECTION EN	0	0	0	460.00	.00	-460.00	100.0%*
1070034 5507 B5513 INSPECTION EN	0	0	0	402.50	.00	-402.50	100.0%*
1070034 5507 B5523 INSPECTION EN	0	0	0	44.00	.00	-44.00	100.0%*
1070034 5507 B5526 INSPECTION EN	0	0	0	3,994.89	.00	-3,994.89	100.0%*
TOTAL COLLECTION-INSPECTION	648,104	0	648,104	168,129.17	.00	479,974.83	25.9%
1070036 COLLECTION-PUMP STATION							
1070036 5305 SMALL EQUIPMT/TOOL	1,000	0	1,000	.00	.00	1,000.00	.0%
1070036 5501 EQUIPMENT MAINTENA	20,000	0	20,000	894.38	.00	19,105.62	4.5%
1070036 5505 O & M PUMP STATION	70,000	0	70,000	11,562.68	.00	58,437.32	16.5%
1070036 5505 B5002 O & M CLASTER	300	0	300	24.99	.00	275.01	8.3%
1070036 5505 B5003 O & M NORTH M	300	0	300	.00	.00	300.00	.0%
1070036 5505 B5004 O & M SOUTH M	300	0	300	.00	.00	300.00	.0%
1070036 5602 POWER	70,000	0	70,000	25,203.95	.00	44,796.05	36.0%
1070036 5602 B5002 POWER-CLASTER	500	0	500	29.46	.00	470.54	5.9%
1070036 5602 B5004 POWER-SOUTH M	500	0	500	191.25	.00	308.75	38.3%
1070036 5603 PUMP STATION PROPA	3,000	0	3,000	509.02	.00	2,490.98	17.0%
TOTAL COLLECTION-PUMP STATION	165,900	0	165,900	38,415.73	.00	127,484.27	23.2%
TOTAL OPERATING FUND	27,075,781	0	27,075,781	5,240,491.34	.00	21,835,289.66	19.4%
TOTAL REVENUES	-22,699,502	0	-22,699,502	-7,585,994.11	.00	-15,113,507.89	
TOTAL EXPENSES	49,775,283	0	49,775,283	12,826,485.45	.00	36,948,797.55	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 04

	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
GRAND TOTAL	27,075,781	0	27,075,781	5,240,491.34	.00	21,835,289.66	19.4%

** END OF REPORT - Generated by Sierra Weight **

UNIVERSITY AREA JOINT AUTHORITY

To: UAJA Board
From: Jason Brown
Re: Financial Report - End of April 2026

Cash Accounts		
General Checking	$227,736.97	
Payroll Checking	$205,305.95	
PLIGIT Checking	$1,793.27	
Petty Cash	$80.81	
Revenue Fund Accounts		
Revenue Sweep	$575,885.48	
Revenue Trustee	$3,131,661.13	
Savings Accounts		
PLIGIT Plus	$10,047.13	
93 BRIF	$1,223,507.57	
	TOTAL LIQUID ASSETS	**$5,376,018.31**
Dedicated Accounts		
2015 DSF	$241.47	
2017A DSF	$14,141.33	
2017 B & C DSF	$94,852.38	
2018 DSF	$208,527.00	
2020 DSF	$78,498.26	
2020A DSF	$95,456.83	
2021 DSF	$132,758.87	
2021A DSF	$1,019.18	
2022 DSF	$4,796.15	
2024 DSF	$938,222.60	
2025 DSF	$991,928.55	
2021 Construction Fund	$952,329.50	
2024 Construction Fund - Biosolids	$217.17	
2024 Construction Fund - Solar Purchase	$17,834.57	
2025 Construction Fund - Biosolids	$11,048,980.36	
2024 Capitalized Interest Fund	$1.30	
2025 Capitalized Interest Fund	$6,063.76	
	TOTAL DEDICATED ASSETS	**$14,585,869.28**
Restricted Accounts		
93 Oper. Expense Reserve	$953,597.74	
93 Debt Service Reserve	$9,617,326.64	
		$10,570,924.38
Receivables Outstanding		
UAJA Sewer	$2,659,010.37	
UAJA Surcharge	$39,083.00	
Borough Sewer	$5,195,493.94	
PGM Sewer	$66,845.05	
PSU Sewer	$0.00	
	TOTAL OUTSTANDING	**$7,960,432.36**

SUPERINTENDENT'S REPORT
Andrew Breon, Superintendent
April 2026 Data

PLANT OPERATIONS:

12-Month Rolling Effluent Average:	3.15 MGD	Average Plant Effluent Temperature:	62.0°
Current Year Effluent Average:	3.88 MGD	Highest Daily Influent Flow (4/5):	6.72 MGD
Total Monthly Influent Flow:	181.55 MG	Lowest Daily Influent Flow (4/28):	5.67 MGD
Average Monthly Influent Flow:	6.05 MGD	Average GDK Wetlands Temperature:	58.3°

On-Line Treatment Units:

4—Primary Clarifiers	4—Secondary Clarifiers
2—Aeration Basins	8—Denitrification Filters

REUSE WATER DISTRIBUTION:

	April	Year to date gallons
Best Western Hotel	29,000	109,000
Centre Hills Country Club	678,000	678,000
Stewart Drive Hydrant	0	0
UAJA Collections Garage	0	5,000
Cintas	582,448	2,407,213
Red Line Car Wash	413,000	2,090,000
Centre Concrete	99,000	459,000
UAJA Plant Site Wetlands	5,210,000	22,211,000
UAJA Plant Ozone Heat Exchanger	3,201,897	12,807,589
UAJA Plant Usage	40,000	145,000
GDK Park Vault	14,555,000	82,276,000
Mountain View Country Club	628,000	637,000
TOTAL GALLONS	25,436,345	123,824,802

SEPTAGE OPERATIONS REPORT FOR APRIL 2026:

Pounds of Solids Received:

	NOV	DEC	JAN	FEB	MAR	APR
Port Matilda	2,339	1009	734	963	3,002	2,581
Huston Township	584	267	600	534	583	550
Eagle Creek Mobile Home	0	0	0	0	0	0

Gallons Received:

Residential/Commercial	20,075	10,195	5,450	1,200	8,075	22,605
Eagle Creek Mobile Home	0	0	0	0	0	0
Port Matilda	11,000	5,500	5,500	5,500	18,500	17,500
Huston Township	8,000	8,000	6,000	8,000	8,000	8,000
Total Gallons	39,075	23,695	16,950	94,300	766,323	48,105

PLANT MAINTENANCE:

- Repaired the spray nozzle manifold in the Odor Control pre-condition chamber.
- Replaced the RAS/WAS Pump control panel.
- Replaced the control wiring for the IPS pump station.
- Replaced the communication wiring for MFs 4, 5, and 6.
- Repaired process piping on MF 3.
- Installed the weir cleaning brushes on the Secondary Clarifiers.
- Replaced the diaphragm in Primary Pump 7.

UNIVERSITY AREA JOINT AUTHORITY
1576 Spring Valley Road
State College, PA 16801

COLLECTION SYSTEMS SUPERINTENDENT'S REPORT

Activities for the month of April 2026
Daren Brown, Superintendent

MAINLINE MAINTENANCE:

Mainline Cleaning – 6,027 ft cleaned/cut with root cutter.
Mainline televising – 13,123 ft televised – 66 manholes inspected.
Replaced 665' of mainline and laterals at 2nd Ave project
2- New lateral installs (Ross St in Ferguson Township and Kennard Rd. Harris Township)
Locating cleanouts for GIS

LIFT STATION MAINTENANCE:

Cleaned (11) wet wells.

NEXT MONTH PROJECTS:

Finish 2nd Ave Project (Restoration)
Start Strouse Ave Project
Several mainline spot repairs
Manhole adjustments for paving projects

INSPECTION:

335 Innovation Park (90% complete)
Shiloh Commercial Park (75% complete)
Patton Crossings (Cava Restaurant) waiting on final as-builts
Blaise Alexander Hyundai (10% complete)
Blue Spring Enclave (held pre-construction meeting)
Grayspoint 7B (80% complete)

MAINLINE CONSTRUCTION:

Summit Park (waiting on pre-construction meeting)
Mount Nittany Manor Phase 1&2 (waiting on pre-construction meeting)
Crew 814 Phase 1 (waiting on pre-construction meeting)

NEW CONNECTIONS:

a. Single-Family Residential	8	c.	Commercial	1
b. Multi-Family Residential	2	d	Non-Residential	0

TOTAL 11

PA One-Calls Responded to April 1 thru 30 = 618

Herbert, Rowland & Grubic, Inc.
2568 Park Center Boulevard
State College, PA 16801
814.238.7117
www.hrg-inc.com

CONSULTING ENGINEER'S REPORT

UNIVERSITY AREA JOINT AUTHORITY

HRG Project Number: 001178.0693

May 20, 2026

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

RETAINER SERVICES (R001178.0693)

- Easement exhibits were prepared for the sewer lines in Innovation Park.
- An updated cost estimate for the entry road improvements was provided.

PUDDINTOWN INTERCEPTOR ACT 537 SPECIAL STUDY (R001178.0725)

- Comment responses have been drafted, and input was obtained from the Authority Staff and the Authority's Solicitor.
- The special study has been updated to account for the proposed Greystar Development and sewer segment capacities based on a third-party survey.
- HRG is developing projected special purpose tapping fee components to incorporate into the study.

WEST PATTON (MEEKS LANE) PUMP STATION BASIS OF DESIGN (R001178.0730)

- HRG is working with the Developer (S&A Homes) to design the proposed pump station and force main.
- The Meeks Lane Special Study was adopted at the April 27, 2026, meeting of the COG. The adopted study was submitted to the PA DEP.

RECLAIMED WATER STORAGE TANKS REHABILIATION (R001178.0742)

- A pre-construction conference was held; however, notice to proceed has not yet been issued, pending review of the Contractor's documents.
- The Contractor's stated that they would be available to start work in June.

OAKWOOD TRUNK SEWER RELOCATION AND UPGRADE (R001178.0749)

- The Component 3 was adopted at the May 7th meeting of College Township and was submitted to the PA DEP.

DEVELOPER PLAN REVIEWS:

- 335 Innovation Building at Innovation Park (R001178.0757): Revised as-built drawings are being reviewed.

HERBERT, ROWLAND & GRUBIC, INC.

Benjamin R. Burns, P.E.
Team Leader | Water & Wastewater

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RETTEW
We answer to you.
330 Innovation Boulevard, Suite 104, State College, PA 16803 ● Phone: (800) 738-8395
E-mail: rettew@rettew.com ● Website: rettew.com

University Area Joint Authority
Summation of Project Activities

May 2026

WWTP NPDES Permit – Phosphorus Study (094612027)

- We are working with a firm to develop a scope to model Spring Creek based on the data collected.

Ozone Disinfection for Effluent (094612023)

- The Contractor and the manufacturer (Aqua Aerobics) are completing punchlist items, including additional training for the operators.

Payment Request to Date

Contract Number	Application for Payment #	Current Payment Due	Contract Price To Date incld/CO	Total Work To Date	% Monetarily Complete	Balance of Contract Amount Including Retainage
2021-05 GC			$5,458,723.91	$5,323,473.91	97.52%	$401,423.70
2021-06 EC	11-Final	$39,825.00	$350,000.00	$350,000.00	100.00%	$0.00
2021-07 MC			$223,000.00	$223,000.00	100.00%	$0.00
		$39,825.00	$6,031,723.91	$5,896,473.91	97.76%	$401,423.70

- Application for Payment No. 11-Final has been received for Contract 2021-06 (Electrical Construction) in the amount of $39,825.00. RETTEW recommends payment of Application for Payment No. 11-Final in the amount of $39,825.00.

Ozone Disinfection for Effluent Project Schedule

Milestone	Date
Notice to Proceed Issued	12/27/2021
Substantial Completion	03/27/2023
Requested Substantial Completion Date	11/10/2025

Anaerobic Digestion Project (094612026)

- Equipment start-ups, staff trainings, and commissioning activities are underway. Dewatered sludge from the centrifuges is now moving along the old and new conveyor belts from the Dewatering Building, into the Dryer Building, and into the Wet Cake Bin. From there, staff is pumping the cake to a dumpster for disposal.
- The first of the imported sludge will be delivered the week of May 18th. The material will be processed through the Ecrusor to be used to start filling the Food Waste/Organics digesters.

- No Changes Orders to be presented this month.

Payment Requests To Date						
Contract Number	Application for Payment #	Current Payment Due	Contract Price To Date incld/CO	Total Work To Date	% Monetarily Complete	Balance of Contract Amount Including Retainage
2022-01	29	$698,810.97	$69,468,695.42	$67,260,416.23	96.82%	$5,571,300.03
2022-02	19	$1,643.50	$892,290.99	$880,890.98	98.72%	$55,444.55
2022-03	24	$9,505.07	$1,204,119.12	$960,503.98	79.77%	$291,640.38
2022-04	25	$277,351.52	$7,616,624.19	$6,320,257.61	82.98%	$1,612,379.46
		$987,311.06	$79,181,729.72	$75,422,068.80	95.25%	$7,530,764.42

- Application for Payment No. 29 has been received for Contract 2022-01 (General Construction) in the amount of $698,810.97. RETTEW recommends payment of Application for Payment No. 29 in the amount of $698,810.97.
- Application for Payment No. 19 has been received for Contract 2022-02 (Plumbing Construction) in the amount of $1,643.50. RETTEW recommends payment of Application for Payment No. 19 in the amount of $1,643.50.
- Application for Payment No. 24 has been received for Contract 2022-03 (HVAC Construction) in the amount of $9,505.07. RETTEW recommends payment of Application for Payment No. 24 in the amount of $9,505.07.
- Application for Payment No. 25 has been received for Contract 2022-04 (Electrical Construction) in the amount of $277,351.52. RETTEW recommends payment of Application for Payment No. 25 in the amount of $277,351.52.

Anaerobic Digestion Project Schedule

Milestone	Date
Notice to Proceed Issued	January 8, 2024
Revised Substantial Completion	March 31, 2026

UNIVERSITY AREA JOINT AUTHORITY
1576 Spring Valley Road
State College, PA 16801

EXECUTIVE DIRECTOR'S REPORT

May 20, 2026

INFORMATION ITEMS

Borough of State College Delinquency

The unpaid balance for the Borough of State College is $5,195,493.94.

ACTION ITEMS

2. Approval of the Minutes

3. Public Comment

3.1 Other items not on the agenda

4. Old Business

4.1 2025 Audit

The draft audit is included in the meeting packet. Board Treasurer, Jeff Nucciarone, Board Member, Jan Ulbrecht, Board Member, Peter Marshall, Cory Miller and Jason Brown met with Maher Duessel (via Zoom) on May 8th to review and comment on the 2025 draft audit. Brian McCall, a partner in Maher Duessel, will attend the meeting to review the 2025 draft audit with the Board.

Recommendation: Approve the 2025 Audit.

4.2 UAJA Mission Statement

At the April Board meeting, the mission statement that had been developed more than 25 years ago by Staff and Board members was presented to be adopted by the Board. The Board voted to change the mission statement to the following:

UAJA – Providing high quality wastewater and other resource recovery services that improve the environment, economy, and quality of life of the Centre Region, now and in the future.

The old UAJA mission statement was:

UAJA – Improving the environment, economy and quality of life of the Centre Region, now and in the future.

As suggested, The Executive Director met with the staff to discuss the change. The staff found the new wording to be too restrictive. It limits actions to providing wastewater and other resource recovery services.

"The Water Resources Utility of the Future: A Blueprint for Action" is included in the agenda report. This report was published in 2013, 12 years after UAJA wrote the previous mission statement. This nationwide effort is a reflection of where UAJA has been going for decades. UAJA has been awarded the "Utility of the Future Today" award three times. Very few organizations have managed to accomplish that.

This portion of the executive summary of the blueprint describes UAJA and the Centre Region quite well:

"The most progressive of today's clean water agencies are defining the UOTF. Instead of solely collecting and transporting wastewaters as far downstream as possible to central treatment plants where wastes are cleansed to meet permit limits prior to discharge to waterways, the UOTF transforms itself into a manager of valuable resources, a partner in local economic development, and a member of the watershed community seeking to deliver maximum environmental benefits at the least cost to society. It does this by reclaiming and reusing water, extracting and finding commercial uses for nutrients and other constituents, capturing waste heat and latent energy in biosolids and liquid streams, generating renewable energy using its land and other horizontal assets, and using green infrastructure to manage stormwater but also to improve urban quality of life more broadly. These actions benefit the utility in the form of reduced costs and increased revenues. But they also deliver environmental, economic, and social benefits both locally and nationally."

The Blueprint for Action recognizes that often the greatest environmental gain can be achieved only through cooperative efforts that go beyond traditional wastewater treatment. Our local municipalities recognize this as well. UAJA needs a mission statement that makes it clear that we are a partner in improving the watershed beyond providing high quality wastewater and other resource recovery services.

Recommendation: Adopt the UAJA mission statement, "UAJA – Improving the environment, economy and quality of life of the Centre Region, now and in the future."

5. New Business

5.1 Organics Processing Contract New Freedom Resources, LLC

Included in the agenda report is a draft agreement between UAJA and New Freedom Resources, LLC for processing organics. The agreement does not commit UAJA to a set quantity to receive, nor does it commit New Freedom to supplying a set quantity of organics. Most of the conditions are the same as our other already executed organics processing agreements.

Recommendation: Approve the Organics Processing Agreement with New Freedom Resources, LLC as presented.

5.2 Requisitions

BRIF #1074	FilmTec Corp. AWT Membranes	$183,377.76
BRIF #1075	HRG Oakwood Trunk Project	$35,000.00
BRIF #1076	SiteOne Landscape 2nd Street Project (Seed and Fertilizer)	$235.62
BRIF #1077	Heidelberg Materials 2nd Street Project (Stone)	$6,177.43
BRIF #1078	L/B Water 2nd Street Project (Misc. Materials)	$75.00

BRIF #1079	Robinson Septic Service 2nd Street Project	$150.00
BRIF #1080	Maxwell Transport 2nd Street Project (Lowboy)	$348.00
BRIF #1081	Bi-Lo Supply 2nd Street Project (Misc. Materials)	$321.63
BRIF #1082	Irvin Farms 2nd Street Project (Straw)	$120.00
BRIF #1083	C.L. Harter Excavating 2nd Street Project (Top Soil)	$1,200.00
BRIF #1084	A&H Equipment Truck Dump Bed	$32,219.91
TOTAL BRIF-		**$259,225.35**
Construction Fund #038	PSI Pumping Solutions Pay App. #11- Ozone Project-Electrical	$39,825.00
TOTAL 2021 CONSTRUCTION FUND-		**$39,825.00**
Construction Fund #090	Rettew Sludge Drying Project- Engineering	$60,114.00
Construction Fund #091	Hillis-Carnes Engineering Sludge Drying Project- Inspection	$160.00
Construction Fund #092	Helena-Agri Enterprises Sludge Drying Project- Lime	$7,140.00
Construction Fund #093	MSA Safety Sludge Drying Project- Start Up Supplies	$10,200.00
Construction Fund #094	B&S Sheet Metal Sludge Drying Project- Start Up Supplies	$420.00
Construction Fund #095	Mike's Video Sludge Drying Project- Start Up Supplies	$1,290.00
Construction Fund #096	Morefield Sludge Drying Project- Network/Cabling	$5,833.75
Construction Fund #097	Hite Company Sludge Drying Project- Fiber Optic Lines	$25,232.12

Construction Fund #098	Sherwood Logan Sludge Drying Project- Headworks Upgrade	$144,574.00
Construction Fund #099	Linde Gas Sludge Drying Project- Nitrogen Gas	$1,324.69
Construction Fund #100	APR Supply Sludge Drying Project- Start Up Supplies	$359.69
Construction Fund #101	Construction Tool Service Sludge Drying Project- Start Up Supplies	$952.00
Construction Fund #102	Keystone Engineering Sludge Drying Project- SCADA/Network	$143,361.71
Construction Fund #103	Best Line Equipment Sludge Drying Project- JLG Telehandler	$213,000.00
Construction Fund #104	Quandel Construction Group Pay App. #29- Sludge Drying Project-General	$698,810.97
Construction Fund #105	Myco Mechanical Pay App. #19- Sludge Drying Project-Plumbing	$1,643.50
Construction Fund #106	Myco Mechanical Pay App. #24- Sludge Drying Project-HVAC	$9,505.07
Construction Fund #107	Hayden Power Group Pay App. #25- Sludge Drying Project-Electrical	$277,351.52
TOTAL 2025 CONSTRUCTION FUND (Biosolids)-		**$1,601,273.02**
Revenue Fund #228	Debt Service, Operation and Maintenance Expenses	$1,250,000.00
TOTAL REVENUE FUND-		**$1,250,000.00**

6. Reports of Officers

7. Other Business

Executive Session – for legal discussions.

8. Adjournment

MaherDuessel

Board Members
University Area Joint Authority
State College, Pennsylvania

We have audited the financial statements of the University Area Joint Authority (Authority) for the year ended December 31, 2025. In addition, we have audited the Statement of Net Position, Statement of Revenues, Expenses, and Changes in Net Position, Statement of Fiduciary Net Position, Statement of Changes in Fiduciary Net Position, and Debt Statement – regulatory basis (Schedules) included in the 2025 Annual Report of Municipal Authorities and Non-Profits (DCED-CLGS-04). Professional standards require that we provide you with information about our responsibilities under auditing standards generally accepted in the United States of America, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our communication with the Board President about planning matters on April 1, 2026. Professional standards also require that we communicate to you the following information related to our audit.

Our Responsibility under Auditing Standards Generally Accepted in the United States of America

As stated in our engagement letter dated February 21, 2023, and amended on April 7, 2025, our responsibility, as described by professional standards, is to express opinions about whether the financial statements and Schedules prepared by management with your oversight are fairly presented, in all material respects, in conformity with accounting principles generally accepted in the United States of America, and the accounting practices and procedures prescribed or permitted by the Pennsylvania Department of Community and Economic Development (DCED), which is a regulatory basis of accounting. Our audit of the financial statements and Schedules does not relieve you or management of your responsibilities.

In addition, our responsibility is to plan and perform the audit to obtain reasonable, but not absolute, assurance that the financial statements and Schedules are free of material misstatement. As part of our audit, we considered the system of internal control of the Authority. Such considerations were solely for the purpose of determining our audit procedures and not to provide any assurance concerning such internal control. We are responsible for communicating significant matters related to the audit that are, in our professional judgment, relevant to your responsibilities in overseeing the financial reporting process. However, we are not required to design procedures specifically to identify such matters.

Significant Accounting Policies

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the Authority are described in Note 1 to the financial statements, and the Schedules follow accounting policies prescribed by the DCED. For the year ended December 31, 2025, the Authority adopted the provisions of Governmental Accounting

Standards Board (GASB) Statement No. 102 (Certain Risk Disclosures). No other new accounting policies were adopted, and the application of existing policies was not changed during 2025. We noted no transactions entered into by the Authority during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements and Schedules in the proper period.

Accounting Estimates

Accounting estimates are an integral part of the financial statements and Schedules prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and Schedules and because of the possibility that future events affecting them may differ significantly from those expected.

We noted no sensitive estimates affecting the financial statements and Schedules.

Disclosures

Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. The Schedules were prepared without disclosures as permitted by the DCED.

We noted no sensitive disclosures affecting the financial statements.

The financial statement disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. The material misstatements detected as a result of audit procedures and corrected by management related to fund balance, accounts payable, and amortization of bond premiums and discounts.

Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements and Schedules or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated May 30, 2025.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the Authority's financial statements and Schedules or a determination of the type of auditor's opinion that may be expressed on those statements and Schedules, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Issues Discussed Prior to Retention of Independent Auditors

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the Authority's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Audit Findings or Issues

Matters involving internal controls and the Authority's operations are detailed in a separately issued management letter.

Other Matters

Required Supplementary Information

We applied certain limited procedures to the required supplementary information (RSI) that supplements the basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency

with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

Supplementary Information

We were engaged to report on the supplementary information as described in the table of contents, which accompanies the financial statements but is not RSI. With respect to this supplementary information, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

This information is intended solely for the information and use of the Board Members and management of the Authority, and is not intended to be, and should not be, used by anyone other than these specified parties.

Very truly yours,

Pittsburgh, Pennsylvania
May 30, 2025

MaherDuessel

Board Members
University Area Joint Authority
State College, Pennsylvania

In planning and performing our audit of the financial statements of the University Area Joint Authority (Authority) as of and for the year ended December 31, 2025, in accordance with auditing standards generally accepted in the United States of America, we considered the Authority's system of internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

Our consideration of internal control was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore material weaknesses or significant deficiencies may exist that were not identified. However, as discussed below, we identified a certain deficiency that we consider to be a material weakness.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis.

Those items prefaced by an asterisk (*) are comments that were reported in a prior year and continue to require attention.

We consider the following deficiency in internal control to be a material weakness:

***External Financial Statement Preparation**

As a part of the audit process, we assist management in preparing the financial statements, based on information provided by the Authority's management. This preparation includes posting adjusting entries to ensure that the financial statements are free of material misstatement. During our audit, we identified material adjustments that were not initially identified by the Authority's financial reporting system. These adjustments were to roll net position, record accounts payable, and amortize bond discounts and premiums.

Due to the complexity of changing accounting and reporting requirements, it is impractical that the Authority would have the resources available to fully prepare their own external financial statements without some level of assistance; however, we recommend that management continue to evaluate their current internal controls over the financial reporting process to ensure that they are at a level deemed appropriate by management.

We also have the following comments and recommendations on other matters. These other matters, all of which have been discussed with appropriate members of management, are intended to improve internal control or result in other operating efficiencies. Our comments are summarized as follows:

*Segregation of Duties

Strong internal control requires that duties be segregated so that one person does not control all aspects of an accounting function. Due to the limited size of the Authority, there is an inherent lack of segregation of duties with regard to the sewer billings and collections, payroll and cash disbursements processes.

Sewer Billings and Collections

Currently, the same individual is responsible for:

- Adding new customers to the system;
- Preparing the quarterly sewer billings;
- Receiving, opening, and processing checks received by mail from customers;
- Managing customer agreements for automatic withdrawal payments and handling the processing of those payments;
- Posting sewer billings and collections to the general ledger;
- Preparing bank deposits;
- Handling customer questions and complaints;
- Handling delinquent accounts, including assessing penalties and preparing and mailing delinquent notices;
- Making adjustments/write-offs to customer accounts.

The Authority has implemented procedures to help mitigate risks associated with the sewer billings and collections segregation of duties risks. First, the Authority has adopted a policy to have all billing adjustments approved by the Executive Director. In addition, an independent person (not the billing clerk) prints a monthly report of the billing adjustments

and a monthly Accounts Receivable Aging report for the Authority's Assistant Executive Director's review. During the Assistant Executive Director's monthly review, he reviews the list of billing adjustments for any unusual activity and reviews the Accounts Receivable Aging report, for any unusual delinquent accounts.

Payroll

Currently, the same individual is responsible for:

- Processing biweekly payrolls;
- Making changes to the payroll master file (including wage/salary adjustments and payroll withholding rates);
- Printing payroll checks;
- Signing payroll checks using the signature stamp;
- Reconciling the payroll bank statement.

A mitigating control exists, as the Assistant Executive Director receives the payroll bank statement unopened and reviews the cancelled check images and transfer activity for reasonableness before the bank statement is given to the payroll processor to perform the monthly reconciliation.

We continue to recommend that someone independent of the payroll system enter all changes into the payroll master file; the payroll processor should not have access to do so. If this change in duties is not implemented, at a minimum, we recommend that someone independent of the payroll process periodically test check that pay rates are consistent with those authorized by the appropriate levels of management, and that payroll withholdings (including pension and deferred compensation withholdings) are consistent with the amounts approved by the employee and/or required by union contract.

Cash Disbursements

Currently, the same individual is responsible for:

- Processing invoices;
- Printing checks;
- Signing checks using the signature stamp for checks under $5,000;
- Mailing checks;
- Posting disbursement activity to the general ledger;
- Reconciling the bank statement.

Mitigating controls include the review of monthly financial statements by the Board, live signatures required on checks over $5,000, and the opening, reviewing, and signing off on bank statements by the Assistant Executive Director before they are reconciled.

Although over the past several years the Authority has made significant efforts and improvements to internal controls with regard to the sewer billings and collections, payroll and cash disbursements processes, which reduce the likelihood of errors or fraud occurring and not being detected, management needs to appreciate that an absence of segregation exists at the Authority due to a small office staff, and to continue to be mindful of actions required to mitigate the risks that result from this lack of segregation to the extent possible.

***Computer Systems Security**

The Authority should consider an overall review and documentation of the information technology areas that are essential to the effective operations of the Authority. This is especially important with the now-constant threat of ransomware, which we have seen impact a number of our clients in the non-profit and governmental industries throughout the state. These areas are as follows:

- Security Management – Controls that provide a framework for assessing and managing risk, developing security policies, assigning responsibilities, and monitoring the adequacy of security controls.
- Access Control – Controls that limit or detect access to computer resources (data, programs, equipment, and facilities) and protect against unauthorized modification, loss, and disclosure.
- Configuration Management – Controls that help to prevent unauthorized changes to software and hardware configurations, and provide reasonable assurance that systems are configured and operating securely and as intended.

- Segregation of Duties – Controls that constitute policies, procedures, and an organizational structure to manage who can control key aspects of computer-related operations.
- Contingency Planning – Controls that involve procedures for continuing critical operations without interruption, or with prompt resumption, when unexpected events occur.

Although the Authority has implemented additional IT and security measures such as cyber security training, multi-factor authentication protocols, and additional firewalls, we recommend that the Authority continue to assess threats and security measure implementation and provide training as appropriate on topics such as phishing and business email compromise scams.

This communication is intended solely for the information and use of the Board Members, management, and others within the Authority, and is not intended to be, and should not be, used by anyone other than these specified parties.

Pittsburgh, Pennsylvania
May 30, 2025

University Area Joint Authority

Financial Statements and
Required Supplementary and
Supplementary Information

Years Ended December 31, 2025 and 2024
with Independent Auditor's Report

UNIVERSITY AREA JOINT AUTHORITY

YEARS ENDED DECEMBER 31, 2025 AND 2024

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MaherDuessel

Independent Auditor's Report

Board Members
University Area Joint Authority
State College, Pennsylvania

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying financial statements of the business-type activities of the University Area Joint Authority (Authority), as of and for the years ended December 31, 2025 and 2024, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities of the Authority, as of December 31, 2025 and 2024, and the changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Authority and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Authority's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with generally accepted auditing standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with generally accepted auditing standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Authority's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the required supplementary information listed in the table of contents be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Authority's basic financial statements. The supplementary information listed in the table of contents is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Pittsburgh, Pennsylvania
DATE XX, 20XX

UNIVERSITY AREA JOINT AUTHORITY
MANAGEMENT'S DISCUSSION AND ANALYSIS

This section of the financial report presents the Management's Discussion and Analysis (MD&A) of the University Area Joint Authority's (Authority) financial condition and performance for the fiscal year ending December 31, 2025 and 2024 in compliance with Statement No. 34 of the Governmental Accounting Standards Board (GASB). This analysis is intended to be read and used in conjunction with the included financial statements.

FINANCIAL HIGHLIGHTS

The following are key financial highlights during the 2025 fiscal year:

- In 2025, the Bulk Treatment Rate remained stable at $5,624/million gallons and the EDU rate increased from $113/quarter to $121/quarter.

- In 2025, the plant capacity tap fee increased from $6,485 to $6,550 per EDU. This fee has historically been increased annually by the same percentage as the Construction Cost Index published in the Engineering News Record.

REQUIRED FINANCIAL STATEMENTS

The financial statements of the Authority are presented as an Enterprise Fund because the operations are financed and operated in a manner similar to private sector businesses, where the costs of providing services to the general public on a continuing basis are intended to be financed or recovered through user charges or sewer service fees. The Authority uses the accrual basis of accounting whereby revenues are recognized when earned and expenses are recognized when the liability is incurred. The financial statements offer short-term and long-term financial information about the Authority's activities.

The Statement of Net Position summarizes all of the Authority's assets and deferred outflows of resources and liabilities and deferred inflows of resources and provides information about the nature and amounts of investments in resources or assets and the offsetting obligations or liabilities to Authority creditors. The overall financial condition of the Authority is reflected in this statement.

The Statement of Revenues and Expenses and Changes in Net Position summarizes the revenues and expenses for the current fiscal year and past fiscal year. This statement measures the success of the Authority's operations over the past year and can be used to determine whether the Authority has successfully recovered all its costs through its sewage disposal rates and other fees. Changes in net position can also be a useful indicator of whether the financial condition of the Authority is improving or deteriorating.

The third required financial statement is the Statement of Cash Flows. This statement provides information about the Authority's cash receipts and cash payments during the reporting period. The statement reports cash flows from operating activities, cash flows from capital and related

financing activities, and cash flows from investing activities, as well as net changes in cash during the reporting period.

The notes to Financial Statements provide required disclosures and other information essential to a full understanding of material data provided in the statements. The notes present information on the Authority's accounting policies, the basis of accounting, investments, capital assets, outstanding debt, and other significant activities, such as material risks, obligations, commitments, contingencies, and future requirements, if any.

FINANCIAL ANALYSIS

The format of the 2025 financial statements is similar to 2024 and includes a direct line-by-line comparison to the 2024 financial statements.

TABLE 1
CONDENSED STATEMENTS OF NET POSITION

	December 31, 2025	December 31, 2024	Change
Current assets	$ 14,018,282	$ 12,250,144	$ 1,768,138
Other assets	30,930,630	30,294,736	635,894
Capital assets, net	158,093,643	117,424,224	40,669,419
Total assets	$ 203,042,555	$ 159,969,104	$ 43,073,451
Total deferred outflows of resources	$ 1,058,618	$ 1,446,536	$ (387,918)
Current liabilities	$ 12,652,672	$ 11,990,011	$ 662,661
Non-current liabilities	143,789,675	102,851,902	40,937,773
Total liabilities	$ 156,442,347	$ 114,841,913	$ 41,600,434
Net Position:			
Net investment in capital assets	$ 25,060,136	$ 29,111,942	$ (4,051,806)
Restricted	10,540,469	7,128,748	3,411,721
Unrestricted	12,058,221	10,333,037	1,725,184
Total net position	$ 47,658,826	$ 46,573,727	$ 1,085,099

Table 1 presents a condensed summary of the Authority's Statements of Net Position at December 31, 2025 and 2024.

The format of the 2024 financial statements is similar to 2023 and includes a direct line-by-line comparison to the 2023 financial statements.

TABLE 2
CONDENSED STATEMENTS OF NET POSITION

	December 31, 2024	December 31, 2023	Change
Current assets	$ 12,250,144	$ 11,211,296	$ 1,038,848
Other assets	30,294,736	14,509,106	15,785,630
Capital assets	117,424,224	91,531,153	25,893,071
Total assets	$159,969,104	$117,251,555	$ 42,717,549
Total deferred outflows of resources	$ 1,446,536	$ 1,834,454	$ (387,918)
Current liabilities	$ 11,990,011	$ 6,610,389	$ 5,379,622
Non-current liabilities	102,851,902	65,017,362	37,834,540
Total liabilities	$114,841,913	$ 71,627,751	$ 43,214,162
Net Position:			
Net investment in capital assets	$ 29,111,942	$ 33,429,436	$ (4,317,494)
Restricted	7,128,748	4,144,599	2,984,149
Unrestricted	10,333,037	9,884,223	448,814
Total net position	$ 46,573,727	$ 47,458,258	$ (884,531)

Table 2 presents a condensed summary of the Authority's Statements of Net Position at December 31, 2024 and 2023.

Table 3 presents a condensed summary of the Authority's Statements of Revenues and Expenses and Changes in Net Position for the years ended December 31, 2025 and 2024.

TABLE 3
CONDENSED STATEMENTS OF REVENUES AND EXPENSES
AND CHANGES IN NET POSITION

	2025	2024	Change
Operating Revenues:			
Sewer charges	$ 19,154,480	$ 17,827,813	$ 1,326,667
Other fees and charges	237,370	258,653	(21,283)
Total Revenues	19,391,850	18,086,466	1,305,384
Operating Expenses:			
Treatment plant	7,070,783	7,818,172	(747,389)
Collection	2,558,080	2,562,150	(4,070)
General and administration	2,536,543	2,555,367	(18,824)
Depreciation	3,678,443	5,195,896	(1,517,453)
Total Expenses	15,843,849	18,131,585	(2,287,736)
Nonoperating Activity:			
Revenues	1,707,564	1,653,055	54,509
Expenses	(5,576,227)	(3,717,669)	(1,858,558)
Total Nonoperating Activity	(3,868,663)	(2,064,614)	(1,804,049)
Capital Contributions:			
Developer	504,400	92,000	412,400
Permit and tap fees	901,361	1,133,202	(231,841)
Total Capital Contributions	1,405,761	1,225,202	180,559
Change in Net Position	1,085,099	(884,531)	1,969,630
Net Position:			
Beginning of year	46,573,727	47,458,258	(884,531)
End of year	$ 47,658,826	$ 46,573,727	$ 1,085,099

The Authority's operating revenues increased by $1,305,384 due to an increase in sewer rates in 2025. Nonoperating revenues and expenses for 2025 increased by $54,509 and $1,858,558, respectively, due to investment earnings and additional interest expense related to a bond issue. Capital contributions increased by $180,559 due to more developer contributions in 2025. Tapping fees decreased in 2025 compared to 2024 due to less construction. As a result, change in net position increased in 2025 from 2024 by $1,192,005.

Table 4 presents a condensed summary of the Authority's Statements of Revenues and Expenses and Changes in Net Position for the years ended December 31, 2024 and 2023.

TABLE 4
CONDENSED STATEMENTS OF REVENUES AND EXPENSES
AND CHANGES IN NET POSITION

	2024	2023	Change
Operating Revenues:			
Sewer charges	$ 17,827,813	$ 16,488,046	$ 1,339,767
Other fees and charges	258,653	362,954	(104,301)
Total Revenues	18,086,466	16,851,000	1,235,466
Operating Expenses:			
Treatment plant	7,818,172	7,961,052	(142,880)
Collection	2,562,150	2,546,162	15,988
General and administration	2,555,367	2,653,573	(98,206)
Depreciation	5,195,896	5,253,474	(57,578)
Total Expenses	18,131,585	18,414,261	(282,676)
Nonoperating Activity:			
Revenues	1,653,055	176,051	1,477,004
Expenses	(3,717,669)	(1,996,881)	(1,720,788)
Total Nonoperating Activity	(2,064,614)	(1,820,830)	(243,784)
Capital Contributions:			
Developer	92,000	211,120	(119,120)
Permit and tap fees	1,133,202	2,077,605	(944,403)
Total Capital Contributions	1,225,202	2,288,725	(1,063,523)
Change in Net Position	(884,531)	(1,095,366)	210,835
Net Position:			
Beginning of year	47,458,258	48,553,624	(1,095,366)
End of year	$ 46,573,727	$ 47,458,258	$ (884,531)

CAPITAL IMPROVEMENTS

During 2025, the Authority continued to make capital purchases and improvements. The Authority continued the biosolid drying project that was started in 2024. Several sewer replacement projects were undertaken, and construction was completed. Numerous developer-funded extensions were installed.

DEBT

At the end of 2025, the Authority had outstanding debt totaling $147,464,500. The Authority has issued Revenue Bonds in the following years: Series A of 2017, Series B of 2017, Series of 2018, Series of 2020, Series A of 2020, Series of 2021, Series A of 2021, Series of 2022, Series of 2024, and Series of 2025. The Series of 2025 Bond Issue was issued in March of 2025 and will be used to fund capital improvements of the Authority. All of this debt is subordinate to the 1993 Bond Indenture. The Authority maintains a Debt Service Reserve Fund in accordance with the requirements of the 1993 Bond Trust Indenture. More detailed information about the Authority's long-term debt is presented in the notes to the financial statements.

CONDITIONS AFFECTING FUTURE FINANCIAL POSITION

At this time, there are no significant conditions that staff is aware of that may affect the future financial condition of the Authority.

CONTACTING THE AUTHORITY'S MANAGER

If you have any questions about this report or need additional financial information, contact the University Area Joint Authority's Manager at 1576 Spring Valley Road, State College, PA 16801.

UNIVERSITY AREA JOINT AUTHORITY

STATEMENTS OF NET POSITION

DECEMBER 31, 2025 AND 2024

	2025	2024
Assets:		
Current assets:		
Cash and cash equivalents	$ 477,535	$ 288,988
Accounts receivable - operations	3,454,886	3,215,811
Due from Borough of State College	5,377,483	2,632,773
Prepaid expenses	918,961	449,429
Trustee funds - unrestricted	3,789,417	5,663,143
Total current assets	14,018,282	12,250,144
Capital assets, not being depreciated	80,673,435	42,013,913
Capital assets, net of accumulated depreciation	77,420,208	75,410,311
Total capital assets, net	158,093,643	117,424,224
Other assets:		
Trustee funds - restricted for debt service and operating reserves	10,540,469	7,128,748
Trustee funds - restricted for capital projects	20,390,161	23,165,988
Total other assets	30,930,630	30,294,736
Total assets	$ 203,042,555	$ 159,969,104
Deferred Outflows of Resources:		
Deferred charge on refunding	$ 1,058,618	$ 1,446,536
Liabilities:		
Current liabilities:		
Current portion of bonds payable	$ 5,234,500	$ 5,015,000
Accounts payable and accrued liabilities	2,522,800	2,553,548
Retainage payable	3,890,323	3,737,176
Accrued interest - bonds payable	886,329	591,687
Advance escrow deposits	117,517	91,397
Security deposits	1,203	1,203
Total current liabilities	12,652,672	11,990,011
Long-term liabilities:		
Compensated absences	955,012	1,232,820
Bonds payable, net	142,834,663	101,619,082
Total long-term liabilities	143,789,675	102,851,902
Total liabilities	$ 156,442,347	$ 114,841,913
Net Position:		
Net investment in capital assets	$ 25,060,136	$ 29,111,942
Restricted	10,540,469	7,128,748
Unrestricted	12,058,221	10,333,037
Total net position	$ 47,658,826	$ 46,573,727

See accompanying notes to financial statements.

UNIVERSITY AREA JOINT AUTHORITY

STATEMENTS OF REVENUES AND EXPENSES AND CHANGES IN NET POSITION

YEARS ENDED DECEMBER 31, 2025 AND 2024

	2025	2024
Operating Revenues:		
Revenue - sewer	$ 19,154,480	$ 17,827,813
Revenue - solids	24,893	44,603
Maintenance	116,954	106,245
Reimbursed fees	33,266	42,301
Revenue - beneficial reuse	27,268	21,842
Miscellaneous	34,989	43,662
Total operating revenues	19,391,850	18,086,466
Operating Expenses:		
Wastewater treatment plant:		
Laboratory	331,846	407,195
Physical plant	1,429,541	1,333,020
Industrial pre-treatment program	123,882	121,896
Beneficial reuse	1,094,071	1,033,871
Dewatering	299,355	509,824
Compost	168,063	457,063
Treatment operations	3,624,025	3,955,303
Total wastewater treatment plant	7,070,783	7,818,172
Collection:		
Inspection	535,699	541,934
Pump station	127,506	145,877
Maintenance	1,894,875	1,874,339
Total collection	2,558,080	2,562,150
Depreciation expense	3,678,443	5,195,896
General and administrative expenses	2,536,543	2,555,367
Total operating expenses	15,843,849	18,131,585
Net Operating Income (Loss)	3,548,001	(45,119)
Nonoperating Revenues (Expenses):		
Investment income (loss):		
Trustee fund accounts	1,705,303	1,548,589
Operating accounts	2,261	2,304
Gain (loss) on asset disposal	(32,198)	102,162
Interest expense:		
Bonds payable	(5,013,836)	(3,238,593)
Bond issue costs	(514,543)	(462,276)
Trustee fees	(15,650)	(16,800)
Total nonoperating revenues (expenses)	(3,868,663)	(2,064,614)
Income (Loss) Before Contribution Revenue	(320,662)	(2,109,733)
Contribution Revenue:		
Contributions:		
Developer	504,400	92,000
Permit and tapping fees	901,361	1,133,202
Total contribution revenue	1,405,761	1,225,202
Change in Net Position	1,085,099	(884,531)
Net Position:		
Beginning of year	46,573,727	47,458,258
End of year	$ 47,658,826	$ 46,573,727

See accompanying notes to financial statements.

UNIVERSITY AREA JOINT AUTHORITY

STATEMENTS OF CASH FLOWS

YEARS ENDED DECEMBER 31, 2025 AND 2024

	2025	2024
Cash Flows From Operating Activities:		
Receipts from customers and users	$ 16,408,065	$ 18,654,892
Payments to suppliers	(1,633,597)	(1,464,629)
Payments to employees	(6,238,014)	(6,246,149)
Payments for other operating expenses	(5,041,135)	(5,313,043)
Net cash provided by (used in) operating activities	3,495,319	5,631,071
Cash Flows From Capital and Related Financing Activities:		
Purchase/construction of capital assets	(43,785,459)	(25,943,937)
Contributions: permit and tapping fees	901,361	1,133,202
Increase (decrease) in escrow deposits	26,120	15,517
Proceeds from issuance of bonds	46,912,311	43,045,221
Bond issue costs	(514,543)	(462,276)
Principal paid on capital debt	(5,015,000)	(4,864,500)
Interest paid on capital debt	(4,793,506)	(3,103,075)
Net cash provided by (used in) capital and related financing activities	(6,268,716)	9,820,152
Cash Flows From Investing Activities:		
Interest received on trustee accounts	1,689,653	1,531,789
Gain (loss) on asset disposal	32,198	3,838
Interest on operating accounts	2,261	2,304
Net cash provided by (used in) investing activities	1,724,112	1,537,931
Net Increase (Decrease) in Cash and Cash Equivalents	(1,049,285)	16,989,154
Cash and Cash Equivalents:		
Beginning of year	36,246,867	19,257,713
End of year	$ 35,197,582	$ 36,246,867
Consists of:		
Cash and cash equivalents	$ 477,535	$ 288,988
Trustee funds - unrestricted	3,789,417	5,663,143
Trustee funds - restricted for debt service and operating reserves	10,540,469	7,128,748
Trustee funds - restricted for capital projects	20,390,161	23,165,988
	$ 35,197,582	$ 36,246,867
Reconciliation of Net Operating Income (Loss) to Net Cash Provided by (Used in) Operating Activities:		
Net operating income (loss)	$ 3,548,001	$ (45,119)
Adjustments to reconcile net operating income (loss) to net cash provided by (used in) operating activities:		
Depreciation	3,678,443	5,195,896
Change in:		
Accounts receivable	(239,075)	(146,833)
Due from State College Borough	(2,744,710)	715,259
Prepaid expenses	(469,532)	(403,750)
Compensated absences	(277,808)	315,618
Total adjustments	(52,682)	5,676,190
Net cash provided by (used in) operating activities	$ 3,495,319	$ 5,631,071
Non-Cash Investing, Capital, and Financing Activities:		
Contributions of developers' system	$ 504,400	$ 92,000

See accompanying notes to financial statements.

1. Summary of Significant Accounting Policies

The University Area Joint Authority (Authority) was formed in 1964 by the Townships of Patton, Ferguson, College, and Harris and was joined by the Borough of State College in 1967, all under the laws of the Commonwealth of Pennsylvania, pursuant to the Municipality Authorities Act of 1945 (Act), as amended. This Act was superseded in 2001 by the Pennsylvania Act 22 of 2001, under which the Authority now duly exists. The Authority was formed for the purpose of financing, constructing, and operating a regional wastewater treatment and disposal facility.

The Patton-Ferguson Joint Authority and College-Harris Joint Authority were formed in 1965 and 1967, respectively, to operate and maintain the sewage collection and transportation systems to the wastewater treatment and disposal facility operated by the Authority. In November 1997, the Authority unified the sewage collection and transportation systems and operations of the Patton-Ferguson Joint Authority and the College-Harris Joint Authority with the consent of the five municipalities.

The Authority is governed by a Board of ten members who are appointed for staggered five-year terms. Each of the five municipalities appoints two Board members. The Authority's activities are controlled by seventeen separate Trust Indentures dated between November 1, 1993 and November 1, 2017. The Authority was in compliance with all significant requirements of the Trust Indentures.

Measurement Focus and Basis of Accounting

The Authority accounts for its activities as an Enterprise Fund that is similar to those found in the private sector, where the determination of net income is necessary or useful to sound financial administration. The Authority's financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows.

Reporting Entity

The Borough of State College, College Township, Ferguson Township, Harris Township, and Patton Township appoint individuals to the governing Board of the Authority; however, the Authority is not financially accountable or fiscally dependent on the above-named entities. The Authority is a separate entity and has total budgetary approval authority. The Authority is not a component unit of any of the above entities.

Cash and Cash Equivalents

The Authority considers all highly liquid investments with original maturities of three months or less to be cash equivalents. For the purpose of the statements of cash flows, cash and cash equivalents include restricted cash and cash equivalents.

Accounts Receivable

Accounts receivable primarily consist of the fourth quarter unbilled sewage charges. There is no allowance for uncollectible accounts at December 31, 2025 and 2024, as all accounts are considered collectible.

Capital Assets

Capital assets are stated at historical cost, less accumulated depreciation. Developer contributions are recorded at acquisition value. Capital assets with initial costs that equal or exceed $10,000 and have estimated useful lives in excess of one year are recorded as capital assets. Depreciation is computed on the straight-line method based on the estimated useful lives of the related assets. Routine repairs and maintenance are expensed as incurred.

Accounts and Retainage Payable

Accounts payable primarily consist of retainage payable and other payables related to capital expenditures.

Prepaid

Prepaid expenses primarily consist of bond insurance costs incurred from the issuance of bonds.

Compensated Absences

The estimated amounts of vested vacation, personal leave, and sick benefits incurred during the year are included in employee benefits expenses. The estimated liability is reported as compensated absences in the accompanying statements of net position.

Deferred Outflows and Inflows of Resources

In addition to assets and liabilities, the statements of net position report a separate section for deferred outflows and inflows of resources. This represents a consumption of net position or acquisition of net position that applies to a future period(s) and so will *not* be recognized as an outflow or inflow of resources (expense or revenue) until then. The Authority has one item that qualifies for reporting in this category, the deferred charge on refunding of debt.

Revenue and Expenses

Operating revenues and expenses consist of those revenues and expenses that result from the ongoing principal operations of the Authority. Operating revenue represents user fees generated on the operation and maintenance of the regional wastewater treatment and disposal facility. Nonoperating revenue and expenses consist of all other revenue and expenses received by the Authority.

Bond Premiums and Discounts

Bond premiums and discounts are amortized over the life of the respective bond issue utilizing the straight-line method. Any unamortized portion of the bond issue premium or discount is reflected as an addition or reduction of the related bond payable.

Refunding Transactions

The excess of the reacquisition price over the net carrying amount of refunded debt is recorded as a deferred charge on refunding on the statements of net position and amortized over the shorter of the term of the refunding issue or refunded bonds.

Risk Management

The Authority maintains insurance coverage for risks of loss from tort actions, workers' compensation, employee life, unemployment, disability, and other potential claims arising from legal actions. There have been no significant reductions in insurance coverage during the years under audit. The insurance coverage is evaluated by the Authority on an annual basis. There are no liabilities for unpaid claims included in these financial statements.

Investments

Investments are recorded at fair value. The change in fair value of investments is recognized as an increase or decrease to investment assets and investment income.

The Authority categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted market prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

The Authority's trustee funds include investments in money markets and certificates of deposit.

Net Position

Accounting standards require the classification of net position into three components – net investment in capital assets; restricted; and unrestricted. These classifications are defined as follows:

- Net investment in capital assets - This component of net position consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt are also included in this component of net position. If there are significant unspent related debt proceeds or deferred inflows of resources at the end of the reporting period, the portion of the debt or deferred inflows of resources attributable to the unspent amount is not included in the calculation of net investment in capital assets. Instead, that portion of the debt or deferred inflow of resources is included in the same net position component (restricted or unrestricted) as the unspent amount.

- Restricted - This component of net position consists of restricted assets reduced by liabilities. Generally, a liability relates to restricted assets if the asset results from a resource flow that also results in the recognition of a liability or if the liability will be liquidated with the restricted assets reported. The Authority has restricted net position at December 31, 2025 and 2024 of $10,540,469 and $7,128,748,

respectively. These funds are restricted to be used for debt service and operating reserves.

- Unrestricted - This component of net position is the net amount of the assets, deferred outflows of resources and liabilities that are not included in the determination of net investment in capital assets or the restricted components of net position.

When an expense is incurred for purposes for which there are both restricted and unrestricted net position available, it is the Authority's policy to apply those expenses to restricted net position to the extent such are available and then to unrestricted net position.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, deferred inflows and outflows, and disclosure on contingent asset and liabilities at the date of the financial statements and revenues and expenses during the reporting period. Actual results could differ from those estimates, and such differences may be material.

Adopted Pronouncements

The Authority adopted Governmental Accounting Standards Board (GASB) Statement No. 102, *Certain Risk Disclosures*, for the year ended December 31, 2025. Adoption of this Statement did not have a significant impact on the Authority's financial statements for the current year.

Pending Pronouncements

GASB has issued statements that will become effective in future years including Statement Nos. 103 (Financial Reporting Model Improvements), 104 (Disclosure of Certain Capital Assets), and 105 (Subsequent Events). Management has not yet determined the impact of these statements on the financial statements.

2. Transactions with the Borough of State College

The Authority provides sewage treatment of wastewater for the Borough of State College. The amounts due from the Borough of State College at December 31, 2025 and 2024 and the treatment billings for the years then ended are summarized below. These billings represent approximately 30 percent of total operating revenues for the years ended December 31, 2025 and 2024.

	2025	2024
Amount due from Borough of State College	$ 5,377,483	$ 2,632,773
Treatment billings	$ 5,868,544	$ 5,387,205

The Authority and the Borough of State College are involved in litigation relating to the collection of certain wastewater treatment charges included in the amounts due from the Borough of State College at December 31, 2025 and 2024. Management, after evaluating the available information and consulting with legal counsel, believes it is probable that the Authority will ultimately collect the amounts recorded as receivable from the Borough of State College and, therefore, has not recorded an allowance for doubtful accounts for these balances. However, the timing of ultimate collection is not presently determinable.

3. Cash, Cash Equivalents, and Investments

Pennsylvania statutes provide for investment of governmental funds into certain authorized investment types including U.S. Treasury bills, other short-term U.S. and Pennsylvania government obligations, short-term commercial paper issued by a public corporation, banker's acceptances, insured or collateralized time deposits, and certificates of deposit. Statutes do not prescribe regulations related to demand deposits; however, they do allow pooling of governmental funds for investment purposes. The deposit and investment policy of the Authority adheres to state statutes and related trust indentures. There were no deposit or investment transactions during the year that were in violation of either the state statutes or the policy of the Authority.

The following is a description of the Authority's deposit and investment risks:

Custodial Credit Risk - Custodial credit risk is the risk that in the event of a bank failure, the Authority's deposits may not be returned to it. The Authority does not have a formal deposit policy for custodial credit risk. As of December 31, 2025, $413,788 of the Authority's bank balance of $663,788 was exposed to custodial credit risk, and as of December 31, 2024, $65,308 of the Authority's bank balance of $315,308 was exposed to custodial credit risk. These funds are collateralized in accordance with Act 72 of the Pennsylvania state legislature, which requires the institution to pool collateral for all governmental deposits and have the collateral held by an approved custodian in the institution's name. These deposits have carrying amounts of $465,833 and $277,761 as of December 31, 2025 and 2024, respectively.

In addition to the deposits noted above, included as cash and cash equivalents on the statements of net position are short-term investments of $11,702 and $11,227 at December 31, 2025 and 2024, respectively, invested in Pennsylvania Local Government Investment Trust (PLGIT).

The Authority's trustee accounts have a carrying amount and a fair value of $34,720,047 at December 31, 2025, and a carrying amount and a fair value of $35,957,879 at December 31, 2024. At December 31, 2025 and 2024, the entire balance of the trustee funds was invested in money market funds and certificates of deposit. Money market funds and certificates of deposit are classified in Level 1 of the fair value hierarchy.

Interest Rate Risk - The Authority does not have a formal investment policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates. The maturities of the money market and PLGIT investments are daily.

Credit Risk - The Authority has no formal investment policy that would limit its investment choices based on credit ratings by nationally recognized statistical rating organizations. As of December 31, 2025 and 2024, the Authority's investment in money markets and PLGIT were rated AA- and AAA by Standard & Poor's, respectively.

Concentration of Credit Risk – Management and the Board of Directors place no limit on the amount the Authority may invest in any one issuer.

4. Capital Assets

A summary of changes in capital assets for the year ended December 31, 2025 is as follows:

	January 1, 2025	Additions/ Transfers	Deletions/ Transfers	December 31, 2025
Capital Assets:				
Not being depreciated:				
Land	$ 3,711,928	$ -	$ -	$ 3,711,928
Construction in progress	38,301,985	38,885,523	(226,001)	76,961,507
Total not being depreciated	42,013,913	38,885,523	(226,001)	80,673,435
Being depreciated:				
Administrative	652,610	-	-	652,610
Solar equipment	-	4,715,000	-	4,715,000
Vehicles	3,886,872	-	(62,397)	3,824,475
Collection and treatment plant	193,992,765	987,772	(7,456,083)	187,524,454
Total being depreciated	198,532,247	5,702,772	(7,518,480)	196,716,539
Accumulated depreciation	(123,121,936)	(3,678,443)	7,504,048	(119,296,331)
Net being depreciated	75,410,311	2,024,329	(14,432)	77,420,208
Total capital assets, net of depreciation	$ 117,424,224	$ 40,909,852	$ (240,433)	$ 158,093,643

A summary of changes in capital assets for the year ended December 31, 2024 is as follows:

	January 1, 2024	Additions/ Transfers	Deletions/ Transfers	December 31, 2024
Capital Assets:				
Not being depreciated:				
Land	$ 3,711,928	$ -	$ -	$ 3,711,928
Construction in progress	7,704,936	30,611,267	(14,218)	38,301,985
Total not being depreciated	11,416,864	30,611,267	(14,218)	42,013,913
Being depreciated:				
Administrative	652,610	-	-	652,610
Solar equipment	-	-	-	-
Vehicles	4,080,789	133,678	(327,595)	3,886,872
Collection and treatment plant	193,630,687	362,078	-	193,992,765
Total being depreciated	198,364,086	495,756	(327,595)	198,532,247
Accumulated depreciation	(118,249,797)	(5,195,896)	323,757	(123,121,936)
Net being depreciated	80,114,289	(4,700,140)	(3,838)	75,410,311
Total capital assets, net of depreciation	$ 91,531,153	$ 25,911,127	$ (18,056)	$ 117,424,224

In February 2017, the Authority entered into a series of agreements with a third party to construct and operate a solar array and battery energy storage system. The third party constructed and owned the system. The Authority was responsible for operating, maintaining, and repairing the system. The agreements covered a 30-year term, with options for the Authority to purchase the system at the end of years 6 and 10 for the fair market value of the system as determined by an independent appraiser. In 2025, the Authority exercised the option to purchase the system for $4,715,000, thereby releasing all prior commitments under the agreements discussed previously. The system is capitalized as an administrative asset. The electricity produced by the system directly offsets electricity purchased by the Authority.

5. Long-Term Debt

In August 2017, the Authority issued $5,293,000 in 2017A Series Sewer Revenue Bonds, with interest rates ranging from 1.98% to 2.23% to currently refund the 2011A Series Sewer Revenue Bonds.

In October 2017, the Authority issued $20,680,000 in 2017B Series Sewer Revenue Bonds, with interest rates ranging from 3.00% to 5.00% to currently refund the 2014 Series Sewer Revenue Bonds. The deferred charge on refunding from this transaction was $4,113,728 and will be amortized through 2028. This deferred refunding charge is included as a deferred outflow of resources on the statements of net position.

In April 2018, the Authority issued $13,450,000 in 2018 Series Sewer Revenue Bonds, with interest rates ranging from 3.00% to 3.12% to fund various capital projects.

In February 2020, the Authority issued $9,675,000 in 2020 Series Sewer Revenue Bonds, with interest rates ranging from 1.05% to 4.00% to currently refund the 2015 Series Sewer Revenue Bonds.

In December 2020, the Authority issued $9,545,000 in 2020A Series Sewer Revenue Bonds, with an interest rate of 2.00% to fund various capital projects.

In February 2021, the Authority issued $8,850,000 in 2021 Series Sewer Revenue Bonds, with an interest rate of 3.00% to fund various capital projects.

In March 2021, the Authority issued $6,515,000 in 2021A Series Sewer Revenue Bonds, with interest rates ranging from 1.25% to 2.00% to currently refund the 2016 Series Sewer Revenue Bonds. The deferred charge on refunding from this transaction was $97,604 and will be amortized through 2028. This deferred refunding charge is included as a deferred outflow of resources on the statements of net position.

In March 2022, the Authority issued $9,000,000 in 2022 Series Sewer Revenue Bonds, with an interest rate of 2.04% to currently refund the 2017 Series Sewer Revenue Bonds.

In March 2024, the Authority issued $42,765,000 in 2024 Series Sewer Revenue Bonds, with an interest rate of 4.00%, as of year-end, to fund various capital projects.

In March 2025, the Authority issued $48,090,000 in 2025 Series Sewer Revenue Bonds, with an interest rate of 4.0% to fund various capital projects.

The bonds contain a provision that in the event of default, the Trustee may declare, upon the written request of holders of 25% or more in aggregate principal amount of the outstanding bonds, that outstanding principal of all bonds, if not due and payable, and any accrued interest shall be due and payable immediately.

A summary of changes in long-term debt for the year ended December 31, 2025 is as follows:

Long-Term Debt	Original Issue	Date of Final Maturity	Interest Rate	Balance January 1, 2025	Issued	Retired	Balance December 31, 2025
Revenue bonds:							
2017A	5,293,000	11/1/2026	1.98 - 2.23%	1,284,500	-	610,000	674,500
2017B	20,680,000	11/1/2028	3.00 - 5.00 %	6,990,000	-	3,105,000	3,885,000
2018	13,450,000	11/1/2032	3.00 - 3.13%	13,450,000	-	-	13,450,000
2020	9,675,000	11/1/2028	1.05 - 4.00%	7,920,000	-	725,000	7,195,000
2020A	9,545,000	11/1/2034	2.00%	9,545,000	-	-	9,545,000
2021	8,850,000	11/1/2035	3.00%	8,850,000	-	-	8,850,000
2021A	6,515,000	11/1/2028	1.25 - 2.00%	4,680,000	-	470,000	4,210,000
2022	9,000,000	10/1/2029	2.04%	8,905,000	-	105,000	8,800,000
2024	42,765,000	11/1/2049	4.00-5.00%	42,765,000	-	-	42,765,000
2025	48,090,000	11/1/2049	4.00%	-	48,090,000	-	48,090,000
Total long-term debt				$ 104,389,500	$ 48,090,000	$ 5,015,000	147,464,500
Less: current portion							(5,234,500)
Long-term portion							142,230,000
Plus: Unamortized bond premium							1,846,888
Less: Unamortized bond discount							(1,242,225)
Long-term notes and bonds payable, net							$ 142,834,663

A summary of changes in long-term debt for the year ended December 31, 2024 is as follows:

Long-Term Debt	Original Issue	Date of Final Maturity	Interest Rate	Balance January 1, 2024	Issued	Retired	Balance December 31, 2024
Revenue bonds:							
2015	9,995,000	11/1/2028	Variable	$ 315,000	$ -	$ 315,000	$ -
2017A	5,293,000	11/1/2026	1.98 - 2.23%	1,909,000	-	624,500	1,284,500
2017B	20,680,000	11/1/2028	3.00 - 5.00 %	9,960,000	-	2,970,000	6,990,000
2018	13,450,000	11/1/2032	3.00 - 3.13%	13,450,000	-	-	13,450,000
2020	9,675,000	11/1/2028	1.05 - 4.00%	8,305,000	-	385,000	7,920,000
2020A	9,545,000	11/1/2034	2.00%	9,545,000	-	-	9,545,000
2021	8,850,000	11/1/2035	3.00%	8,850,000	-	-	8,850,000
2021A	6,515,000	11/1/2028	1.25 - 2.00%	5,155,000	-	475,000	4,680,000
2022	9,000,000	10/1/2029	2.04%	9,000,000	-	95,000	8,905,000
2024	42,765,000	11/1/2049	4.00-5.00%	-	42,765,000	-	42,765,000
Total long-term debt				$ 66,489,000	$ 42,765,000	$ 4,864,500	104,389,500
Less: current portion							(5,015,000)
Long-term portion							99,374,500
Plus: Unamortized bond premium							2,373,680
Less: Unamortized bond discount							(129,098)
Long-term notes and bonds payable, net							$ 101,619,082

The annual debt service requirements to maturity on the long-term debt, including principal and interest at December 31, 2025 are as follows:

Year Ending December 31,	Principal	Interest	Total
2026	$ 5,234,500	$ 5,318,973	$ 10,553,473
2027	5,465,000	5,113,952	10,578,952
2028	5,575,000	5,001,552	10,576,552
2029	5,730,000	4,880,077	10,610,077
2030	5,875,000	4,736,827	10,611,827
2031-2035	31,965,000	21,224,559	53,189,559
2036-2040	25,760,000	16,103,635	41,863,635
2041-2045	31,605,000	10,257,632	41,862,632
2046-2049	30,255,000	3,235,521	33,490,521
Total	$ 147,464,500	$ 75,872,728	$ 223,337,228

6. Compensated Absences

Full-time permanent employees are granted vacation and personal leave benefits in varying amounts to specified maximums in accordance with the Authority's policy. Employees are entitled to all accrued vacation and personal leave balances at termination. Full-time permanent employees can accrue sick leave to specified maximums. Employees who retire from the Authority are entitled to a percentage of their accrued sick leave balance as cash payments or can convert their entitlement into extended healthcare coverage on a full-month basis.

Changes to the compensated absences liability were as follows during the year ended December 31, 2025:

Beginning Balance	Additions	Reductions	Ending Balance	Due Within One Year
$ 1,232,820	$ 214,041	$ 491,849	$ 955,012	$ 451,048

Changes to the compensated absences liability were as follows during the year ended December 31, 2024:

Beginning Balance	Additions	Reductions	Ending Balance	Due Within One Year
$ 917,202	$ 742,344	$ 426,726	$ 1,232,820	$ 470,082

7. Pension Plan

The Authority has a contributory defined contribution pension plan (plan) administered by ICMA Retirement Corporation covering all full-time employees with six months of continuous employment and who have attained 21 years of age. Employees become 50% vested after being with the plan for one year. The vesting percentage increases 5% per year until the fifth year. Employees are 80% vested after six years and fully vested after seven years. The Authority contributes 10% of the employee's base salary for management and non-union employees and 5% for union employees. Union employees are required to contribute 5% of their base salary. Effective July 1, 2022, employees are able to contribute an additional 2.5%. Management and non-union employees have no contribution requirements. Terms of the plan were established and may be amended by the Authority's Board of Directors. Employer contributions were $340,839 and $328,414 for the years ended December 31, 2025 and 2024, respectively.

8. Deferred Compensation Plan

The Authority offers its employees a deferred compensation plan (plan) administered by the ICMA Retirement Corporation and created in accordance with Internal Revenue Code Section 457. The plan, available to all Authority employees, permits them to defer a portion of their salary until future years. The deferred compensation is not available to employees until termination, retirement, death, or unforeseeable emergency.

As a result of legislative changes, all amounts of compensation deferred under the plan, all property and rights purchased with those amounts, and all income attributable to those amounts, property, or rights are (until paid or made available to the employee or other beneficiary) held in trust for the exclusive benefit of the participants and their beneficiaries, whereas, prior to these legislative changes, these amounts were solely the property rights of the Authority, subject only to the claims of the Authority's general creditors. As a result,

the deferred compensation investments are not reported in the Authority's financial statements. Employee contributions for the years ended December 31, 2025 and 2024 were $57,050 and $53,425, respectively

9. Agreement with Employees

The Authority is a party to a collective bargaining agreement with Council 83, American Federation of State, County, and Municipal Employees, AFL-CIO, under the provisions of Act 195 of the Pennsylvania Legislature. The agreement establishes rates of pay, hours of work, procedures for resolution of differences, and other conditions of employment. The agreement was renegotiated in 2022 and is effective from July 1, 2022 to June 30, 2026.

10. Construction Commitments

The Authority is committed to construction contracts for the biosolids plant upgrade and odor control capital projects. The remaining commitments as of December 31, 2025 totaled approximately $14.4 million.

SUPPLEMENTARY INFORMATION

UNIVERSITY AREA JOINT AUTHORITY

SUPPLEMENTARY SCHEDULE I
GENERAL AND ADMINISTRATIVE EXPENSES

YEARS ENDED DECEMBER 31, 2025 AND 2024

	2025	2024
Salaries and wages	$ 795,492	$ 763,551
Payroll taxes	81,880	73,572
Employee benefits	467,314	495,411
Supplies and postage	79,051	64,751
Contractual services	95,098	140,284
Repairs and maintenance	73,877	85,578
Utilities	128,316	160,807
Employee provisions	60,709	37,569
Legal and accounting	93,475	103,377
Insurance	395,712	367,637
Miscellaneous	265,619	262,830
	$ 2,536,543	$ 2,555,367

UNIVERSITY AREA JOINT AUTHORITY

SUPPLEMENTARY SCHEDULE II
COMPARATIVE ANALYSIS OF WASTEWATER TREATMENT PLANT EXPENSES

YEARS ENDED DECEMBER 31, 2025 AND 2024

	2025	2024
Laboratory:		
Salaries and wages	$ 219,238	$ 277,884
Payroll taxes	19,733	18,514
Employee benefits	53,801	54,879
Supplies	37,817	37,451
Repairs and maintenance	1,257	18,467
Subtotal	331,846	407,195
Physical Plant:		
Salaries and wages	534,992	556,505
Payroll taxes	43,964	41,690
Employee benefits	140,634	131,401
Supplies	82,599	69,392
Contractual services	20,611	43,945
Repairs and maintenance	606,741	490,087
Subtotal	1,429,541	1,333,020
Industrial Pre-treatment Program:		
Salaries and wages	93,823	89,641
Payroll taxes	7,216	6,946
Employee benefits	21,407	21,966
Contractual services	1,436	2,446
Repairs and maintenance	-	897
Subtotal	123,882	121,896
Beneficial Reuse:		
Salaries and wages	44,693	42,412
Payroll taxes	3,419	3,245
Employee benefits	11,998	11,908
Supplies	595,677	606,690
Utilities	125,042	128,048
Contractual services	92,257	82,416
Repairs and maintenance	220,985	159,152
Subtotal	1,094,071	1,033,871

(Continued)

UNIVERSITY AREA JOINT AUTHORITY

SUPPLEMENTARY SCHEDULE II
COMPARATIVE ANALYSIS OF WASTEWATER TREATMENT PLANT EXPENSES

YEARS ENDED DECEMBER 31, 2025 AND 2024
(Continued)

	2025	2024
Dewatering:		
Salaries and wages	63,603	210,591
Payroll taxes	7,523	13,093
Employee benefits	30,433	63,254
Supplies	65,516	65,222
Repairs and maintenance	75,443	99,461
Utilities	56,837	58,203
Subtotal	299,355	509,824
Compost:		
Salaries and wages	10,221	152,508
Payroll taxes	3,439	8,731
Employee benefits	12,067	31,211
Supplies	2,105	30,213
Repairs and maintenance	3,390	33,484
Utilities	136,716	199,189
Miscellaneous	125	1,727
Subtotal	168,063	457,063
Treatment Operations:		
Salaries and wages	896,675	1,008,237
Payroll taxes	71,770	74,622
Employee benefits	178,301	225,484
Supplies	748,149	566,046
Contractual services	303,775	962,195
Utilities	920,540	689,908
Miscellaneous	504,815	428,811
Subtotal	3,624,025	3,955,373
Total wastewater treatment plant expenses	$ 7,070,783	$ 7,818,242

(Concluded)

UNIVERSITY AREA JOINT AUTHORITY

SUPPLEMENTARY SCHEDULE III
COMPARATIVE ANALYSIS OF COLLECTION EXPENSES

YEARS ENDED DECEMBER 31, 2025 AND 2024

	2025	2024
Inspection:		
Salaries and wages	$ 386,863	$ 409,704
Payroll taxes	32,685	28,664
Employee benefits	97,861	91,695
Supplies	3,358	2,999
Repairs and maintenance	14,932	8,872
Subtotal	535,699	541,934
Pump Station:		
Supplies	2,207	1,805
Repairs and maintenance	42,021	73,195
Utilities	83,278	70,877
Subtotal	127,506	145,877
Maintenance:		
Salaries and wages	1,223,635	1,235,022
Payroll taxes	97,096	92,488
Employee benefits	308,430	326,938
Supplies	17,118	20,060
Repairs and maintenance	248,596	199,831
Subtotal	1,894,875	1,874,339
Total collection expenses	$ 2,558,080	$ 2,562,150

UNIVERSITY AREA JOINT AUTHORITY

SUPPLEMENTARY SCHEDULE IV
COMPARATIVE ANALYSIS OF TRUSTEE FUNDS

YEARS ENDED DECEMBER 31, 2025 AND 2024

	2025	2024
Trustee Funds - unrestricted:		
Revenue Fund	$ 2,616,672	$ 4,344,769
Bond Redemption and Improvement Fund	1,172,745	1,318,374
Total unrestricted funds	$ 3,789,417	$ 5,663,143
Trustee Funds - restricted for debt service operating reserve:		
Debt Service Reserve Fund	$ 9,557,705	$ 6,168,012
Debt Service Fund - 2015	241	241
Debt Service Fund - 2017A	317	314
Debt Service Fund - 2017B&C	827	823
Debt Service Fund - 2018	172	171
Debt Service Fund - 2020	6,548	6,542
Debt Service Fund - 2020	7	5
Debt Service Fund - 2021	8	7
Debt Service Fund - 2021	1,019	1,018
Operating Expense Reserve Fund	946,043	897,221
Debt Service Fund - 2024	15,963	6,549
Capitalized Interest Fund - 2024	1	47,845
Debt Service Fund - 2025	5,617	-
Capitalized Interest Fund - 2025	5,997	-
Total restricted for debt service	$ 10,540,465	$ 7,128,748
Trustee Funds - restricted for capital projects:		
Construction Fund - 2021	$ 964,314	$ 966,830
Construction Fund - 2024 Sludge Drying	118	19,090,064
Construction Fund - 2024 Solar	17,639	3,109,094
Construction Fund - 2025 Sludge Drying	19,408,090	-
Total restricted for capital projects	$ 20,390,161	$ 23,165,988

DCED-CLGS-04

Received by DCED: 01/01/0001
Approved by DCED:

Department of Community & Economic Development
Governor's Center for Local Government Services
Commonwealth Keystone Building
400 North Street, 4th Floor
Harrisburg, PA 17120-0225
Ph: 888-223-6837 | fax: 717-783-1402
RA-MuniStats@pa.gov

2025 ANNUAL REPORT OF MUNICIPAL AUTHORITIES AND NON-PROFITS

UNIVERSITY AREA JOINT AUTHORITY 141888

MUNICIPAL AUTHORITY INFORMATION

Information on file

Name:	UNIVERSITY AREA JOINT AUTHORITY
Address:	1576 SPRING VALLEY ROAD STATE COLLEGE, PA 16801
Phone:	(814) 238-5361
Fax:	
Contact Person:	BRENDA BENNINGHOFF
Title:	HUMAN RESOURCES DIRE
Email:	BRENDAB@UAJA.ORG
Year Authority Organized	1964
Year Authority Terminates	2051
Fiscal Year Ends (month/day):	12/31
Number of Employees	
Full Time Equivalent:	54
Part Time Equivalent:	0
Filing Status:	Active
Facility Type:	

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5/7/2026

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UNIVERSITY AREA JOINT AUTHORITY

AUTHORITY OFFICIALS LIST

President	MR. DAVID LAPINSKI
Address:	1576 SPRING VALLEY ROAD
	STATE COLLEGE, PA 16801
Phone:	(814) 238-5361
Fax:	
e-mail:	

Secretary	MR. MATT AUMAN
Address:	1576 SPRING VALLEY ROAD
	STATE COLLEGE, PA 16801
Phone:	(814) 238-5361
Fax:	
e-mail:	

Treasurer	MR. JEFFREY NUCCIARONE
Address:	1576 SPRING VALLEY ROAD
	STATE COLLEGE, PA 16801
Phone:	(814) 238-5361
Fax:	
e-mail:	

Solicitor	MILLER KISTLER CAMPBELL
Address:	720 S ATHERTON STREET
	STATE COLLEGE , PA 16801
Phone:	(814) 234-1500
Fax:	
e-mail:	

5/7/2026

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UNIVERSITY AREA JOINT AUTHORITY

GEOGRAPHICAL AREAS SERVED

Municipality Name	County
COLLEGE TWP	CENTRE
FERGUSON TWP	CENTRE
HARRIS TOWNSHIP	CENTRE
PATTON TWP	CENTRE
STATE COLLEGE BORO	CENTRE

5/7/2026

MaherDuessel

Independent Auditor's Report

Board Members
University Area Joint Authority
State College, Pennsylvania

Report on the Audit of the Financial Statements

Opinions

We have audited the Statement of Net Position, Statement of Revenues, Expenses, and Changes in Net Position, Statement of Fiduciary Net Position, Statement of Changes in Fiduciary Net Position, and Debt Statement – regulatory basis, as of and for the year ended December 31, 2025 included in the Annual Report of Municipal Authorities and Non-Profits (Schedules) of the University Area Joint Authority (Authority).

Unmodified Opinion on Regulatory Basis of Accounting

In our opinion, the Schedules referred to above present fairly, in all material respects, the regulatory basis financial position of the Authority as of December 31, 2025, and the regulatory results of its operations for the year then ended in accordance with the financial reporting provisions described in the instructions provided by Pennsylvania Department of Community and Economic Development (DCED).

Adverse Opinion on U.S. Generally Accepted Accounting Principles

In our opinion, because of the significance of the matter discussed in the "Basis for Adverse Opinion on U.S. Generally Accepted Accounting Principles" section of our report, the Schedules referred to above do not present fairly, in accordance with accounting principles generally accepted in the United States of America, the financial position of the Authority as of December 31,2025, and the results of its operations for the year then ended.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Authority and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Basis for Adverse Opinion on U.S. Generally Accepted Accounting Principles

To meet the financial reporting requirements of the Commonwealth of Pennsylvania, the Schedules are prepared by the Authority on the basis of the instructions provided by the DCED, which is a basis of accounting other than accounting principles generally accepted in the United States of America.

The effects on the Schedules of the variances between the regulatory basis of accounting described above and accounting principles generally accepted in the United States of America, although not reasonably determinable, are presumed to be material and pervasive.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of these Schedules in accordance with the financial reporting provisions as described in the instructions provided by the DCED to meet filing requirements in Pennsylvania. Management is also responsible for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of Schedules that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with generally accepted auditing standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with generally accepted auditing standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing

an opinion on the effectiveness of the Authority's internal control. Accordingly, no such opinion is expressed.

- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Authority's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Pittsburgh, Pennsylvania
DATE

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UNIVERSITY AREA JOINT AUTHORITY

STATEMENT OF NET POSITION
FOR THE FISCAL YEAR ENDING 2025

CURRENT ASSETS	
Cash and cash equivalents	4,266,952
Investments	
Receivables (net of allowance for uncollectibles)	3,454,886
Lease rental payments receivable (Financing authorities, only)	
Due from other governments	5,377,483
Inventories	
Prepaids	918,961
Restricted current assets:	
Cash or cash equivalents	
Investments	
Lease rental payments receivable (Financing authorities, only)	
Intergovernmental receivables	
Other current assets	
TOTAL CURRENT ASSETS	14,018,282

NON-CURRENT ASSETS	
Restricted non-current assets:	
Investments	30,930,630
Lease rental payments receivable (Financing authorities, only)	
Capital assets not being depreciated:	
Land	3,711,928
Construction in progress	76,961,507
Capital assets net of accumulated depreciation:	
Buildings and system	71,741,881
Improvements other than buildings	
Furnishings, machinery and equipment	5,678,327
Infrastructure	
Lease rental payments receivable (Financing authorities, only)	
Other non-current assets	
TOTAL NON-CURRENT ASSETS	189,024,273
TOTAL ASSETS	203,042,555

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DEFERRED OUTFLOWS OF RESOURCES	
Deferred amount of debt refundings	1,058,618
Deferrals related to pensions	
Other deferred outflows of resources	
TOTAL DEFERRED OUTFLOWS OF RESOURCES	1,058,618
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	204,101,173

CURRENT LIABILITIES	
Accounts payable	2,522,800
Accrued payroll and withholdings	
Accrued interest payable	886,329
Due to other governments	
Unearned revenue	
Funds held as fiduciary	
Debt due within one year	5,234,500
Other current liabilities	4,009,043
TOTAL CURRENT LIABILITIES	12,652,672

NON-CURRENT LIABILITIES	
Debt due in more than one year	142,834,663
Net pension liabilities	
Other non-current liabilities	955,012
TOTAL NON-CURRENT LIABILITIES	143,789,675
TOTAL LIABILITIES	156,442,347

DEFERRED INFLOWS OF RESOURCES	
Deferred amount on debt refundings	
Deferrals related to pensions	
Other deferred inflows of resources	
TOTAL DEFERRED INFLOWS OF RESOURCES	0
TOTAL LIABILITIES AND DEFERRED INFLOWS OF RESOURCES	156,442,347

NET POSITION	
Net investment in capital assets	25,060,136
Restricted	10,540,469
Unrestricted	12,058,221
TOTAL NET POSITION	47,658,826
TOTAL LIABILITIES AND DEFERRED INFLOWS OF RESOURCES AND NET POSITION	204,101,173

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UNIVERSITY AREA JOINT AUTHORITY

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STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION FOR THE FISCAL YEAR ENDING 2025

SEWER OPERATING REVENUES	
Charges for service	19,206,641
Lease rental income (Financing authorities, only)	
Operating grants:	
Federal	
State	
Local	
Other	
Contributions	
Interest income	
Assessment revenue*	
Payments in lieu of assessments*	
Program income*	
Other operating revenue	185,209
TOTAL SEWER OPERATING REVENUES	19,391,850

SEWER OPERATING EXPENSES	
Administrative	2,536,543
Contracted services	418,079
Personnel services	4,615,520
Supplies and materials	1,554,546
Repairs and maintenance	1,213,365
Utilities	1,322,413
Other services and charges	
Depreciation and amortization	3,678,443
Fundraising*	
Program services*	
Other operating expenses	504,940
TOTAL SEWER OPERATING EXPENSES	15,843,849
SEWER OPERATING INCOME (LOSS)	3,548,001

SEWER NONOPERATING REVENUES / (EXPENSES)	
Nonoperating grants:	
Federal	
State	

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Local	DRAFT
Other	
Investment earnings / (losses)	1,707,564
Interest expense	(5,013,836)
Gain / (loss) on sale of assets	(32,198)
Other financing sources / (uses)	(514,543)
Other nonoperating revenues	
Other nonoperating (expenses)	(15,650)
Debt service principal and interest (expense)**	
TOTAL SEWER NONOPERATING REVENUES (EXPENSES)	(3,868,663)

CAPITAL CONTRIBUTIONS	1,405,761
CHANGE IN NET POSITION	1,085,099
NET POSITION - BEGINNING OF YEAR	46,573,727
PRIOR PERIOD ADJUSTMENT	
SEWER NET POSITION - END OF YEAR	47,658,826

*Business/Neighborhood Improvement Districts
**see the Authorities and Non-Profits Annual Financial Report Tip Sheet available from your Start Page.

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UNIVERSITY AREA JOINT AUTHORITY

STATEMENT OF FIDUCIARY NET POSITION
FOR THE FISCAL YEAR ENDING 2025

ASSETS		
	Trust Funds	**Custodial Funds**
Cash and cash equivalents		
Receivables		
Investments, at fair value		
Restricted assets:		
Temporarily restricted:		
Cash, or cash equivalents		
Investments		
Intergovernmental receivables		
Permanently restricted:		
Investments		
Other assets		
TOTAL ASSETS	0	0

DEFERRED OUTFLOWS OF RESOURCES		
	Trust Funds	**Custodial Funds**
Other deferred outflows of resources		
TOTAL DEFERRED OUTFLOWS OF RESOURCES	0	0
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	0	0

LIABILITIES		
	Trust Funds	**Custodial Funds**
Accounts payable and other current liabilities		
Due to other governments		
Unearned revenue		
Debt due within one year		
Other liabilities		
TOTAL LIABILITIES	0	0

DEFERRED INFLOWS OF RESOURCES		
	Trust Funds	**Custodial Funds**
Other deferred inflows of resources		
TOTAL DEFERRED INFLOWS OF RESOURCES	0	0
TOTAL LIABILITIES AND DEFERRED INFLOWS OF RESOURCES	0	0

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NET POSITION		
	Trust Funds	Custodial Funds
Assets held in trust for pension/other postemployment benefits		
Other		
TOTAL NET POSITION	0	0
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION	0	0

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UNIVERSITY AREA JOINT AUTHORITY

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE FISCAL YEAR ENDING 2025

ADDITIONS		
Contributions		
	Trust Funds	**Custodial Funds**
Employer		
Plan members		
Private donations		
Other		
TOTAL CONTRIBUTIONS	0	0
Investment Earnings		
	Trust Funds	**Custodial Funds**
Interest		
Net increase / (decrease) in the fair value of investments		
Other		
TOTAL INVESTMENT EARNINGS	0	0
	Trust Funds	**Custodial Funds**
Less investment expenses		
TOTAL ADDITIONS	0	0
DEDUCTIONS		
	Trust Funds	**Custodial Funds**
Benefits		
Administrative expenses		
Other		
TOTAL DEDUCTIONS	0	0
NET POSITION		
	Trust Funds	**Custodial Funds**
CHANGE IN NET POSITION	0	0
NET POSITION - BEGINNING OF YEAR	0	0
PRIOR PERIOD ADJUSTMENT		
NET POSITION - END OF YEAR	0	0

5/7/2026

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UNIVERSITY AREA JOINT AUTHORITY

DEBT STATEMENT
FISCAL YEAR ENDING 2025

Purpose	Issuance Type	Issue Year (YYYY)	Maturity Year (YYYY)	Original Amount of Issue	Outstanding Beginning of Year	Principal Incurred This Year	Principal Paid This Year	Current Year Accretion on Compound Interest Bonds	Outstanding at Year End
Revenue Bonds and Notes									
Series of 2017A	Bond	2017	2026	5,293,000	1,284,500	0	610,000	0	$674,500
Series of 2017B	Bond	2017	2028	20,680,000	6,990,000	0	3,105,000	0	$3,885,000
Series of 2018	Bond	2018	2032	13,450,000	13,450,000	0	0	0	$13,450,000
Series of 2020	Bond	2020	2028	9,675,000	7,920,000	0	725,000	0	$7,195,000
Series of 2020A	Bond	2020	2034	9,545,000	9,545,000	0	0	0	$9,545,000
Series of 2021	Bond	2021	2035	8,850,000	8,850,000	0	0	0	$8,850,000
Series of 2021A	Bond	2021	2028	6,515,000	4,680,000	0	470,000	0	$4,210,000
Series of 2022	Bond	2022	2028	9,000,000	8,905,000	0	105,000	0	$8,800,000
Series of 2024	Bond	2024	2049	42,765,000	42,765,000	0	0	0	$42,765,000
Series of 2025	Bond	2025	2049	48,090,000	0	48,090,000	0	0	$48,090,000
					Total Bonds and Notes Outstanding				$147,464,500
					Capitalized Lease Obligations				$0
					Plus (Less) Unamortized Premium (Discount)				604,663
					NET DEBT				$148,069,163

5/7/2026

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SIGNATURE AND VERIFICATION

I certify that the foregoing information is correct and complete for the 2025 municipal Authority's fiscal year.

Name: **Title:**

Phone:

5/7/2026

MaherDuessel

Independent Auditor's Report on Summary Financial Statements

Board Members
University Area Joint Authority
State College, Pennsylvania

Opinion

The summary financial statements of University Area Joint Authority (Authority) as of and for the year ended December 31, 2025, are derived from the audited Statement of Net Position, the Statement of Revenues, Expenses, and Changes in Net Position, Statement of Fiduciary Net Position, Statement of Changes in Fiduciary Net Position and Debt Statement – regulatory basis included in the 2025 Annual Report of Municipal Authorities and Non-Profits (Schedules) of the Authority. We expressed an unmodified audit opinion on the regulatory basis of accounting on those audited Schedules in our report dated May 30, 2025.

In our opinion, the accompanying summary financial statements of the Authority as of and for the year ended December 31, 2025 referred to above are consistent, in all material respects, with the audited Schedules from which they have been derived, on the accounting practices and procedures prescribed or permitted by the Pennsylvania Department of Community and Economic Development (regulatory basis).

Summary Financial Statements

The summary financial statements do not contain all the disclosures and schedules required by the regulatory basis. Reading the summary financial statements and the auditor's report hereon, therefore, is not a substitute for reading the audited Schedules and the auditor's report thereon. The summary financial statements and the audited Schedules do not reflect the effects of events that occurred subsequent to the date of our report on the audited Schedules.

Responsibility of Management for the Summary Financial Statements

Management is responsible for the preparation of the summary financial statements on the regulatory basis of accounting as described above.

Auditor's Responsibility

Our responsibility is to express an opinion on whether the summary financial statements are consistent, in all material respects, with the audited Schedules based on our procedures, which were conducted in accordance with auditing standards generally accepted in the United States of America. The procedures consisted principally of comparing the summary financial statements with the related information in the audited Schedules from which the summary financial statements have been derived and evaluating whether the summary financial statements are prepared in accordance with the regulatory basis of accounting. We did not perform any audit procedures regarding the audited Schedules after the date of our report on those Schedules.

Pittsburgh, Pennsylvania
May 30, 2025

LEGAL ADVERTISEMENT

UNIVERSITY AREA JOINT AUTHORITY

SUMMARY FINANCIAL INFORMATION
DERIVED FROM THE 2025 ANNUAL REPORT OF MUNICIPAL AUTHORITIES AND NON-PROFITS (DCED-CLGS-04)

Published in accordance with Section 8 of the Pennsylvania Municipality Authorities Act of 1945, as amended.

SUMMARY STATEMENT OF NET POSITION

DECEMBER 31, 2025

Current Assets	$	14,018,282
Non-Current Assets		189,024,273
Total Assets		203,042,555
Deferred Outflows of Resources		1,058,618
Total Assets and Deferred Outflows of Resources	$	204,101,173
Current Liabilities	$	12,652,672
Non-Current Liabilities		143,789,675
Total Liabilities		156,442,347
Total Liabilities and Deferred Inflows of Resources		156,442,347
Net Position:		
Net investment in capital assets		25,060,136
Restricted		10,540,469
Unrestricted		12,058,221
Total Net Position		47,658,826
Total Liabilities and Deferred Inflows of Resources and Net Position	$	204,101,173

SUMMARY STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

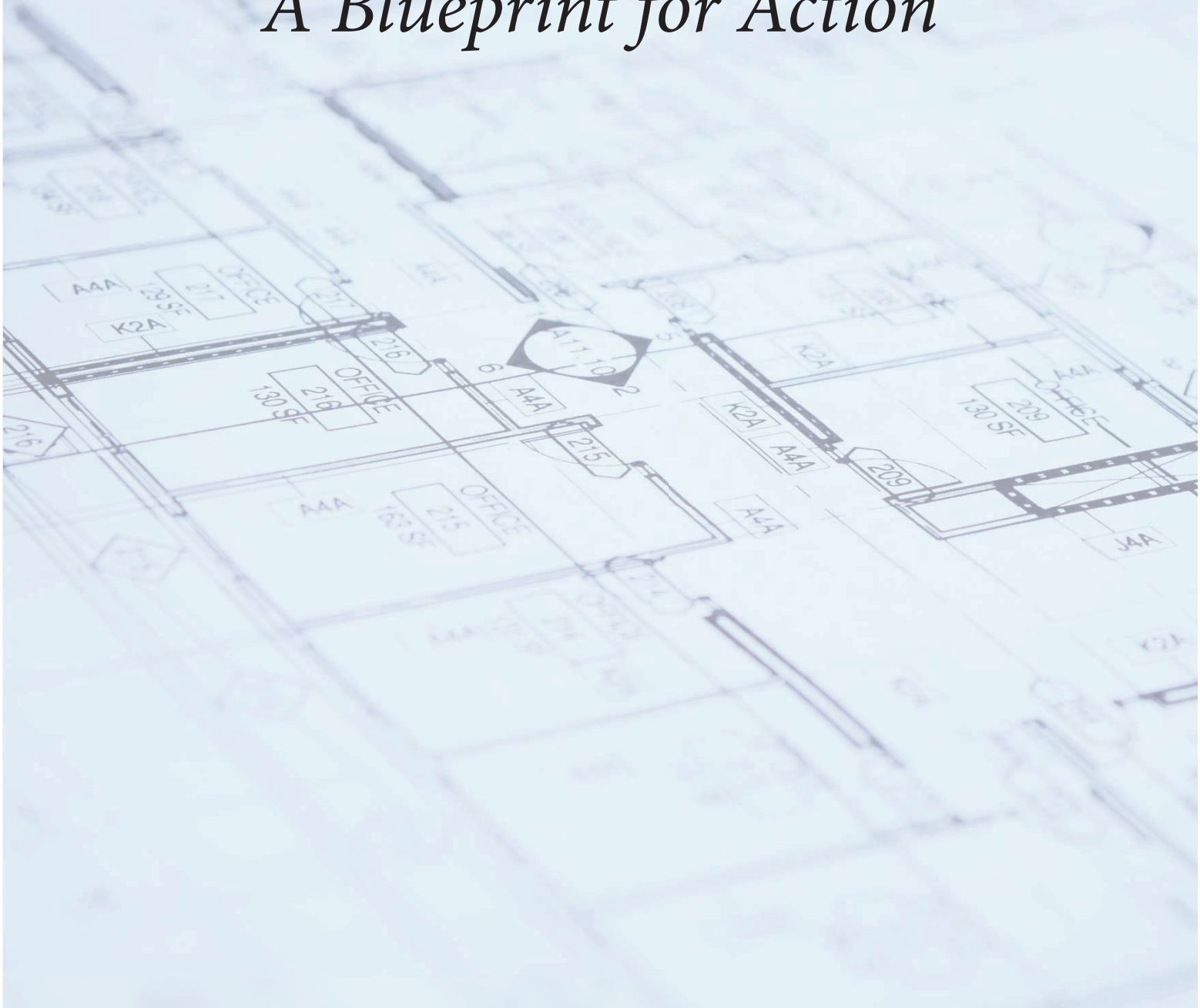
YEAR ENDED DECEMBER 31, 2025

Operating Revenues	$	19,391,850
Operating Expenses		15,843,849
Operating Income (Loss)		3,548,001
Nonoperating Revenues (Expenses)		(3,868,663)
Capital Contributions		1,405,761
Change in Net Position		1,085,099
Net Position:		
Beginning of year		46,573,727
End of year	$	47,658,826

Complete copies of the annual audited financial statements of the Authority are available for examination at the Authority Office.

The Water Resources Utility of the Future:

A Blueprint for Action



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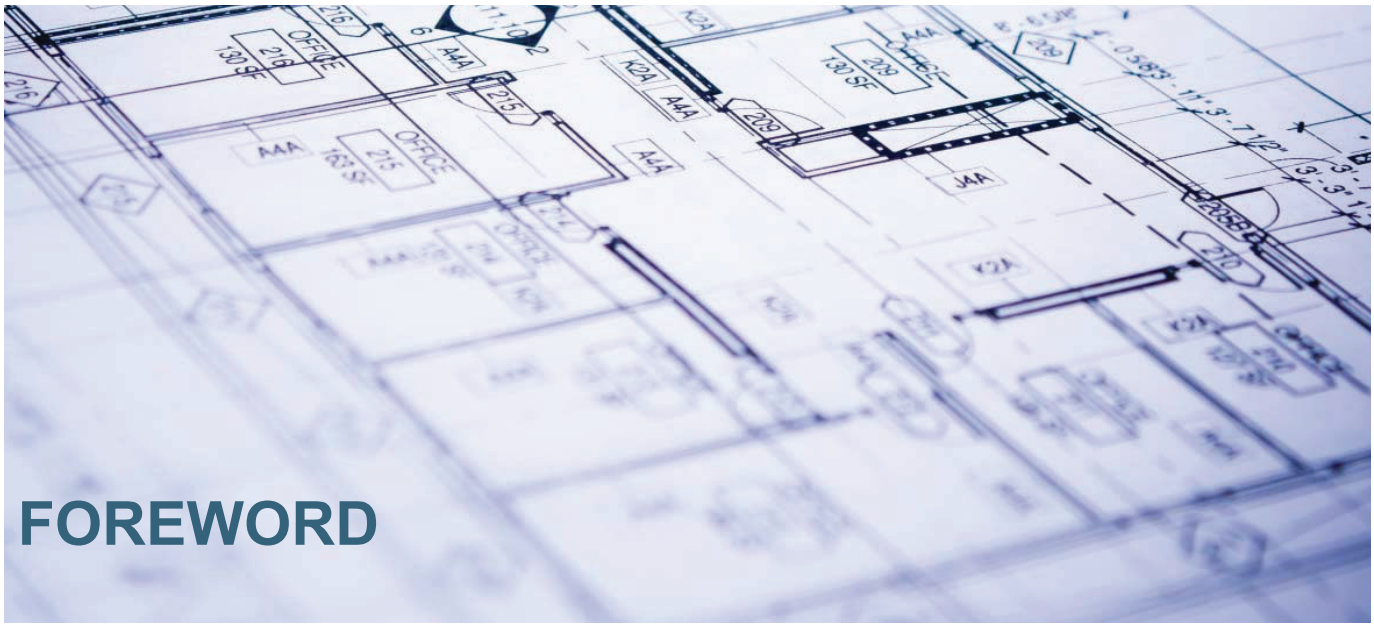

FOREWORD

The National Association of Clean Water Agencies (NACWA), the Water Environment Research Foundation (WERF) and the Water Environment Federation (WEF) are pleased to release the *Water Resources Utility of the Future . . . Blueprint for Action*. Work on this document began in earnest in September 2012 and has been shepherded along by the strong efforts of a joint Steering Committee made up of three representatives from each of the three organizations as well as by a diverse Task Force of 49 experts representing a broad cross-section from the three organizations' memberships. The Steering Committee ensured the *Blueprint* remained both targeted and comprehensive while the Task Force provided data, input, editing and insight throughout the drafting process.

This *Blueprint* was placed on a fast-track for finalization to ensure that Utility of the Future (UOTF) issues are front and center as the 113th Congress and incoming Administration develop their environmental priorities. The audience for this *Blueprint,* however, is broader than just federal policy-makers and includes local utility managers, private sector interests, state and local governments, and many others within the clean water, drinking water, energy and agricultural communities.

Our three organizations have different missions and strengths - these include advocacy, technical input, outreach/communications, scientific research, data collection and media relations. Each organization will cull from this document to determine which particular UOTF priorities to advance. Wherever possible, however, the three organizations will work together to advance shared objectives and will seek to encourage the array of organizations that make up the clean water sector to review this document closely and work to advance the UOTF objectives outlined in the *Blueprint* as well.

It is critical to understand that the *Blueprint* is a living document and that new ideas under the UOTF umbrella will continue to be added. This document represents an opening salvo in the effort to define and tie together a diverse realm of resource recovery activities and innovative approaches, many of which were never contemplated, and likely could never have been foreseen, 40 years ago when the Clean Water Act was enacted.

This project was advanced because a group of industry leaders arrived at a shared realization that the challenges (and opportunities) faced by wastewater agencies are unprecedented and that some of the paradigms

that have been in place for decades are changing to meet these challenges. This *Blueprint* underscores the need for the clean water sector to work together to shape the landscape of clean water going forward. It also highlights the type of collaboration that is needed to ensure a sustainable future that minimizes waste, maximizes resources, protects the ratepayer, improves the community, and embraces innovation in an unprecedented manner.

The joint Steering Committee and Task Force that did the hard work to make this *Blueprint* possible constitutes a model that is now in place not only for further joint efforts under the UOTF banner but potentially for other efforts that can advance the clean water sector's lofty objectives. We sincerely hope you find this document as fascinating and useful to read as our organizations did creating it!

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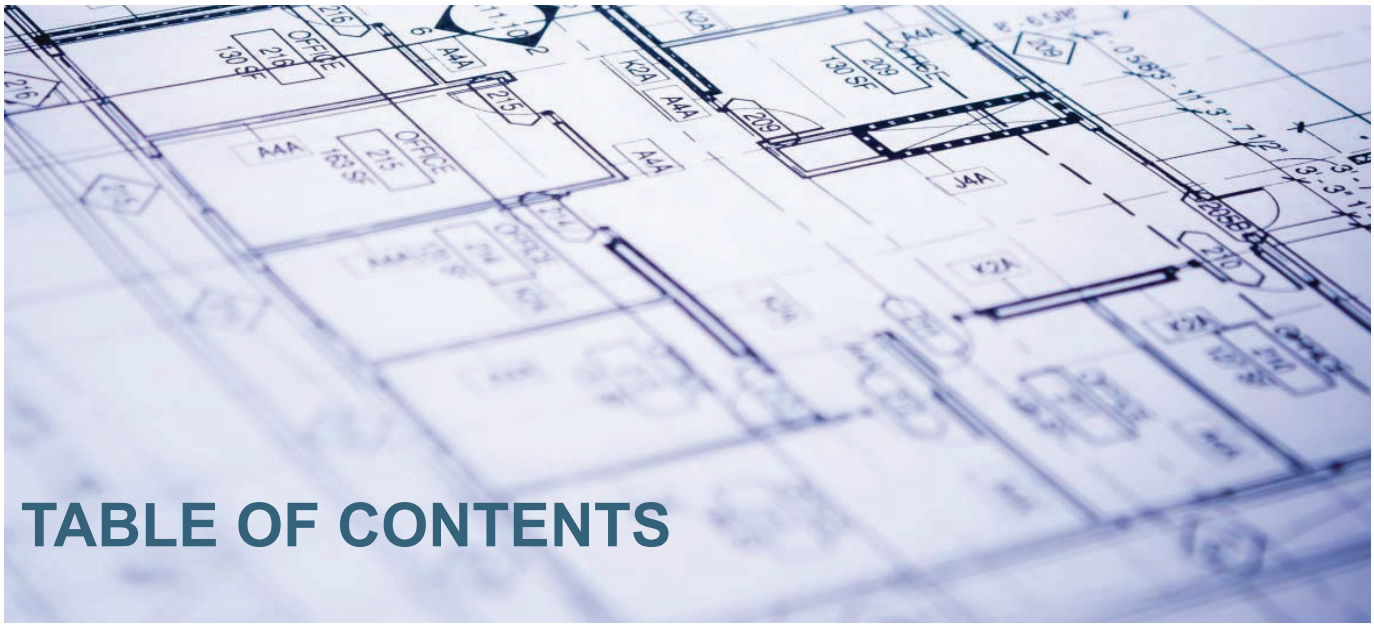

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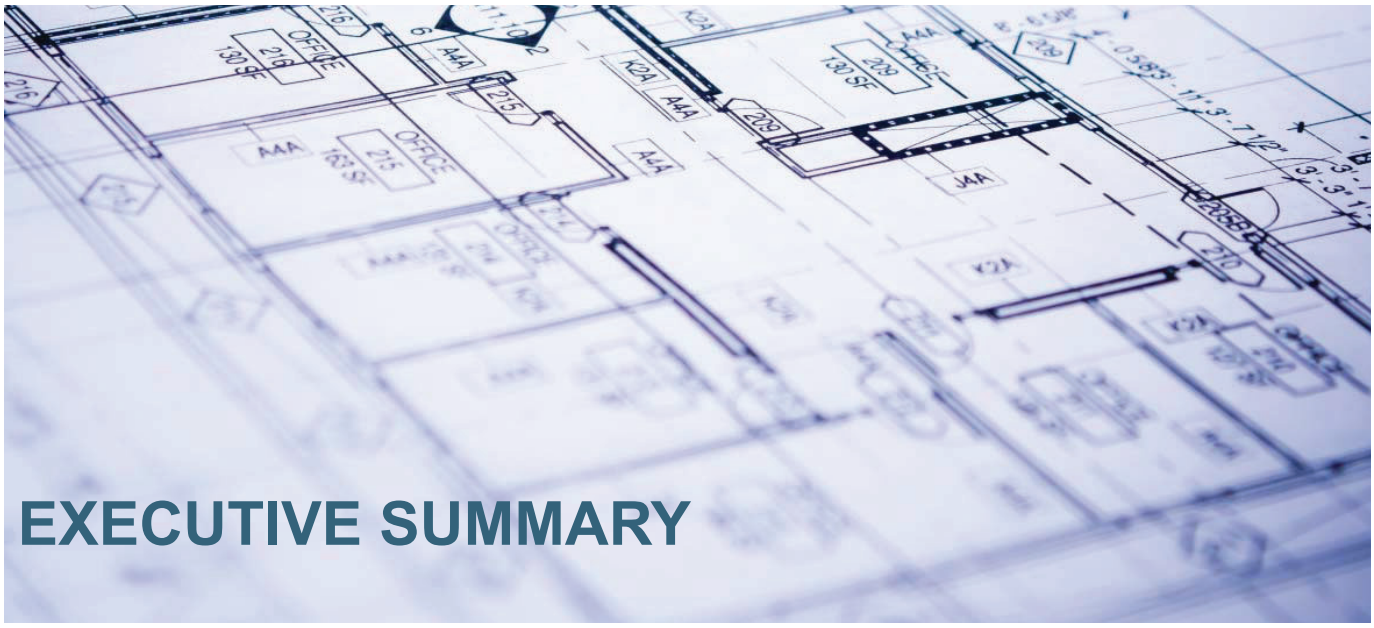


EXECUTIVE SUMMARY

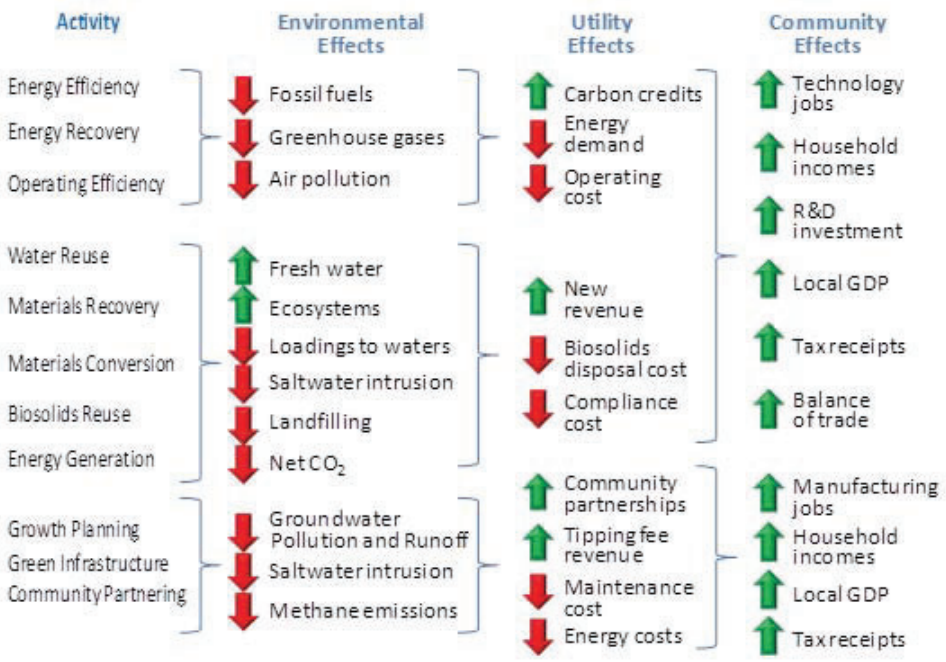
The clean water paradigm in the US is changing. The Water Resources Utility of the Future (UOTF) will transform the way traditional wastewater utilities view themselves and manage their operations. They also will transform their relationships with their communities and their contributions to local economies. This *Blueprint* presents the clean water industry's vision for the future as well as a series of actions that will help deliver our vision.

Today's utilities have evolved and matured over decades. Originally technical engineering entities, utility managers now embrace sophisticated management approaches and have developed innovative finance capabilities. These institutions have accomplished many of their goals — they are operationally efficient collectors and managers of household and industrial wastewaters and protectors of the quality of the nation's waterways. In recognition of these achievements, these utilities are increasingly renaming themselves "Water Resources Recovery Facilities" or "Clean Water Agencies."

The most progressive of today's clean water agencies are defining the UOTF. Instead of solely collecting and transporting wastewaters as far downstream as possible to central treatment plants where wastes are cleansed to meet permit limits prior to discharge to waterways, the UOTF transforms itself into a manager of valuable resources, a partner in local economic development, and a member of the watershed community seeking to deliver maximum environmental benefits at the least cost to society. It does this by reclaiming and reusing water, extracting and finding commercial uses for nutrients and other constituents, capturing waste heat and latent energy in biosolids and liquid streams, generating renewable energy using its land and other horizontal assets, and using green infrastructure to manage stormwater but also to improve urban quality of life more broadly.

These actions benefit the utility in the form of reduced costs and increased revenues. But they also deliver environmental, economic, and social benefits both locally and nationally:

Because we have examples of these sorts of innovations and outcomes, it is tempting to conclude that no further action is needed. Indeed, there are signs that the market for innovation in the clean water sector is beginning to bear fruit after many years of trial and error. But, resistance to change is strong, reinforced by



regulatory pressures, strained utility budgets, political reluctance to raise rates, customer confusion about the benefits of innovation, skyrocketing demands for capital competing for every dollar, risk and regret associated with technology failure, and venture capital looking elsewhere for faster and safer returns.

This *Blueprint for Action* examines these barriers, suggests incentives for innovation, and compiles a series of actions that could change the dynamics of this industry. It asks the US Congress to take a major role legislatively to assure that the Clean Water Act and other authorizing statutes fully support public and private enterprises across the clean water industry as they make the transition to the UOTF. Some actions call for legislative or regulatory changes to sanction watershed-based solutions to the nation's biggest water quality challenges. These would enable all sources of water quality contaminants to work together on socially cost-effective, market-based solutions while respecting the regulatory framework that has served us well for decades. Other actions call for modest changes to encourage water reuse and water conservation where it is feasible, needed, and cost-effective and for similarly incremental changes to enable clean water agencies to fully recover waste heat and energy and to produce clean, renewable energy at their facilities.

Other actions address financial and risk allocation conventions: focusing disparate federal financial support programs on UOTF objectives; maximizing efficient water use and reuse for new government buildings where it is environmentally and economically feasible to do so; stimulating the pace of technology innovation with a new advanced research and development program for clean water; and implementing pooled risk-sharing strategies and reciprocity for technology approval across the 50 states, both aimed at boosting adoption rates for new technologies.

Still others call for institutional or programmatic changes that for the most part, the clean water sector itself can implement working more closely with other municipal leadership and in some cases, state and/or federal regulators. Stronger support for Green Infrastructure from within the sector could help go beyond cost-effective stormwater control to frame a broader conversation about fundamental urban design. New models for integrated watershed planning would engage the public, civic leadership, drinking water utilities, and infrastructure

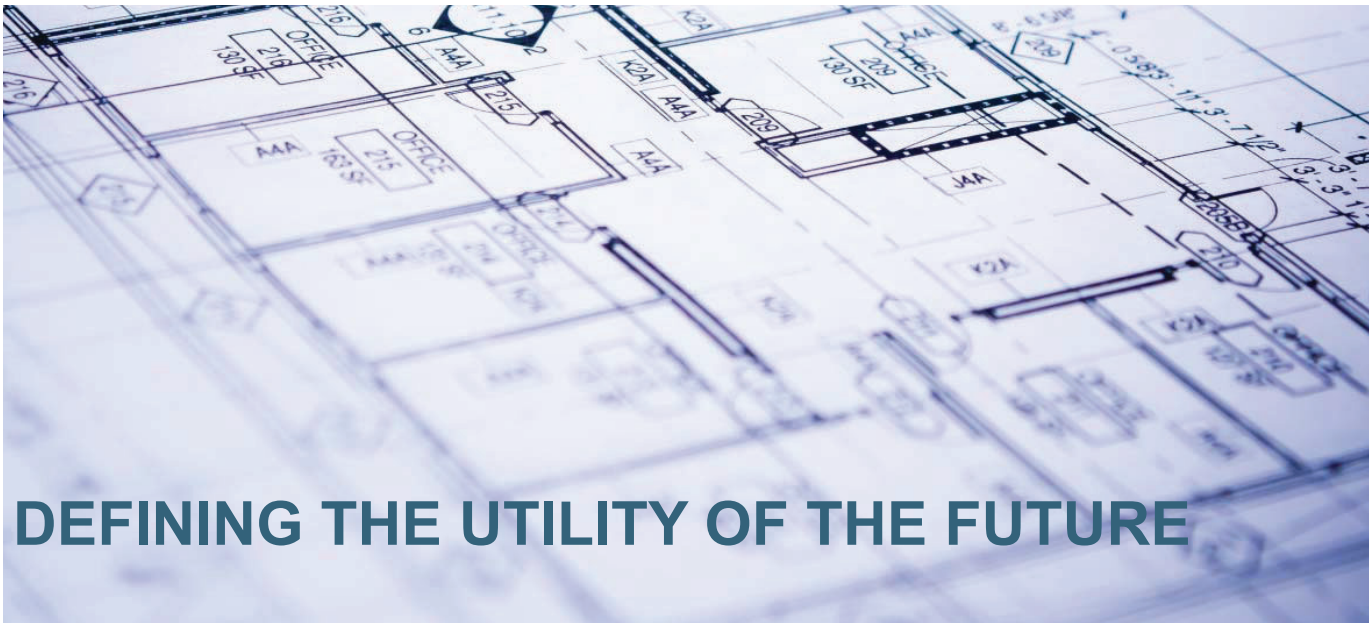
professionals to make better decisions.

Finally, the *Blueprint* makes a strong case that clean water agencies must continue to strengthen their institutions though productivity improvement processes/decision support tools such as Lean, Six Sigma, and sustainability-driven environmental management systems. The UOTF will increasingly use social media and smart technology to interact with customers and deliver services more efficiently. It will standardize operator certification to create a better trained and more mobile workforce. These approaches help ensure that the sector performs at peak levels so that external resources will have the greatest impact.

There should be little doubt that all of these changes to the status quo can have profound results. But the world around us will change even as we change our own sector. This *Blueprint*, therefore, also calls for bold, transformational thinking and cooperation in our advocacy, in research and development, and in education and outreach efforts. To shape the future, the *Blueprint* calls for creation of a Congressional caucus where water sector experts can collaborate with legislators to help drive UOTF initiatives and craft a 21st Century Watershed Act that builds on 40 years of Clean Water Act achievements but embraces UOTF initiatives more fully. As well, the *Blueprint* calls for an intergovernmental solution to improve the resilience of our infrastructure and our communities in response to extreme weather events like Hurricanes Sandy, Irene, or Katrina. It asks professional organizations that represent the clean water industry to work together to create the "Industry of the Future," notably, by compiling a knowledge base of UOTF achievements and by working with the Environmental Protection Agency (EPA),other federal agencies, and the US Congress to implement key elements of this *Blueprint*. And, it calls on the states to develop or support water markets that address long- and short-term shortages in the face of drought.

At this early stage, we cannot fully envision the limits to this new paradigm. But, we do know that each clean water agency will take a somewhat different path from handlers of wastewater to managers of sustainable resources; from regulated entities seeking permit compliance to watershed-scale environmental leaders seeking least-cost/highest return environmental and social solutions; from engineers designing concrete and steel treatment works to regional planners designing and building weather-resilient, green communities; from isolated public service units to integrated members of economically thriving local economies.

This *Blueprint for Action* defines tangible steps — actions we can take as a nation to realize our vision.



DEFINING THE UTILITY OF THE FUTURE

Evolution of Today's Clean Water Utility

Urban sanitation in the US has evolved from the 18th century norm of dumping human waste in the streets, through the era of sewage collection but little treatment from the mid-1800s through the early-1900s, to early treatment efforts of the early to mid-1900s, to the Clean Water Act era of federal intervention requiring secondary or greater treatment following the Act's passage in 1972. According to a recent poll of 11,341 readers conducted by the British Medical Journal, the advent of modern sanitation — collection and treatment of human wastewater prior to discharge — was the single most important public health advance of the last two centuries.[1]

The institutions that managed this transition have similarly evolved. In the very early years, sewer companies were nearly all owned and operated privately. As cities realized that modern sanitation held the key to a healthy population and economic growth, governments stepped in to expand collection networks. City public works departments that added rudimentary treatment to help clean up America's waterways from raw sewage discharge eventually became city sewer departments. Over the first couple of decades following Clean Water Act mandates for both greatly enhanced treatment and increasing financial sophistication, many city sewer agencies transitioned into public, but generally larger, regional and often independent authorities with broad technical, financial, legal, and management mandates. Not surprisingly, utility leadership diversified to include lawyers, economists, scientists, and management experts as well as engineers.

Today, America's urban clean water agencies are among the most sophisticated and effective utility organizations in the world. They deliver services to more than 90 percent of the US population; their operations affect nearly every river, stream, lake, estuary, and coastal waterway in the US; they manage more than $500 billion in net depreciated assets; they finance about $25 billion a year in capital investments; they manage a combined budget of more than $55 billion a year.[2] They remove more than 90 percent of organic inputs, an estimated 55 percent of nutrients, and nearly all harmful bacteria.[3] Environmental outcomes are equally impressive — according to EPA and state analyses, municipal wastewater discharges account for less than 10% of remaining water quality impairment of the nation's rivers, streams, lakes, reservoirs, and coastal shoreline and only about 30% of impaired estuaries.[4]

The public health and environment-based model of the "traditional" wastewater treatment utility that evolved over the last 150 years has had as its principal objectives, to collect and transport human and industrial wastewater quickly and as far downstream as possible to central treatment works that could purify it sufficiently and cost-effectively so that when discharged, receiving waters would meet applicable environmental standards.

Defining the Utility of the Future: A New Model Is Emerging

While traditional public health and environmental protection will always be central, the model for the utility of the future (UOTF) is evolving in new directions. It contemplates a new business approach where instead of simply collecting, treating, and disposing of municipal and industrial wastewater, the UOTF recognizes that its inputs are valuable resources. As such, its objectives are to separate, extract, reuse, or convert valuable water, energy and commodities from wastewater while using utility assets in innovative ways to reduce costs, increase revenues, and strengthen the local economy. The UOTF also seeks to engage more fully with others that share the water resource through watershed-based approaches, innovative partnerships and adaptive management techniques to ensure that actions maximize environmental benefits.

This is no longer an aspiration. With the help of technology developers, innovative US clean water agencies are beginning to take these steps today.

A Model of the Wastewater Utility of the Future

Motivation	Activity	Innovation
Financial Strengthening (Increased Revenues, Reduced Costs)	Water Reuse	• Industrial Cooling, Recharge, Landscape, Golf Course Irrigation
	Materials Recovery Materials Conversion	• NH_4, P Compounds, N Compounds, Metals • Bioplastics, Pyrolysis Fuel Oil, Algal Biomass, Solid Fuels, Fertilizers
	Biosolids Reuse	• Liquid/Solid Fertilizer
	Energy Generation	• Photovoltaics, Wind Turbines
	Energy Recovery	• Methane, Hydrogen, Heat Recovery
	Operating Efficiency	• Automation and Smart Operations, Asset Management, Sourcing
Environmental Sustainability	Watershed Processes	• Alternatives to Point Source Controls
	Energy Efficiency	• Energy Efficiency Equipment & Networks
	Green Infrastructure Infiltration/Inflow Control	• Green Roofs, Urban Parks, Porous Pavement, Leak Detection & Repair
Social and Community Well-Being	Growth Planning Green Infrastructure Infiltration/Inflow Control	• Sectoral Expansion, Targeted Upgrades, Managed Package Plants • Urban Runoff Controls
	Community Partnering	• Biowaste Conversion To Methane

The nation's clean water agencies are becoming more energy and operationally efficient, recovering energy from biosolids, reusing effluent and biosolids, recovering nutrient and other constituents, transforming waste streams into valuable new commodities, taking steps to support economic expansion by setting capital investment priorities to meet the needs of industry, and working collaboratively with other water quality interests within their watersheds.

The Business Case for Action: Why Utilities Are Transforming Themselves

Part of the explanation for why clean water agencies are increasingly taking these actions lies in the natural evolution of the institutions as introduced earlier — after decades of experience, utilities simply have done a good job at meeting traditional objectives. Utilities also realize that for some constituents including nutrients, mercury, and emerging pollutants, the most effective environmental solutions and the most cost-effective solutions for the communities they serve increasingly involve others outside their direct control.

At the same time, we are reaching the limit of traditional sources of urban water in many areas, especially in the arid West; real costs of energy are rising steadily; and local budgets are stretched thin as utilities cope with political reluctance to raise rates even as costs of asset replacement and advanced treatment are escalating. In some cases, customers have limited ability to pay more for wastewater services. As a result, one of the key drivers is financial. Utilities that undertake transformative measures toward the UOTF, from treatment and disposal of wastewater to sustainable resource management, generate from their own perspective, net benefits in the form of reduced costs and increased revenues.

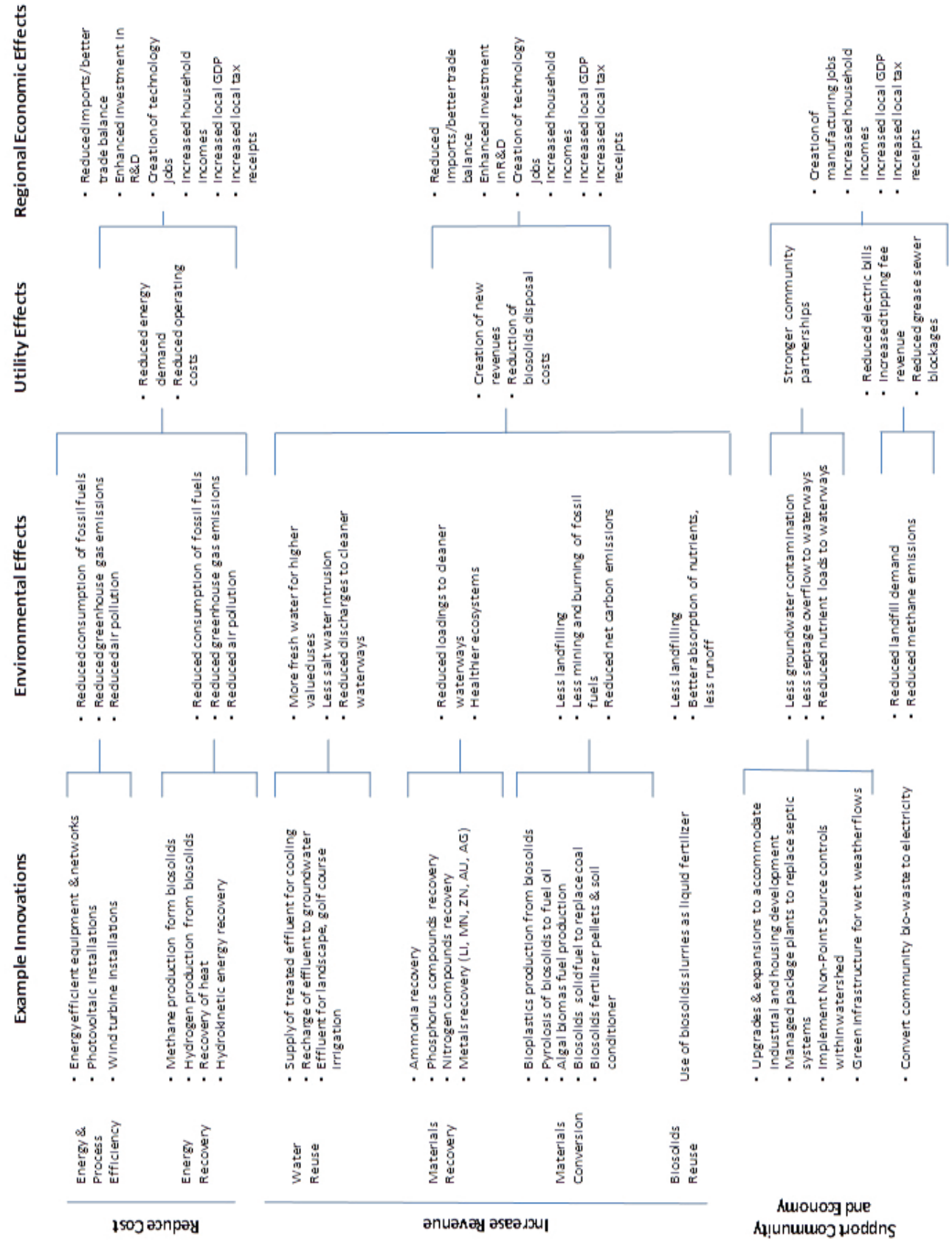
UOTF Leadership in the US

The Camden County Municipal Utility Authority (CCMUA), which serves 500,000 people across 37 communities in southwestern New Jersey, responded to economic pressures over the last five years with a series of UOTF initiatives including operating performance improvements, green infrastructure, solar energy, and currently underway, methane recovery from biosolids. Combined operating and capital costs are now lower than they were in 1996, effluent is cleaner as are the tributaries to the Delaware River into which CCMUA's effluent is discharged, odors from the plant have been significantly reduced, and vendor-financed solar photovoltaic arrays save about $300,000 a year in energy costs.

The Milwaukee Metropolitan Sewerage District (MMSD), serving 1.1 million customers in 28 communities in the regional Lake Michigan watershed, has set stringent, 25-year sustainability, cost reduction and efficiency goals. MMSD's two guiding principles capture the essence of the UOTF: (1) Sustainable Bottom Line, balancing economic, environmental, operational, and social values; and (2) Water Quality Leadership and Collaboration, through strategic alliances and a watershed approach.

MMSD promotes future use of green infrastructure, cost-effective watershed-based permitting and effluent trading, renewable energy sources to meet 100% of its energy needs, reduction in its carbon footprint by 90% from a 2005 baseline through energy efficiency projects, and multiple steps to mitigate the effects of climate change.

Importantly, these actions also result in benefits to the environment, the communities they serve, and both local and the national economies (see the exhibit below). Fewer residuals are released into the environment. Those that are released are generally in a more benign form. Many UOTF elements capture methane, a powerful greenhouse gas that would have been released to the atmosphere. Clean water agencies that substitute their own renewable forms of electricity for purchased electricity from carbon-based fuels reduce CO_2 emissions. Utility savings are passed back to the community in the form of mitigated rate increases and investments to strengthen service delivery and environmental quality.


Example Innovations
Environmental Effects
Utility Effects
Regional Economic Effects
Reduce Cost
Increase Revenue
Support Community and Economy
Energy & Process Efficiency
Energy Recovery
Water Reuse
Materials Recovery
Materials Conversion
Biosolids Reuse
Energy efficient equipment & networks
Photovoltaic Installations
Wind turbine installations
Methane production form biosolids
Hydrogen production from biosolids
Recovery of heat
Hydrokinetic energy recovery
Supply of treated effluent for cooling
Recharge of effluent to groundwater
Effluent for landscape, golf course irrigation
Ammonia recovery
Phosphorus compounds recovery
Nitrogen compounds recovery
Metals recovery (LI, MN, ZN, AU, AG)
Bioplastics production from biosolids
Pyrolosis of biosolids to fuel oil
Algal biomass fuel production
Biosolids solid fuel to replace coal
Biosolids fertilizer pellets & soil conditioner
Use of biosolids slurries as liquid fertilizer
Upgrades & expansions to accommodate Industrial and housing development
Managed package plants to replace septic systems
Implement Non-Point Source controls within watershed
Green Infrastructure for wet weather flows
Convert community bio-waste to electricity
Reduced consumption of fossil fuels
Reduced greenhouse gas emissions
Reduced air pollution
Reduced energy demand
Reduced operating costs
Reduced imports/better trade balance
Enhanced Investment in R&D
Creation of technology jobs
Increased household incomes
Increased local GDP
Increased local tax receipts
More fresh water for higher value uses
Less salt water intrusion
Reduced discharges to cleaner waterways
Reduced loadings to cleaner waterways
Healthier ecosystems
Less landfilling
Less mining and burning of fossil fuels
Reduced net carbon emissions
Less landfilling
Better absorption of nutrients, less runoff
Creation of new revenues
Reduction of biosolids disposal costs
Reduced imports/better trade balance
Enhanced Investment in R&D
Creation of technology jobs
Increased household incomes
Increased local GDP
Increased local tax receipts
Less groundwater contamination
Less septage overflow to waterways
Reduced nutrient loads to waterways
Reduced landfill demand
Reduced methane emissions
Stronger community partnerships
Reduced electric bills
Increased tipping fee revenue
Reduced grease sewer blockages
Creation of manufacturing jobs
Increased household incomes
Increased local GDP
Increased local tax receipts

Local economies and in many cases, the national economy also benefit (these effects are illustrated in the graphic above). Reduced costs and increased revenues passed back to households and businesses create more disposable income, which can be reinvested in local goods and services. Business will have more capital to reinvest in plant and equipment as well as research and development. Part of this investment ends up creating new jobs in the technology and manufacturing sectors, which creates demand for new housing and other goods. As a result, governments enjoy growing tax receipts. Nationally, energy savings reduce imports and support a healthier balance of trade. Locally, utilities enjoy a dividend from these value dynamics as they come back to the utility in the form of increased demand and higher revenues.

Non-potable wastewater reuse (for industrial cooling, toilet flushing, landscape irrigation, fire fighting, and ecological enhancement), while still in its infancy, is increasing rapidly and offers cost-effective solutions to stressed regional water supplies in the West and in rapidly growing regions in the Southeast. Water reuse builds on the success of water conservation programs, which have allowed utilities to better manage infrastructure expansion needs. While non-potable wastewater reuse has doubled over the last decade to about 2 billion gallons a day, this represents only about 5 percent of total municipal wastewater discharged, according to the WaterReuse Association.[5] Where water scarcity threatens local economies or community stability, reuse offers "water independence" and greater local control of future economic growth. Locally generated electricity has similar benefits to communities that depend on fragile generation or transmission infrastructure for their supply.

US clean water agencies are increasingly engaging within their service areas as both public health and economic development leaders. Some activities are routine — coordinating with local and state highway agencies to replace sewer pipes when roads are being rebuilt or with telecommunications companies to lay fiber optic cable to under served areas when sewer lines are open for repair or replacement. Similarly, clean water agencies often work very closely with economic development agencies and real estate developers to furnish new or expanded services to potential entrants. Increasingly, public wastewater authorities are partnering with technology developers and solution providers to develop renewable energy, nutrient recovery, wastewater reuse, and operational efficiency projects. Similarly, clean water utility managers are increasingly taking the lead in watershed-scale management initiatives that address both water quality and water use.

UOTF Leadership in the US

The East Bay Municipal Utility District (EBMUD) serving Oakland and surrounding areas east of San Francisco implemented an innovative program to blend community food waste (e.g. fats, oils, and grease from local restaurants and food waste from wineries and farms) with their own biosolids to produce enough methane-generated electricity to meet their own demand and send excess to the local grid. This 55,000 megawatt-hour/yr, $31 million biogas project saves the utility $3 million a year in energy and contributed to EBMUD's reduction of 13,300 metric tons of carbon from its 2010 baseline.

The Hampton Roads Sanitation District (HRSD), serving 1.6 million people in 17 cities in southeast Virginia, employs a unique nutrient recovery process in its Nansemond Treatment plant, one of nine large treatment facilities. In an innovative partnership with Ostara Nutrient Recovery Technologies, Inc., HRSD recovers and converts about 85 percent of phosphorus and 25 percent of ammonia from its dewatering process into a slow release fertilizer, Crystal Green™. Fertilizer revenues offset both capital and operating costs, effectively reducing discharge of nutrients at no cost to HRSD and compared to alternatives, saves ratepayers money. It also increases overall plant efficiency and replaces mined phosphorus fertilizer generating net economic and environmental gains. Dozens of clean water agencies have installed solar photovoltaic networks and/or erected wind turbines, converting their land and building assets into sources of renewable energy to power their facilities, reduce energy costs, and cut carbon emissions.

A Vision for the Future

While it is clear that America's clean water agencies are emerging in the direction of the UOTF, the pace, depth and breadth of this transformation remains unclear. As is the case at any fundamental turning point, many believe that we are unable to imagine today the extent to which utilities could eventually innovate if faced with the right supportive conditions.

Discussions of innovation often include elements like the amount and quality of research; adoption rates and risk sharing; cooperation between academic, pubic, and private institutions; institutional leadership; workforce education; R&D funding and access to venture capital; protection of intellectual property rights; and market forces and competition. Indeed, many of these are relevant to the US clean water sector. In terms of what may be needed to create optimal conditions for innovation, sector leaders can point to many incremental changes within the industry and across the legislative, administrative, financial, and institutional environments in which they operate. Some envision bold new directions for their organizations — new models for highly efficient, community-based delivery of public health, customer service, and technology development.

The UOTF will be more distributed, automated, and circular. Reuse facilities, for example, are likely to be distributed because it will make little economic sense to reuse wastewater after it is transported long distances downstream to centralized facilities and pumped back upstream to points of application. Significant savings in energy, infrastructure replacement, and maintenance are possible with distributed, local reuse for cooling or landscape irrigation. Automation and controls, web-enabled mobile devices, and cloud computing will help drive this transition and, more generally, enable unattended operations linked to central control rooms that monitor operations, adjust processes in real time, communicate with customers, and manage the entire commercial process. UOTF processes will be circular in the sense that water, nutrients, solids, heat, energy, and other constituents will be reused and not discarded.

The UOTF will be greener and more involved with others within its watershed. Greener as a result of energy efficiency and generation of renewable energy, but also greener in terms of the design of facilities and the choices of solutions, especially green infrastructure — natural land-based solutions in place of concrete and steel containment and treatment structures — to manage stormwater. Working with others at the watershed scale will enable clean water agencies to implement water quality solutions that save them and their communities' money while preserving valuable resources for their most productive uses, including for example, partnering with drinking water utilities on conservation to reduce sanitary wastewater and expansion of wastewater

UOTF Transformations Worldwide

Similar transformations are occurring around the world.

Singapore's Public Utility Board has been treating and reusing municipal wastewater to drinking water quality since 2003. With three "NEWater" plants in operation today, reused wastewater supplies 30 percent of Singapore's water needs, including supplies for industrial processing and blending with reservoir supplies for potable reuse. By 2060, Singapore estimates that NEWater will meet 50 percent of the nation's water needs.

Australia has embarked on a $1.5 billion "Water Smart Australia" program to transform the way utilities and other institutions use and manage their water resources with broader and faster uptake of smart technologies. In one example, two private firms, Veolia Water and AquaNet Sydney acquired the license to supply Sydney Water, the public utility serving Australia's capital, with about 5 million gallons per day (mgd) of recycled water under a 20-year agreement. In this $100 million project, treated secondary wastewater is diverted from discharge pipes and membrane filtered (ultra filtration and reverse osmosis) prior to storage and pumping to various sites for reuse as industrial cooling and process water, as well as irrigation and fighting fire.

infrastructure.

Enabling Innovation: What It Will Take to Realize the Vision

Fundamentally, innovation in the clean water sector is already taking place because it's good for the utility, the environment, the community, and the economy. The market is working, but at a slow and unpredictable pace. Left to evolve on its own, we might imagine a future where economic, environmental, and social forces drive a slow and bumpy transition to the UOTF. Relatively modest changes to current conditions would drive this transition more predictably to more locations, large and small, across the nation.

To effect the transition, utility leadership and management will have to continue, if not escalate their own programs that deliver continuous improvement in operational efficiency. External changes also are needed, however, to enhance incentives and reduce barriers that exist within legislation, regulations, administrative policies and priorities, finance and risk management conventions, and institutional partnerships.

In a 2012 survey of 62 medium and large clean water agencies, "project financing" and "regulatory concerns" were the two most frequently cited barriers to successful implementation of UOTF activities.[6] Technology risks were a close third. Among the least cited barriers were management reluctance, customer acceptance, and legal authority to take the sorts of UOTF actions described above. A few utilities said availability of land would prevent them from taking certain UOTF actions, such as installing solar photovoltaic farms or wind turbines. The following section explores the most prevalent of these barriers and proposes actions to mitigate them. It also examines ways to provide incentives for technology innovation and broader adoption across the sector.

UOTF Opportunities Available to All Size Utilities

Simple process and equipment changes that cost about $1 million generated about $50,000/year in energy savings in Mukilteo Washington's 2.6 mgd facility.

Less than $15,000 in advanced instrumentation and controls netted more than $9,000 in annual energy savings at the Bartlett Tennessee wastewater plant.

The clean water utility serving Cascade Wisconsin (population: 706) is powered 100 percent with renewable energy from two 100 KW wind turbines, generating $30,000/yr in energy savings (12.5 year payback) and reducing carbon emissions by 200 tons a year.

The 2 mgd clean water utility in Essex Junction Vermont recently installed two 30 kilowatt methane-fueled micro-turbines to generate its own electricity from biosolids. In this combined heat and power (CHP) project, waste heat offsets the cost of fuel needed to heat its anaerobic digesters. With total energy savings of $33,000 a year, the project has a 7.84% IRR and reduces CO2 emissions by 30 tons a year.

The Gloversville-Johnstown NY wastewater facility serving 25,000 residents and 12 local industries generates 90% of its energy needs in its anaerobic digester processing biosolids from the plant plus local dairy wastes. It saves $500,000 a year in energy costs and nets $750,000 a year in additional revenue from dairy waste acceptance fees.

CREATING AN ENVIRONMENT OF INNOVATION

Today's clean water agencies operate within a complex environment of legal, institutional, and financial forces that taken together, influence utility decisions. By using these forces to provide the right incentives and remove unnecessary barriers to innovation, the nation can help utilities be better stewards of the environment and suppliers of public health services. These actions can mitigate risk, strengthen project feasibility, and stimulate technology advancement with minimal resource commitments that generate high rates of economic, environmental, and social return. In short, by re-examining current policies from the perspective of the UOTF, we can further enhance environmental and public health outcomes while enabling emerging objectives like resource recovery, water reuse, energy efficiency, and sustainable communities.

This section suggests key changes to:

- Legislation and Regulations,
- Institutional and Programmatic Practices,
- Financial and Risk Management Conventions, and
- Utility Leadership and Internal Management Approaches.

Each of these areas will be explored subsequently in this section. Options and suggestions are drawn largely from the experiences of clean water agency practitioners, technology suppliers, academics, and industry analysts that have participated in this initiative. The intent is to be indicative, not categorical, so options should be taken as examples. This is a long-term transition and requires a long-term commitment at all levels.

Legislative and Regulatory Actions

Among the many factors that will affect the types of UOTF activities that clean water agencies will pursue and why they will pursue them, none will be more important than the regulatory environment. In the same survey mentioned above, eight out of ten clean water agency managers said regulatory inflexibility is "very important" or "the most important" factor that needs to change to create more innovation in the sector.[7]

Key legal or regulatory actions include:

- Watershed-based processes and integrated approaches designed to deliver enhanced water quality outcomes at lower total social costs,
- Elimination of unintended barriers to widespread innovation on utility-scale energy recovery and generation, and
- Integration of water reuse into wider regional water supply solutions while managing public health risks and costs to all water users.

Given the key role that the US Congress will play in helping clean water agencies transition to the UOTF and today's fiscal realities, it seems logical that the industry advocate for a Congressional Caucus on the UOTF *(see page 30 for details)*. Not only would it raise awareness among legislators, but it would elevate the importance of water to our society and ensure that the federal government is doing everything it can to support the industry. A Congressional UOTF Caucus also would enable the industry and regulators to interact regularly with federal legislators to sort through the issues and set priorities.

An Alternative to the Traditional TMDL

The Dupage River Salt Creek Workgroup (DRSCW) offers a cost-effective alternative to the more formal TMDL process, which could serve as a model for other watersheds faced with similar challenges. This 360 square mile watersheds in northeast Illinois lies in two counties and is home to 55 municipalities, 25 publicly owned treatment works (POTWs) that collectively discharge 15 mgd, 41 permitted MS4 stormwater discharges, and more than 21 dams that have significantly altered the hydrology of its natural waters.

Illinois EPA issued TMDLs for dissolved oxygen and chlorides in 2004, which if applied strictly to reduced effluent loadings at basin point sources, would have cost around $50 million. Instead, municipalities, POTWs, and environmental organizations created DRSCW, a voluntary non-profit organization to decide how to meet ambient water quality goals. Through water quality monitoring, bio-assessment, modeling, and engineering analyses, DRSCW was able to meet dissolved oxygen goals through dam removal and habitat restoration at significant savings. DRSCW is addressing the chloride issue through education on alternative deicing and anti-icing methods.

Watershed-Based Water Quality Solutions. After 40 years of ever-increasing regulatory pressures on US clean water agencies, most of the easy and cost-effective solutions are already in place. Achieving further reductions in pollutant loadings from wastewater treatment plants will be disproportionately expensive relative to potential gains in ambient water quality or relative to the cost of achieving the same or in many cases, far better ambient water quality, by addressing unregulated sources of pollutants or other forms of water quality impairment.[8] This suggests that from a community or broader social perspective, everyone would be better off if the Clean Water Act (CWA) and state equivalents formally encouraged processes that would enable local innovation around least-cost watershed scale water quality solutions rather than less effective, efficient, and equitable solutions because of their enforceability under current law and administrative practice. Following are examples of legislative and regulatory actions that would promote watershed solutions. Continued analysis of these and other watershed matters is needed, however, as more utilities participate in watershed-scale programs.

Total Maximum Daily Load Process. When effluent standards based on conventional wastewater treatment technology under the Clean Water Act are unable to produce ambient water quality that meets criteria for designated uses of the receiving water, the Act provides the states and EPA authority to establish a Total Maximum Daily Load (TMDL) for the pollutants of concern from all sources so that criteria will be met. States then allocate loadings of this pollutant to all point and nonpoint sources in the watershed. But since only point sources are regulated, the TMDL process must rely on voluntary actions to control non-point sources, which are some-

Examples of Successful Trading Programs

One recent program that enables trading of nutrient reductions from all sources across nine states in the Ohio River Basin could serve as a model for other watershed-based trading programs. Launched in 2009 with some states joining as recently as 2012, the project is a first-of-its-kind interstate multi-credit trading program. It represents a comprehensive approach to developing markets for nitrogen, phosphorus and potentially greenhouse gas reduction credits. At full scale, it would become the world's largest water quality trading program potentially creating credit markets for 46 power plants, thousands of wastewater facilities and other industries, and up to 230,000 farmers.

As part of its program to meet nitrogen load reductions to Long Island Sound, the State of Connecticut has established a successful nitrogen credit exchange/ trading program. During the period 2002-2009, some $46 million in nitrogen credits were bought and sold, providing a cost-effective alternative for 79 clean water agencies to meet their nitrogen waste load allocations as part of the TMDL adopted for Long Island Sound. Compared to other alternatives, these facilities have saved between $300 and $400 million through trading.

In 2012, the US Department of Agriculture awarded $2.35 million in grants to organizations in the Chesapeake Bay watershed to build the infrastructure needed to support a bay-wide water quality trading program. This program is expected to reduce loadings of nutrient and other pollutants to the Bay at significant savings to clean water agencies, farmers, and stormwater utilities.

times subsidized through various state and federal grants. Often, the result is load reductions disproportionately allocated to point sources, against which EPA and the states can take legal action, rather than nonpoint sources to which enforceable regulations do not apply.[9] Because of the uncertainties associated with results from nonpoint source programs, EPA suggests in its TMDL guidance that it may be necessary to reopen CWA permits and require more stringent limits on point sources in the event that nonpoint sources are unable to reduce their loadings.

Action: With Congressional authorization as needed, EPA and the states should reform the TMDL process to achieve reliable, least-cost loadings reductions regardless of source and/or other in-stream actions to restore ambient water quality goals, with appropriate financial support where needed, monitoring, and enforcement.

Pollutant Load Trading. Currently, many states enable groups of wastewater treatment utilities within a watershed to work together — that is, trade pollutant loadings among themselves — to attain ambient water quality standards through any combination of loadings that minimizes aggregate costs. Until very recently, states did not allow such trading among point and non-point sources, even though in some watersheds, the cost of removing pollutants per unit removed from non-point sources is [10] to 100 times less than point sources.10 One of the key features of a successful trading program is regulatory flexibility, which enables regulated sources adequate time to attain superior water quality outcomes across all dischargers rather than focus strictly on ways to meet their own ever-increasing permit restrictions.

Action: Congress should support greater adoption of watershed-based solutions by explicitly encouraging trading in the Clean Water Act and extending permit terms for facilities that are participating in these processes. Similarly, EPA should work with delegated states to promote viable and flexible trading programs.

Adaptive Management. The term "adaptive management" in the broadest sense refers to the philosophy of using new information to modify actions within a long term project strategy. The Wisconsin Department of Natural Resources has incorporated the term in a somewhat more narrowly defined man-

ner to describe a regulatory compliance strategy whereby a permitted point source (or group of point sources) will work towards water quality compliance with a state designated water quality standard by developing partnerships within the watershed to balance load reduction efforts by both point and non point sources. The intent is to reduce discharges of the parameter of concern to the water body by the most cost effective method rather than relying strictly on reductions by point sources through installing tertiary treatment. Point source dischargers are afforded flexibility and can defer or avoid costly infrastructure installation by facilitating load reductions within the agriculture or other non point sectors. Adaptive management differs from water quality trading in that it doesn't require trade ratios or margins of safety, but does require demonstration of eventual compliance with the ambient water quality criteria in the receiving water. Adaptive management activities often achieve complementary improvements in the watershed in addition to reduction of specific parameters of concern.

Action: EPA should amend its TMDL regulations and guidance to formally incorporate adaptive management as part of the TMDL approach. Until it does, EPA should issue guidance to state regulators that encourages states to pursue these voluntary processes based on the Wisconsin model.

Energy Extraction from Wastewater and Biosolids.

According to recent industry analyses, heat and embedded energy in biosolids extracted by US clean water agencies contain enough energy to meet up to 12% of US electricity demand.[11] Aside from the savings in utility energy costs and potentially, revenues from the sale of surplus energy and carbon credits, energy extraction/conversion at wastewater facilities contributes to energy independence, reduces the community's carbon footprint, and saves ratepayers money. As documented above, some US clean water agencies are converting their wastewater solids to energy using anaerobic digesters to produce methane, which is converted to electricity. Others use dry biosolids as a fuel. A promising technology converts biosolids to a combustible gas via pyrolosis. Energy also is recoverable from wastewater itself. Treatment plants, especially in cold climates use heat exchangers to extract heat from effluent to pre-heat processes, offsetting energy demand. Promising technologies include solar conversion of nutrients in wastewater effluent to algae

Extracting Energy from Wastewater and Biosolids

San Diego's Point Loma Wastewater Treatment Plant operates a 1,350 kilowatt hydroelectric plant that captures hydrokinetic energy sufficient to power 1,300 homes as its treated effluent drops 90 feet prior to discharge through a 4.5 mile ocean outfall.

Irvine Ranch California, serving roughly 500,000 people in Orange County, is now installing a biosolids to biogas plant, which will save its customers more than $10 million a year for the next 20 years (about $100/year per customer).

Massachusetts Water Resources Authority, serving 43 communities in greater Boston, generates about a quarter of its energy needs from its own power plant fueled by methane produced in its anaerobic digesters on Deer Island. This process, which also produces hot water used in treatment processes, saves $15 million a year in fuel oil costs and another $2.8 million a year in electricity.

Dried biosolids also can be used as a much cleaner fuel than coal. A cement kiln in Union Bridge Maryland uses about 40,000 tons/year of dried biosolids pellets in place of coal. Another kiln in Rialto California uses 1,640 wet tons/day of biosolids converted to 300 tons/day of dry biosolids fuel (95% solids) with 5,529 Btu/lb in energy value (slightly less than low grade coal).

Detroit's Water and Sewerage Department is planning to construct a biosolids drying facility by 2016 to produce up to 200 dry tons/day of dried pellets, which may be used as a fuel source in electric power plants in place of coal, helping meet the state's mandate of 10% of its power from renewable sources. Dried pellets also may be used as a fertilizer/soil amendment.

for use in biofuels production and use of wastewater fuel cells to capture electricity created when microbes convert compounds of carbon and nitrogen. Following are examples of energy-related legislative and regulatory actions that would provide incentives for clean water authorities to recover energy or eliminate barriers that inhibit some facilities from doing so. Continued analysis of these and other energy-related matters is needed, however, as more utilities take on energy projects.

Expansion and Clarification of Current Energy Tax Credit and Incentive Programs. Some of the existing federal tax credit and incentive programs designed to promote investment in renewable energy did not necessarily contemplate clean water agencies as developers or partners with private developers. Included here are such programs as the renewable fuel standard, renewable energy production tax credit, clean renewable energy bonds, and qualified energy conservation bonds. As the nation moves toward energy independence through for example, development of renewable energy standards, the wastewater community needs to be part of the conversation to ensure that the energy they generate is included.

> ***Action: The clean water sector should work with Congress to examine these programs to assure that they do not exclude or limit their participation and where it does or can, they should work with Congress to amend authorizing language to ensure that private investors have every incentive to partner with clean water authorities to extract energy from wastewater and biosolids, and to ensure that renewable energy from these facilities however generated is eligible to participate in markets for renewable energy.***

Use Multi-Media Benefit and Risk Frameworks to Resolve Regulatory Conflicts that Inhibit Energy Recovery at Clean Water Authorities. As America's clean water authorities innovate around energy recovery, conflicts will inevitably arise between energy recovery and other objectives. These can be resolved using multi-media risk and benefit analyses. In March 2011, for example, EPA finalized new source performance standards and emission guidelines for new and existing sewage sludge incinerators intended to reduce emissions of nine pollutants from these facilities.[12] This rule is currently the subject of litigation. According to the wastewater industry, these rules will make it prohibitively expensive for clean water agencies to invest in innovative biosolids incineration/energy production technologies. It is questionable whether the modest potential reduction in public health risk from this proposed rule exceeds the risks associated with the alternative of landfilling biosolids. Where these incinerators are used to recover energy, additional environmental and public health returns in the form of reduced fossil fuel use and reduced carbon and methane emissions should exceed any gains from the proposed rule.

> ***Action: EPA should revise the March 2011 sewage sludge incineration rule to exclude sewage sludge incinerators that use biosolids to generate energy. More broadly, EPA should work with clean water authorities to formulate procedures that account for multi-media assessment of energy and resource recovery alternatives at their facilities, so that future rules can take a broader, more holistic perspective of all environmental benefits and risks.***

Relief from Limits on Tax-Exempt Bonds Used to Finance Publicly Owned Renewable Energy Projects. Under section 141 of the Internal Revenue Code, public clean water agencies cannot issue tax-exempt bonds to finance energy recovery or energy production projects if more than 10% of the energy produced is sold to private users, including generally, feeding unused electricity back to the grid.[13] This rule can affect projects that recover methane from wastewater solids, create electricity by burning biosolids fuels, recover municipal landfill methane to produce electricity, or use utility land to generate electricity from photovoltaics or wind-powered generators. In place of low-cost tax-exempt bonds, utilities faced with this rule can reduce output of their project to just their own needs, use higher-cost private activity bonds or taxable bonds, or partner with an energy service company who finances the project. All of these alternatives either limit energy recovery potential and/or increase costs.

> ***Action: Congress should relax the private-use test for publicly owned and operated energy recovery or production projects as long as the issuer first satisfies 100% of its own energy needs before selling excess production.***

Including Combined Heat and Power (CHP) Projects at Clean Water Agencies in State Renewable Portfolio Standards (RPS). Many state RPSs require that a specified percentage (typically 10-30%) of energy produced within the state comes from renewable energy sources. As of October 2012, 37 states and the District of Columbia had established RPS requirements or goals. But only 28 of these states included biogas from the anaerobic digestion of wastewater solids or waste heat recovery as an eligible resource.[14] RPSs stimulate market and technology development for renewable energy. If states do not include biogas (methane), synthetic gas (other carbon-based combustible fuels) and heat recovery, which include nearly all of the methane recovery/electricity generation projects at wastewater treatment plants as an eligible resource, energy solution providers and energy users lose valuable incentives to invest in or buy power from these sources.

> ***Action: State legislatures should amend their RPS eligibilities to include energy recovery projects from biosolids. To help legislatures understand why such changes would generate triple bottom-line benefits, the wastewater industry should educate state legislatures on this matter.***

Water Reuse. Most federal and state water use and water quality legislation was written and first implemented decades ago, before water reuse was widely practiced. As a result, these statutes and the regulations pursuant to them could be easily clarified to encourage more reuse where it can be shown to be valuable, cost-effective, and safe. In its recent study of water reuse, the National Academy of Science noted several instances where legislative or regulatory initiatives would result in such outcomes.[15] Continued analysis of these and other reuse matters is needed, however, as more utilities take on reuse projects.

Water Rights. According to the National Academy report, state legislation that governs creation and allocation of water rights to users generally was not written contemplating reuse of wastewater.[16] Many states have not yet addressed this matter and conventions vary widely among the states that have amended their water laws to accommodate reclaimed water. Generally, it remains unclear whether reclaimed wastewater creates a new supply or a right to use it, and if it does, to whom this right belongs, especially where downstream uses including the environment could be disadvantaged. In

some states, utilities have explicit, but limited rights to reuse water, as is the case in Colorado where water reuse is limited to the amount imported from outside the basin or that originated as groundwater. In Utah and New Mexico, utilities essentially must have or buy water rights before they can reuse wastewater. Legislation in other states, like Florida and New Jersey explicitly encourages and promotes reuse of wastewater.

Action: States should clarify use rights associated with, and rules governing groundwater storage of, reclaimed wastewater so that private developers and public agencies would have stronger incentives to engage in non-potable reuse of wastewater.

SRF Priorities to Include Water Reuse. Under the Clean Water Act, states have wide latitude to set priorities for funding projects using State Revolving Fund (SRF) monies. States facing strong demand and limited natural supplies for water could stimulate local consideration of reuse by driving more SRF funds to these projects through, for example, explicitly recognizing wastewater recycling and reuse as an eligible category for funding, working with SRF borrowers to structure SRF applications that meet other state requirements for funding, and generally taking other actions that promote needed and feasible wastewater reuse projects.

Action: States in which additional water reuse would help meet future demand for water supplies safely and at least cost should amend SRF eligibilities to include wastewater reuse.

Public Health Protection. Recent risk assessments have shown that properly designed and operated indirect potable wastewater reuse presents public health risks that are orders of magnitude lower than so-called “de-facto” reuse, which already occurs in many places today where public water supplies are drawn from waterways into which treated municipal wastewater is discharged upstream.[17] These sorts of risk comparisons are part of the solution to public acceptance of water reuse, but water utility boards are still reluctant to propose, and the public is still reluctant to accept, direct potable reuse.[18] US experience with de-facto reuse across major river systems plus the experience of Singapore *(see side bar on page 9)* suggests that at least some forms of potable reuse can be designed to be safe.

Action: Consistent with the findings of the National Academy in its recent study on water reuse, Congress should amend the Safe Drinking Water Act to make explicit certain safeguards (e.g. advanced treatment, increased monitoring) that are needed to assure that potable reuse can indeed be safe.

Statutory Acknowledgement of Water Reuse. Regulatory frameworks, most notably the Safe Drinking Water Act and Clean Water Act, fail to address adequately the important role that recycled water supplies can play in terms of public health and safety or sustainable water quality improvement.

Action: Congress should consider three amendments to the Clean Water Act to acknowledge water recycling and reuse where it is feasible and desirable locally: 1) redefine POTW to identify its ability to be a resource provider, 2) extend permit terms for projects that employ resource recovery activities

such as water recycling, 3) name water reuse as eligible for federal financial assistance.

Executive Order on Water Reuse. Currently, at least nine federal agencies play some role in water reuse.[19] By working more closely together, these federal agencies can improve results of their programs and perhaps eliminate duplication. Local clean water agencies and technology developers also would benefit. An Executive Order on water reuse could help coordinate federal reuse policies and programs and stimulate innovation.

Action: The President of the United States should consider issuing an Executive Order that (a) creates a Federal Interagency Task Force on Water Reuse to coordinate all federal water reuse initiatives, and (b) sets a goal for minimum percentages of reclaimed water for all new federal installations (similar to the federal goal for recycled paper).

Institutional and Programmatic Actions

In many cases, simply changing program priorities or administrative processes can drive innovation and help clean water agencies implement effective and efficient UOTF activities.

Leveraging Green Infrastructure to Transform Urban Spaces

Green infrastructure (and reduction of infiltration and inflow to collection systems) offers cities innovative ways to reduce stormwater flows to treatment facilities and polluted runoff to water bodies. Some cities are taking green infrastructure beyond water quality by embedding it within broader initiatives to restructure ways to use urban lands and the way people live, work, and play in urban environments. Significant opportunities exist in vacant lots, roofs, roads, bridges, corridors, medians, parking lots, and other paved spaces for green approaches to stormwater management.

Cities like Washington DC, Portland OR, Syracuse NY, New York City, and Philadelphia PA are taking such steps today. Under a $2 billion agreement signed in 2012 between the two parties, for example, EPA will provide technical support and monitoring including school gardens and low-income neighborhood revitalization through green design in partnership with Philadelphia on the city's 25-year "Green City, Clean Waters" plan, which aims to protect and enhance urban watersheds by managing stormwater with green infrastructure techniques.

DC Water's new Clean Rivers, Green District partnership with Washington DC uses green infrastructure to prevent pollution from coming into contact with rainwater in the first place, while also providing public health, livability, and economic benefits for the District and its residents.

The New York City Green Infrastructure Plan predicts that, "every fully vegetated acre of green infrastructure would provide total annual benefits of $8,522 in reduced energy demand, $166 in reduced CO_2 emissions, $1,044 in improved air quality, and $4,725 in increased property value."

Next generation stormwater utilities can replicate and extend this concept more broadly by partnering with urban planning agencies, architecture and planning faculty at local universities, and experts from across the industry and related professions that have pioneered and demonstrated these concepts.

EPA supports these approaches with a variety of grants as do many other federal and state programs, including prominently, the federal and state Departments of Transportation.

Options include:

- Acknowledging and Paying for Stormwater as Part of a Broader Integrated Water Management Approach
- Leveraging Green Infrastructure to Transform Urban Environments
- Integrated Water Resources Decision Making and Management

Acknowledging and Paying for Stormwater as Part of Integrated Water Management. Municipal separate storm sewer systems (MS4s) are required to develop and implement stormwater management programs to reduce contamination of stormwater runoff within their jurisdictions. According to the most recent analysis, the US will have to spend some $42 billion over the next [20] years to comply with requirements.20 Many urban stormwater control authorities have designed equitable and efficient ways to finance their programs, including frequently, user fees based on land-owners' proportion of impervious surface within the watershed. A growing number of lawsuits by ratepayers, however, are challenging new stormwater fee programs, arguing that impervious-based charges for stormwater represent an illegal tax. Other complications include legal challenges to stormwater programs that require on-site retention of stormwater, a low-cost and green approach, arguing that they constitute illegal local land use controls. Utility leadership can help avoid costly legal challenges that can delay implementation by educating the public about the long-run benefits of effective, efficient, and equitable stormwater management programs such as least life-cycle costs to ratepayers, distribution of costs in proportion to source of runoff, preservation of open space, and creation of habitat.

> ***Action: Using materials that they have already developed, EPA should support local stormwater management entities in initiatives designed to educate the public about the value of, and equitable ways to pay for, stormwater management as one component of integrated management plans for all water resources within local watersheds.***

Integrated Water Resources Decision Making and Management. The transition to the UOTF will be much more effective and efficient to the extent that clean water agencies make joint decisions with other water management and regional planning interests within their service areas. The complication is that in nearly all watersheds, responsibility for these decisions is highly fragmented into multiple public and private entities. Even modest changes in the institutional structure of these entities could have profound results in terms of planning for and allocation of water from all sources to all uses according to availability, cost, and quality. One recent water industry examination of integrated water management called for federal guidance on a "one water" policy from the President's Council on Environmental Quality, better coordination or consolidation of the many federal water programs, and creation and funding of a national water census.[21]

There should be no doubt that these initiatives would have positive outcomes. But, as all analyses rightly point out, sustainable solutions are likely to come as much from the bottom up as from the top down — from those that allocate, regulate, use, price, and pay for water in all its forms (drinking, wastewater, stormwater, etc.). In the short run, clean water utility leadership can organize the many entities that use water or affect its quality within their watershed.

Action: Regional governments should consider creating joint water/wastewater/stormwater utilities that can manage all water within their jurisdictional boundaries as a single resource. Further, these unified water management enterprises would be better equipped to coordinate more effectively with land-use, transport, housing, energy, and other local authorities that use or affect water.

Financial and Risk Management Actions

As regulations and their compliance costs increase and aging infrastructure needs to be replaced, competition for available funds will remain one of the top barriers to more widespread adoption of UOTF initiatives. Ultimately, most UOTF initiatives will reduce future costs or raise additional revenues, so part of the funding solution lies in utility leadership and communication to the public about their own transition and the future of the community under a traditional path versus the UOTF. But many of the benefits of the latter course accrue far beyond community boundaries, for example, to cities downstream that enjoy cleaner waterways and safer water supplies, indeed to the nation as a whole as UOTF initiatives move the nation toward energy independence, reduced greenhouse gas emissions, creation of green jobs, and a stronger economy.

The business case for the UOTF, therefore, argues strongly in favor of a blended approach to funding that draws on local as well as national sources, both public and private. Such an approach would rely on existing grant and loan programs as well as the public capital markets to provide project financing. It also would draw on more innovative partnerships with private solution providers like energy service companies and technology developers that share risks and rewards with public wastewater entities through, for example, performance contacting.

Federal Grant Programs That Support UOTF Initiatives

US Department of the Interior, Bureau of Reclamation. Title XVI 25% matching grants up to $20 million to design and construct demonstration and permanent water reclamation and reuse facilities in the 17 continental US states and to conduct research on reclamation and desalting of impaired surface and groundwater.

US Department of Energy. Energy Efficiency Block Grants to cities, counties, and states to implement energy efficiency projects and programs as well as State Energy Program grants that provide states willing to match at 20% grants to fund energy efficiency and renewable energy programs, including establishment of revolving loan funds to finance local projects.

Environmental Protection Agency. Clean Water and Drinking Water State Revolving Fund capitalization grants to states that fund capital investments to comply with the Clean Water Act and Safe Drinking Water Act, respectively, and separately, a Green Infrastructure Program that provides technical assistance to communities pursuing green infrastructure solutions to comply with stormwater requirements.

US Department of Agriculture. Rural Utility Service financial assistance to towns with populations less than 10,000 for wastewater and stormwater facilities. Rural Development loans and guarantees to build bio-refineries. Natural Resource Conservation Service and Farm Service Agency for conservation objectives, including nutrient controls.

Most forms of long-term funding for infrastructure replacement do a good job of reducing risks associated with failure of assets that could wear out. They are generally are less effective in reducing risks associated with performance of new and innovative technologies that promise to improve performance and/or reduce total life-cycle costs. Many suggest that adoption rates for new technology within the municipal clean water sector are too slow to compel serious investment in technology innovation, and in turn, this limit gains in productivity of invested capital in this sector.[22]

Options include:

- Focusing Expanded Federal Grants Programs on UOTF Initiatives
- Early Stage Technology Innovation Grants: ARPA-W
- Strategies to Reduce Risk of Technology Adoption
- Financial Incentives to Reclaim and Reuse Wastewater

Focus Federal Grant Programs on Implementation of UOTF Initiatives. At least four federal agencies support grant programs that have helped or could help clean water agencies plan and implement UOTF actions: the US Environmental Protection Agency (EPA), the US Department of Energy (DOE), the US Department of Agriculture, and the Bureau of Reclamation (USBR) within the US Department of the Interior.[23] These programs could focus greater attention on implementation of UOTF activities (research and development will be discussed in a subsequent section) and as they do, clean water agencies contemplating UOTF actions should familiarize themselves with these programs and participate in them as appropriate.

Bureau of Reclamation. Launched in 1992 (Public Law 102-575), the USBR's Title XVI program authorized the Department of the Interior to design and construct demonstration and permanent facilities to reclaim and reuse wastewater in the 17 Western states. As of November 2010, approximately $531 million has been appropriated for 42 of the 53 authorized Title XVI projects. The program has generally provided cost sharing for up to 25 percent of the total project costs, with a project maximum of $20 million. As of the end of 2010, the program had a $630 million backlog for projects awaiting appropriations, up from the $354 million backlog in 2006.

> ***Action: The Bureau should focus federal grants on reuse projects, without which returns would be insufficient to attract private co-investment and where they deliver high net economic and social benefits.***

Department of Energy. Among the many renewable energy incentive programs that DOE administers, the Energy Efficiency and Conservation Block Grant (EECBG) and State Energy Program (SEP) grants are perhaps best suited to support UOTF projects at clean water agencies.[24] EECBG, passed in 2007 and was first funded in 2009, provided formula block and competitive grants to cities, counties, states, and Indian tribes to implement energy efficiency projects and programs. SEP provides grants to states that match them at 20% to implement a wide variety of energy efficiency and renewable energy programs and projects. About 95% of the $6.3 billion funds appropriated to these two programs under the 2009 American Recovery and Reinvestment Act (ARRA) are obligated to existing activities, some of which benefitted clean water agencies directly, including EECBG funds that helped finance a new power plant in Miami-Dade County Florida that burns methane recovered from the local clean water agency and local landfill.

> ***Actions. (1) Clean water agencies should take advantage of any unobligated grant funds and to the extent they are eligible, loans from the 29 states that established revolving loan funds using SEP grants.[25] (2) On the basis of strong performance of the 2009 ARRA funding, the wastewater community***

should advocate for continued funding under these programs, with explicit acknowledgement that clean water agencies should be priority recipients of funding assistance.

Environmental Protection Agency. The largest sources of loans and limited grants available to utilities for UOTF initiatives are the 50 EPA grant-funded State Revolving Funds. Given their key role, there should be no doubt that continued funding of these institutions is critical.[26] In addition, EPA's Green Infrastructure Program is providing technical assistance to 27 community partnerships (10 in 2011 and 27 in 2012) to support their efforts to implement green infrastructure solutions to stormwater problems.[27] Assistance (e.g. public charrettes, tactical team assistance, and information sharing on financing) responds to needs, but does not include grants or loans. The value of this assistance is generally small ($35,000-$75,000) and focused on specific products like code reviews, conceptual designs and strategies for green infrastructure approaches, selection of green infrastructure elements, modeling the performance of green infrastructure, or evaluating costs and benefits of green infrastructure. While small, recipients often use this assistance strategically, to meet specific scientific or research needs, to motivate broad participation across their communities, and to engage regulators on matters of affordability and compliance scheduling. An October 2011 joint statement of EPA's Office of Water and Office of Enforcement not only endorsed green infrastructure as part of integrated watershed planning, but noted that EPA and the states have, "flexibility to evaluate a municipality's financial capability…and to set appropriate compliance schedules." Clean water agencies, especially those that have stormwater management responsibility are typically participants of these community partnerships.

Action: The wastewater community should advocate for a continuation, if not an expansion of these EPA programs. Continued federal funding not only preserves the intergovernmental partnership embedded within the Clean Water Act, it creates jobs and accounts for the "public goods" benefits that all clean water utilities deliver when they ship cleaner water to downstream users; reduce greenhouse gas emissions through energy efficiency, methane reduction, and renewable energy production; and reduce runoff from green infrastructure.

Department of Agriculture. USDA administers several grant programs that can help utilities achieve their UOTF goals. The Rural Utility Service provides loans, loan guarantees, and grants for wastewater and stormwater systems to towns with populations of up to 10,000. USDA Rural Development provides loan guarantees to rural communities to build or retrofit commercial scale "bio-refineries," which includes biosolids as an eligible feedstock. Its Repowering Assistance Program provides 50% grants to producers and sellers of advanced biofuels, including biogas (methane) derived from wastewater biosolids. A sister program provides annual production subsidies to bio-refineries that scale up production year-on-year. USDA administers multiple voluntary programs accompanied by some $2-3 billion a year in federal subsidies largely through its Natural Resources Conservation Service and Farm Service Agency to achieve a wide variety of conservation objectives. Fundamentally, these programs are designed to reduce soil erosion and wetlands loss, protect habitat, and improve farm productivity. But about 10-15% is used to control nutrient runoff and these funds could be used more widely to meet watershed nutrient loadings limits at significantly less cost than removing the same

nutrient loadings at wastewater treatment facilities located within the same watershed.[28]

Action: USDA should take steps to assure that a greater proportion of their conservation program assistance funds nutrient reduction programs.

ARPA-W: Early Stage Technology Innovation Grants. Because clean water agencies are responsible for environmental and public health protection, they tend to be justifiably risk averse. One result of this conservative stance, however, is slow adoption of new technology. Despite the substantial size of municipal clean water equipment and services markets, slow adoption of new technology dampens enthusiasm on the part of technology developers and entrepreneurs, artificially reducing the pace of innovation.

To help remedy this, the clean water sector could draw on successful programs in other sectors like defense and energy that have created early stage research and development grants to stimulate creation of breakthrough technologies. In the defense sector the Defense Advanced Research Projects Agency (DARPA) manages numerous grant programs to stimulate innovative research and development initiatives for weapons, information/communications, electronics, and materials. Modeled after DARPA, the Department of Energy administers through its Advanced Research Projects Agency for Energy (ARPA-E), an R&D grants program to, "focus on creative, 'out-of-the-box' transformational energy research that industry by itself cannot or will not support due to its high risk but where success would provide dramatic benefits for the nation."[29] These programs have generated significant technological advances for their intended industries, spin-off applications in many other industries, and created strong export markets for American technology.

Action: Congress should establish and fund ARPA-W to work with industry to define high-risk, high-reward R&D needs, solicit proposals from public and private enterprises that had solutions at various stages of commercialization, and manage information flow about the research for the benefit of the industry and the nation.

Pooled Risk Sharing Strategies. Clean water agencies are slow adopters of new technology in part because of environmental and public health risks if new technologies fail to perform and in part because of the economic, political, and regulatory consequences of failure. Two new initiatives are addressing part of the slow adoption problem. First, the Water Environment Federation and the Water Environment Research Foundation have joined together in a new Leaders Innovation Forum for Technology (LiFT) Technology Evaluation Program (TEP) to facilitate collaboration among facilities for the evaluation and testing of new technologies and disseminate peer reviewed information about emerging technologies.[30] Second, a consortium of US drinking water and clean water agencies are structuring an Innovation Technology Advancement Group (iTAG) with a UK technology innovation consultancy to share experiences on new technologies.[31] These could be powerful steps that enhance market pull for new technologies.

But three aspects of adoption risk will remain: (1) abating private development risk and long adoption cycles, (2) simplifying state regulatory approval processes for new technologies, and (3) acknowledging acceptable variability in performance of advanced technologies in new permits.

Risk Abatement Facility within ARPA-W. At least one part of any new program like the ARPA-W proposal above would have to address adoption risk.

> ***Action: Congress should establish within ARPA-W, a special development facility for consortia of clean water agencies, universities/research centers, and technology developers, who together would jointly apply for federally subsidized private insurance that would offset utility costs in the event that piloting innovative technologies was unsuccessful. This facility also could provide tax credits to private corporations that partnered with a grant recipient to help offset risks associated with developing and commercializing its technology.***

State Certification Reciprocity. State water quality regulators operate largely independently of each other when it comes to approval of new technology to meet permit conditions. The result is that design engineers are reluctant to include new technologies for a proposed project unless they have been demonstrated to work in that state and at scale, even though the exact same technology may have performed according to spec in an identical application in another state or perhaps another country. This is a strong disincentive for technology developers and investors in innovative technology. Yet, there are numerous situations wherein states reciprocate to avoid just this sort of problem: automo-

Why are Clean Water Agencies Typically Slow to Adopt New Technology?

Not all clean water agencies behave this way, but broadly, they accept new technology very slowly, which dampens innovation. Here's why:

Regulations — clean water agencies have navigated the past 40 years of rules, permits, enforcement actions, and penalties by choosing technologies that are 100% proven. New technologies must have a large cost savings to offset risks of deviating from traditional choices.

Management Capacity — clean water agencies are highly capital- and asset-intensive enterprises that manage large workforces over broad geographies, with state, federal and local governing body oversight at the front and thousands of customers to satisfy at the end of their value chains. Many simply have little spare capacity to manage new technology.

Reward Systems Favor the Status Quo —few clean water agencies reward management for taking risks. Generally, just the opposite is true. Consequently, decisions tend to maintain the status quo.

Asymmetry in Public Visibility — when clean water agencies perform well, services are typically taken for granted and the public tends to forget that clean water agencies exist. Their failures, however, are generally highly covered by the media and in full public view. The upside of new technology must be substantial, therefore, to overcome the regret and real consequences of technology failure.

The UOTF Paradigm is Still New — clean water agencies are still used to cleaning waste and discharging residuals. The UOTF will change the paradigm to resource management. Until then, new technologies will have to be "pushed" into the sector. UOTFs will create new demand, "pulling" technology through the industry.

Procurement Requirements for Competition — because of their public heritage, many clean water agencies cannot negotiate with a single technology provider, even if the technology cannot be provided by anyone else.

bile and other vehicle licenses, concealed handgun permits, teacher certifications, on-line education certification, and pesticide licensing procedures (in the 11 Northeast states).

> ***Action: An appropriate organization of the fifty states such as the Council of State Governments should formulate a program of reciprocal technology certification, where once tested and permitted in one state, the burden of proof to deny a permit for that technology in any other state falls to the regulatory agency based on guidelines agreed by all 50 states.***

Acknowledging Acceptable Performance Variability in New Permits. Reliability of some advanced technologies like biological nutrient reduction (BNR) can vary widely from plant to plant, depending on design and actual flows, wet weather events, seasonality, and even diurnal changes in loadings. To reduce regulatory risks, design engineers have attempted to accommodate as many (or all) of these variables as possible. The results is overdesign (e.g. blowers that are too big, reactor basins that are too large, over-sized pumps) targeted to meeting excessively high performance reliability, high initial costs, and expensive and complex operations. To help fix this, engineers have developed sophisticated process models that more accurately predict plant performance, enabling more appropriately sized facilities that are less expensive and easier to operate. If permits reflected variable performance at levels that were still protective of the environment, engineers would design more appropriate facilities and costs of advanced processes would be reduced.

> ***Action: Working more closely with the design engineering community to understand new stochastic approaches to performance and design of advanced technologies including BNR, state and federal permit writers need to incorporate results into new permits to assure that they have more realistic parameter limits that are still protective of the environment, but achievable at more appropriate costs.***

Financial Incentives to Reclaim and Reuse Wastewater. In some parts of the country, wastewater recycling and reuse can be effective and efficient as a solution to water scarcity. According to the National Research Council of the National Academy of Science:

> "Approximately 12 billion gallons of municipal wastewater effluent is discharged each day to an ocean or estuary out of the 32 billion gallons per day discharged nationwide. Reusing these coastal discharges would directly augment available water resources (equivalent to 6 percent of the estimated total U.S. water use or 27 percent of public supply)."[32]

In a recent survey of 1,000 US consumers, more than 80% said they favored the use of recycled water for non-potable uses such as irrigation, industrial cooling, and toilet flushing.[33] But the cost of recycling wastewater for these uses can be a significant barrier to more widespread adoption. Reuse production costs vary considerably depending on factors such as quality needed, technology, scale, pumping and energy costs, and financing costs. Recent estimates range from $1.83/1,000 gallons for non-potable reuse, which is roughly comparable to costs of water produced from fresh water supply to $19.44/1,000 gallons.[34] In the same survey mentioned above, nearly half the respondents said they were willing to pay on average, 12.4% more on their water bills

immediately to ensure that future generations would be less vulnerable to water shortages. So while higher water rates today will be part of the solution, other measures may be needed to fill the gap. Moreover, the gap between reuse costs and other alternatives as above addresses only financial costs. There are significant economic savings associated with wastewater reuse that are not accounted for in strict financial comparisons: reduction in seasonal peak demands on potable systems, which reduces overall capital and operating costs; improved reliability during drought and business investment based on that reliability; and environmental benefits such as preserved in-stream flows, reduced energy demands and lower carbon emissions.

Action: To help fill the relative cost gap and generate other economic and environmental benefits of wastewater reuse, the wastewater industry should advocate for wastewater reuse investment tax credits to attract private investment, expanded grants to cover costs of facility feasibility studies, and/or loan guarantees for reuse projects that serve rural or low income communities that could not afford to repay market rates.

Utility Leadership and Internal Management Actions

As it matured over the last several decades, the clean water sector has embraced the concept of continuous quality improvement in many forms. But despite these improvements, the industry faces a fiscal crunch today unlike any in its history. Federal funding in absolute and real terms has declined by 90% from about $15 billion a year in the 1980s to about $1.5 billion a year in 2012 (all in 2009 dollars). Over this same period, real local investment in wastewater more than doubled from about $27 billion a year to $55 billion a year. Estimates of total sector capital investment needed to meet national clean water goals also has grown from $155 billion in 1986 to $298 billion in 2008, despite a combined federal/state/local investment in wastewater infrastructure of $750 billion during this period. In many places, combined costs of infrastructure replacement and compliance with environmental regulations greatly exceeds both current investment levels and based on standard metrics, affordability for large portions of local populations. Fiscal pressures alone compel leadership and management in the clean water sector to make hard choices every day with limited resources.

While this *Blueprint* is not intended to provide detailed industry guidance, it is important to acknowledge that future successes depend to a great extent on utilities' initiatives to manage themselves and operate as efficiently as possible. Building on 2007 recommendations from leadership in the drinking water and clean water sector, EPA, NACWA, WEF, and other industry associations published a statement of support for an overall utility management framework based on a series of *Attributes of Effectively Managed Utilities and Keys to Management Success*.[35] This document acknowledged and to a degree codified that business in this sector needed to be done in a different way. In 2008, these organizations published the Effective Utility Management Primer for Water and Wastewater Utilities, which reaffirmed the industry's commitment to "Effective Utility Management" or EUM, as a way to assess utility strengths and weaknesses, set institutional priorities, and decide on outcomes they wished to achieve.[36] This collaboration between regulatory and clean water agencies is encouraging as a foundation for further progress.

Other tools and initiatives that are consistent with EUM can help utilities achieve continuous improvement in the productivity of their organizations and help set environmental and public health priorities in a resource constrained world:

Six Sigma Results

Clean Water Services, a water resources management utility serving 536,000 customers in Washington County, Oregon escalated its productivity improvement program developed in the early 1990s to Lean/Six Sigma in 1996, with the following results:

- A 24% gain in productivity in three years,
- A Goal-Share Program to support collaborative improvement efforts,
- A pay-for-performance system within a collective bargaining agreement,
- The nation's first integrated, municipal watershed-based permit,
- A partnership with Ostara Nutrient Recovery Systems, to provide the nation's first full-scale commercial phosphorus recovery system,
- Formation of the Clean Water Institute to commercialize its intellectual property, and
- A Business Process Management Center of Excellence, with core staff trained on Lean and Six Sigma methods.

Over the last decade, Clean Water Services has saved nearly $100 million in operating costs despite their advanced treatment levels. They saved an additional $140 million by instituting the nation's first temperature water quality trading program. They increased labor productivity by more than 35 percent. The utility's fleet was reorganized enabling a 33% reduction in vehicle count. During this period, the utility made strong steps toward the UOTF by reorienting its vision and focus from engineering excellence to watershed and public health stewardship, attaining 100% compliance with all permit terms at all four wastewater treatment plants.

- Lean Operations/Six Sigma for Continuous Improvement,
- Environmental Management Systems to Set Priorities,
- Nationally Consistent Operator Training and Certification,
- Environmental Education,
- Smart Technology to Improve Service and Customer Care.

Lean Operations/Six Sigma for Continuous Improvement. Lean operations or simply, "Lean" is a business improvement approach designed to eliminate non-value adding activity or "waste" using methods developed for manufacturing industries including automotive. Practitioners often combine Lean methods with Six Sigma tools, developed by Motorola and embraced by GE, that use statistical analysis to eliminate defects and variation. Lean and Six Sigma are widely used across the industrial sectors to identify and drive productivity gains through organizational, business process, and technological change.[37] Clean water agencies that use Lean/Six Sigma save millions of dollars, improve service quality, build a confident and motivated workforce, and reduce environmental and safety risks.[38] Its culture of continuous improvement through employee engagement essentially retrains the workforce to think about productivity, take actions to improve productivity, and be rewarded for their successes.

Nationally Consistent Operator Training and Certification. Today's sophisticated resource recovery facilities require highly trained operators that are able to work anywhere in the nation without obstacles. Unfortunately, the Clean Water Act does not require training or certification of operators. Complicating matters further, most states have unique training requirements, so operators certified in one state will not necessarily be certified in others. The UOTF will require more consistency, with a national baseline standard for operator training and certification, perhaps based on the toughest state standard, which would also allow for reciprocity.

Environmental Education. UOTFs will need to advocate for themselves through strong programs of environmental education. Today's students are tomorrow's legislators, ratepayers, and the children

of today's legislators and ratepayers. Thus, it is essential to acquaint children with the importance of water to public health and, ultimately, the welfare of our society. UOTFs also need to make the broader public benefits case regularly to legislators, governing boards, ratepayers, and the press, demonstrating delivery of value for money and reminding the public of the environmental and economic services they deliver every day.

Environmental Management Systems to Set Priorities. An Environmental Management System (EMS) is a framework that helps any organization achieve its environmental goals through consistent control of its operations. EMSs address regulatory demands and other objectives like energy conservation or reduction of infiltration and inflow to collection systems in a systematic and cost-effective manner, setting priorities to reduce risks of non-compliance and improve public health and safety outcomes for the public and employees, respectively.[39] In practice, clean water agencies have found that EMSs also enable the organization to capture institutional knowledge, making it available to future decision makers, in effect ensuring continuity over generations of leadership and management.

Smart Technology to Improve Service Delivery and Customer Care. Web-enabled tablets, smart phones, and cloud-based communications have transformed the way clean water agencies deliver services and interact with their customers. They enable customers to share information instantaneously about service disruptions, faulty infrastructure, and meter figures as backup to automated readings. Work orders can be routed efficiently to field crews according to their location, enabling very fast response times. They also enable work crews in the field to access and update vital information stored centrally about asset location, condition, and performance. Smart phones allow customers to track progress against work requests in real time. Credit card and check payments using mobile devices linked to central billing and collection databases avoid labor-intensive turn-off/turn-on trips. Social media allows dissemination of critical information to customers to support both routine and emergency activities. Smart meters enable automated, labor-free two-way monitoring, communication, and control (customer to utility and vice versa) of usage patterns for billing and for customer awareness. GPS

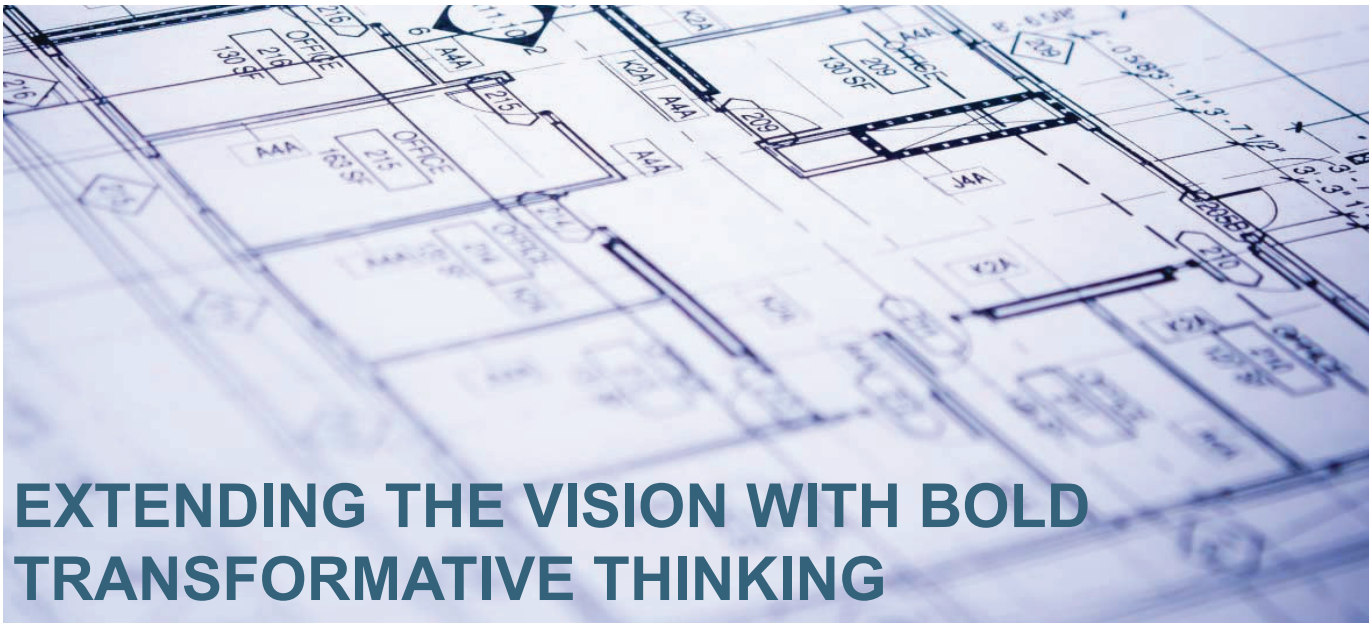
EMSs & Other Management Tools

The Lawrence, Kansas water and clean water utility serving 90,000 customers implemented a utility-wide EMS in 2007. As a result, it reduced biosolids transportation and land application fuel use by 13.5%, eliminated drinking water taste and odor problems, sited a new 530 acre wastewater treatment plant, achieved 73% customer satisfaction, and reduced workers compensation liability by more than 20% in three years.

The Camden County NJ Municipal Utilities Authority (CCMUA) used an EMS process to address its discharge and biosolids issues with equally impressive results. Prior to its EMS, CCMUA was barely meeting its state discharge permit, being fined and sued for almost continuous odor problems and had recently raised its user rates by over 22%. Through the EMS, the CCMUA identified its core objectives to be (1) optimization of water quality, (2) minimization of odors and (3) cost efficiency. Within 5 years of implementing an EMS, the CCMUA improved solids capture by 40%, virtually eliminated its odor problems, completely overhauled its physical plant, and reduced suspended solids in its discharge from 26 to 7 parts per million (permit limit of 30 ppm). The utility accomplished all of this while reducing rates from $337/household in 1996 to $324/household in 2012.

Global Water Resources, which operates a portfolio of small and medium drinking water and clean water agencies in Arizona, is perhaps the most technologically sophisticated utility in the US. It has taken utility efficiency to a new level using evaluation and productivity improvement processes (Total Water Management) similar to Lean, advanced metering infrastructure, and cloud-based data analytics and presentation technology to reduce water losses and put real-time monitoring of water use in the hands of their clients.

devices on agency vehicles enable greatly improved accounting and accountability of rolling stock and field labor, saving thousands in fuel costs.



EXTENDING THE VISION WITH BOLD TRANSFORMATIVE THINKING

The previous section examined incentives for, and barriers to, innovation. It proposed ways to change current regulations, financing conventions, risk allocation mechanisms, administrative procedures, and operating efficiencies to broaden incentives and overcome barriers. There is no doubt that these actions will help utilities transition from collectors and handlers of wastewater to resource managers and environmental leaders.

Many believe, however, that we must go beyond changes to current conditions to arrive at the UOTF, that bold and transformative thinking will be needed to effect quantum movement in operating performance, cost, environmental outcomes, and community involvement.

The sorts of initiatives described in this section are ambitious and complex. It will take time to fully define objectives, roles, scopes, milestones, and measures of success. Consequently, only the concepts are introduced in this *Blueprint*.

Congressional Caucus to Advance UOTF Initiatives

We are perhaps only a few years into a multi-decade transition and at this early stage, it is difficult to foresee all the possibilities. Under these circumstances, while creating an environment of innovation, it seems prudent to also create forums that enable continuous exchange of ideas as they arise. The utility side of the industry has such forums as do technology developers, design engineers, and solution providers. But no such forum exists at the Congressional level to raise awareness among legislators. And clearly, nothing short of a national strategic initiative will result in the kinds of outcomes needed to meet the challenges of the 21st Century and beyond. A Congressional Caucus on the UOTF is one way to elevate the importance of water to our society and ensure that the federal government is doing everything it can to support the industry.

> ***Action: Congressional leaders from both House and Senate authorizing committees should create a Congressional Caucus to bring together legislators, sector leadership, and leadership from within the regulatory, finance, and related communities. The Caucus would enable systematic evaluation of some of the actions discussed in this Blueprint as well as new approaches to solve problems as they arise. Key federal water agencies would participate, perhaps***

Replicating Successful Clean Water Agency Programs

The Narragansett Bay Commission (NBC), serving 360,00 residents and 7,700 businesses in Rhode Island's capital, Providence, and surrounding communities, is a leader in the field of energy efficiency and alternative energy for wastewater treatment facilities. The NBC built the first wind farm in the state of Rhode Island when it installed three 1.5MW wind turbines at its Field's Point facility in Providence. At its Bucklin Point facility in East Providence the NBC is completing design of a biogas Combined Heat & Power (CHP) project and a feasibility study to evaluate installing a 2.6 MW solar photovoltaic plant is ongoing. These alternative energy projects, in conjunction with continuous energy efficiency upgrades, have placed the NBC on a path toward meeting its net-zero energy goal.

With the support of an EPA grant, the NBC has established a partnership with Rhode Island's electric utility, National Grid, to conduct Energy Efficiency Technical Assessments (EETAs) of all Rhode Island wastewater treatment facility operations. All nineteen wastewater plants in Rhode Island were assessed, and at the completion of the EETA process in 2012, each facility received a technical report identifying Energy Efficiency Measures, including equipment and physical operating control systems which could produce economically feasible reductions in energy use if implemented. The technical reports also included cost effective co-generation and use of renewable energy resources that can be implemented by the clean water agencies.

Similar programs could be replicated across the nation, which would leverage the considerable technical expertise embedded within large clean water agencies to reach thousands of smaller clean water agencies and multiply benefits to the nation considerably.

marking the beginning of better federal interagency coordination on water policy and program objectives. Over time, especially in light of inevitable moves to balance the federal budget, one could imagine this group formulating a sensible approach to consolidating the federal role into fewer, more targeted offices and programs.

Creating the Industry of the Future

The future of clean water agencies is emerging largely because of the efforts of dozens of forward thinking leaders in the sector. Regulators, technology developers, consulting engineers, and the industry's professional organizations are supporting this transition. But like any emerging trend, the sector is not yet organized optimally.

The major professional organizations representing clean water agencies can play a key role in organizing the industry to create and sustain the "Industry of the Future." The Task Force that came together under their auspices to create this *Blueprint* can become a powerful driver on their behalf. A concerted movement to organize the clean water sector behind the "Industry of the Future" would include such activities as focused, collaborative research; advocacy for legislative change; advisory services to regulators; public information; and a UOTF knowledge base platform that details and updates the latest UOTF technologies and processes, enabling the nation's 16,000 clean water agencies to replicate them.

Action: The UOTF Task Force organized to support this Blueprint, working with the clean water industry associations, should be the driving force behind implementation of the actions noted herein, especially those that deal with internal activities and creation of an "Industry of the Future" knowledge base. For those that require regulatory action, the Task Force should work with EPA in the capacity of a UOTF Advisory Board. For those that require Congressional action, the Task Force would represent the industry in hearings.

An Intergovernmental Partnership to Address Adaptation to Extreme Weather Events

Recent events such as the broad drought in the summer of 2012 or Hurricane Sandy in the fall of 2012 serve

as constant reminders both of the critical services that clean water utilities provide and of the vulnerability of their physical structures to extreme weather events. Because centralized facilities are typically sited at the lowest elevation possible to facilitate gravity flow, clean water facilities are particularly susceptible to floods and sea level fluctuations. Complicating matters further, they cannot be moved easily since urban land is generally scarce having been developed over the years since these facilities were first built and because complex networks of sewers were built expecting large treatment facilities at their terminus.

Many argue that building in physical and operating resilience can be a viable and cost-effective solution. Elements of such a solution include physical barriers, redundant components, remote operations facilities, and other sorts of hardening approaches. But these may only buy time, especially if climate change results in more frequent and more severe flooding and/or continued sea level rise. Operational resiliency will help under these circumstances, including for example, broad and well exercised inter-local cooperation agreements, regional emergency equipment stores available to multiple facilities, city-wide command centers to manage through an emergency event, and advance warning systems that enable portions of networks to shut down and perhaps divert flow before systems are hydraulically overloaded. Green infrastructure is the third key element, where hard urban surfaces are replaced by vegetated or permeable surfaces to retain runoff and natural shoreline features such as wetlands and sand dunes are restored to mitigate the effects of storm surges.

None of these options are inexpensive. Beyond funding, all of these options involve extensive planning, public education and involvement, changes to individual and corporate behaviors, and potentially changes in land use.[40]

> ***Action: The nation's clean water professional associations should organize a coordinated program to synthesize on-going research and more fully define and recommend elements of a program of action on resilience in response to extreme weather events for the nation's clean water infrastructure. Based on these recommendations, the US Congress should support a concerted 10-year partnership with the states to formulate and help finance infrastructure and other measures to ensure implementation of resiliency plans at all susceptible facilities.***

Creating Real Markets for Water

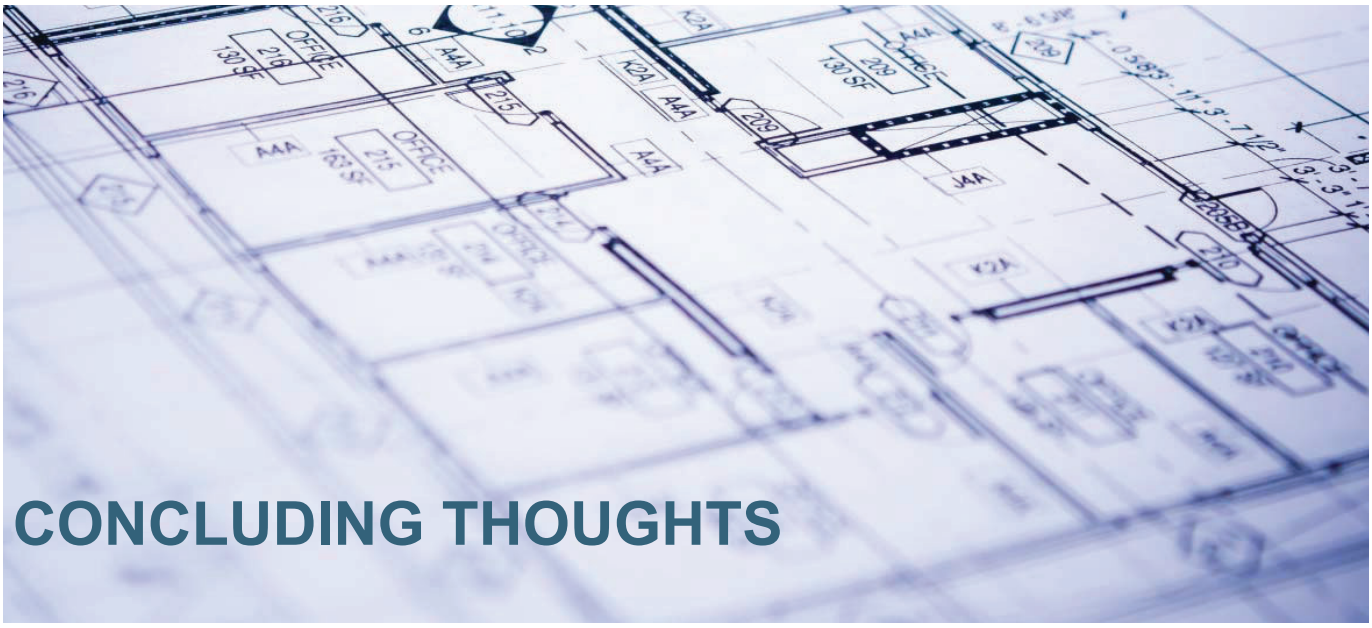
As more clean water agencies reclaim water to reuse in industrial cooling, landscape irrigation, groundwater recharge, and possibly potable water supplies, questions will arise as to the rights to these sources of supply, especially in the western states that operate under a prior appropriations water rights doctrine. A well-defined market for buying and selling water rights within targeted watersheds would support an orderly transition to such reuse and support clean water agencies that wish to create new revenues from the sale of reused water. Aside from the benefits to clean water agencies, well-defined and organized markets for water would help water-short urban centers sustain temporary supplies from less productive users like farmers irrigating marginal lands during droughts.

Water transfers are possible today and, in fact, there are more than two decades of experience in states like California with modest numbers and types of transfers, although they have declined in number in recent years.[41] The market could be significantly strengthened if either or both state agencies that administer water

rights systems within their states and/or the federal government in their capacity to create and define rules within federal interstate water management compacts better define and possibly manage a market for public and private buyers and sellers of water rights.

Facing severe drought for more than a decade, such interventions by the Australian government did exactly this.[42] The Australian water market is considered by many to be the most sophisticated in the world, with more than $3 billion in trades a year. Water rights can be bought and sold separately from land rights and traded on an open market, generally within watershed boundaries. Investors can buy entitlements to water and rent them back to irrigators, or sell the rights into the temporary transfer market. The Australian Government is pursuing a number of initiatives to improve the functioning of water markets: working with Basin states to remove barriers to water trade, developing a National Water Market System that will assist in the efficient management of water registry, transaction and market information functions; and creating and updating market rules. Private water market intermediaries (e.g. water brokers and exchanges) play an important role in the market by bringing buyers and sellers together, reducing search costs, improving information flows and assisting in obtaining regulatory approvals

Action: The professional organizations representing the clean water industry should initiate an examination, perhaps with such organizations as the Western Governors Association or the Council of State Governments, to examine in detail whether and the extent to which the states acting individually or with input from federal water agencies like the US Bureau of Reclamation could better support water markets to define rights for recycled water and achieve more efficient allocation of all source waters (including recycled water), especially during extreme weather events.



CONCLUDING THOUGHTS

Clean water agencies face unprecedented challenges in the coming decade. Fiscal pressures have never been greater. Infrastructure upgrades, expansions, and replacement have never been more critical. Regulatory demands to control nutrients, combined sewer overflows, and sanitary sewer overflows have never been stronger.[43] Future threats of system failure from extreme weather events have never seemed more real.

Yet there is cause for optimism. Sector leadership is stronger than ever. Technology innovation is emerging as a driving force offering design engineers options to make great strides in process efficiency while reducing costs. And most importantly, the sector as a whole is beginning to understand its central role in economic and social well-being. In short, the Utility of the Future is becoming real.

Just a few years into a generational paradigm shift, we cannot fully envision its limits. We do know that each clean water agency will take a somewhat different path from handlers of wastewater to managers of sustainable resources; from regulated entities seeking permit compliance to watershed-scale environmental leaders seeking least-cost environmental and social solutions; from engineers designing concrete and steel treatment works to regional planners designing and building weather-resilient, green communities; from isolated public service units to integrated members of economically thriving local economies.

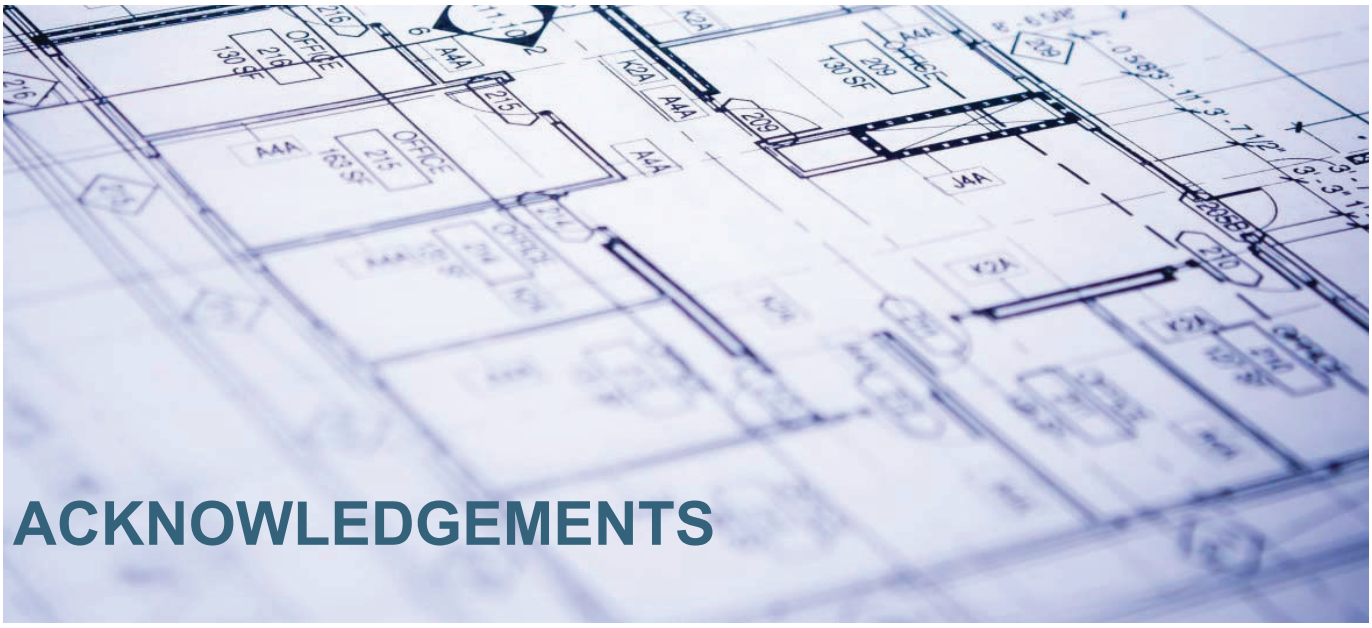
The actions described in this *Blueprint* are important steps. But despite initial optimism, these steps alone may not be enough. We should build on our momentum to go beyond the Clean Water Act by engaging legislators, industry practitioners, and technology innovators in a conversation about a 21st Century Watershed Act. The Congressional Caucus introduced earlier would be an ideal forum for such a conversation.

A 21st Century Watershed Act would find its roots in the foundations of the 1972 Clean Water Act that called on regulators and the regulated community to find solutions to America's water quality challenges by working together at the area-wide or watershed scale. The 1972 Clean Water Act embodied several parallel approaches to meet clean water goals: watershed planning, financial incentives to help clean water agencies upgrade and expand treatment works, a system of legally enforceable water quality requirements and discharge permits with penalties for point sources that failed to meet them, and funding for science and technology to fill knowledge gaps needed to justify requirements and permit conditions.

We have accomplished a great deal with these programs and the nation benefits from significantly cleaner water bodies. Over time, however, Clean Water Act priorities have focused much more narrowly on enforcing tighter and tighter discharge limits to the point that future water quality returns to this 40-year old approach will be sharply lower than we have enjoyed in the past and whatever gains may be possible will come at greatly increased costs. Already reduced federal clean water funding is threatened further by budget concerns, tax-exempt public capital markets appear shaky in the current tax-reform debate, and increasingly communities are reaching their limits of affordability of clean water services. The emergence of UOTF initiatives is clear evidence that a new direction is emerging, that the paradigm has changed.

A new 21st Century Watershed Act would acknowledge this paradigm shift and help realign regulatory expectations, federal programs, and the emerging leadership role of America's clean water agencies as they explore and implement UOTF initiatives described herein. Such an Act would re-create the partnerships previously enjoyed between EPA, state regulators, and clean water agencies. It would embrace sound science based on ecosystem-wide management decisions and holistic evaluation of watersheds to determine sustainable solutions. It would encourage the examination of the historical record for the receiving water to ensure that all causes of impairment are understood and controlled. It would allow for the sorts of watershed processes like adaptive management discussed earlier and "smart engineering" methods to be incorporated as elements of the TMDL process. It would encourage green infrastructure and other solutions that go beyond chemistry in the water column to restore and create fisheries and wetlands or make our shoreline more resilient to extreme weather events while creating the jobs of the future.

The vision of fishable, swimmable waters is something we all share, but new directions are needed if we are to achieve our goals. The progress we are making today is strong evidence that new approaches to resources management are possible, that America's clean water agencies are prepared to lead, and that communities across the nation are motivated to work together to find least-cost water and resource management solutions that improve local economies and the quality of life. A 21st Century Watershed Act would set this new direction legislatively and launch the next increment of success in water resources management.



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Steering Committee

The Steering Committee was made up of nine members – three from each of the partnering organizations – and was tasked with providing high-level oversight to ensure that the *Blueprint* achieved the goals set out in the proposal framing the project.

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Global Water Advisors, Inc

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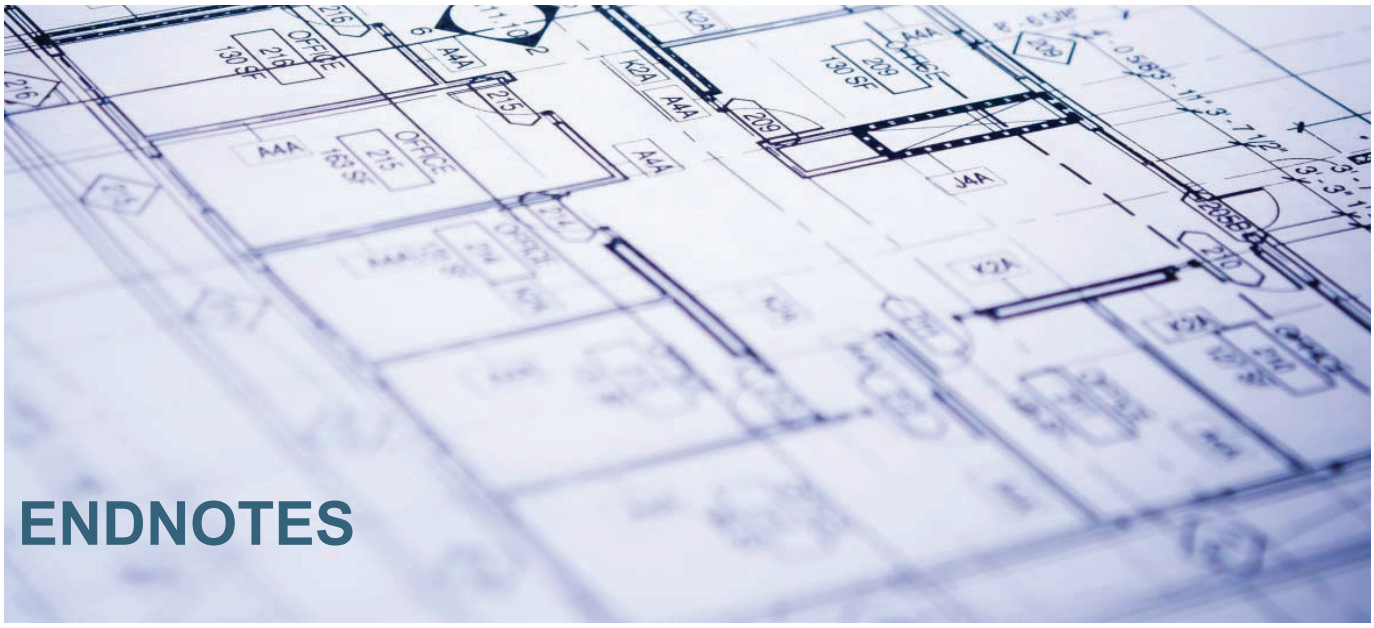


ENDNOTES

1 BMJ 2007; 334:111.2 http://dx.doi.org/10.1136/bmj.39097.611806.DB (18 January 2007)

2 U.S. Environmental Protection Agency, *Clean Watersheds Survey Report to Congress* (2008); U.S. Bureau of the Census, *State and Local Government Finances* (2010); U.S. Bureau of Labor Statistics, *State and Metro Area Employment* (2012).

3 National Association of Clean Water Agencies, *Two Sides of the Same Coin: Increased Investment & Regulatory Prioritization* (2011) and Controlling *Nutrient Loadings to U.S. Waterways: An Urban Perspective* (2012).

4 Agriculture is by far, the greatest source of pollutants that impair US waters. Other sources of impairment or rivers and lakes that exceed municipal sources include atmospheric deposition, hydro-modification, and runoff from urban and rural lands. For details, see: USEPA ATTAINS database and Section 305(b) reports to the US Congress, various years.

5 By comparison, Israel reuses 70 percent, Singapore reuses 30 percent and Australia reuses 8 percent, with a national goal of 30 percent reuse by 2015. For details, see: http://www.nvwra.org/storage/2011/conference/presentations/presMillerWade.pdf

6 Survey of members of the National Association of Clean Water Agencies, September 2012.

7 Ibid.

8 For details, see National Association of Clean Water Agencies, *Controlling Nutrients to US Waterways: An Urban Perspective*, October 2011.

9 Where there is "reasonable assurance" that nonpoint sources will reduce their nutrient pollutant loadings, a state may allocate more of the needed loadings reductions to nonpoint sources instead of more stringent point source reductions. In their recent review, however, the states and EPA concluded that allocation in the absence of enforcement is unreliable: "*States have undertaken and explored different limited approaches to control nonpoint sources. Authority at the federal level for state development of effective, enforceable and*

transparent nonpoint source accountability is lacking." For details, see: State-EPA Nutrient Innovations Task Group, An Urgent Call to Action, a report to the Administrator of the US Environmental Protection Agency, August 27, 2009, page 19.

10 Op cit. National Association of Clean Water Agencies. Also, see: Ohio EPA Rules for Water Quality Trading, Ohio Administrative Code Ch. 3745-5.

11 See Water Environment Research Foundation, *Energy Opportunities in Wastewater and Biosolids*, unpublished White Paper, April 2009.

12 For details, see: http://www.epa.gov/ttn/atw/129/ssi/ssipg.html

13 For details, see: http://www.law.cornell.edu/uscode/text/26/141

14 For details, see: http://www.c2es.org/us-states-regions/policy-maps/renewable-energy-standards

15 National Research Council, Water Science and Technology Board, National Academy of Science, *Water Reuse: Potential for Expanding the Nation's Water Supply Through Reuse of Municipal Wastewater*, The National Academies Press, Washington D.C., 2012.

16 Though each state has its own set of rules and conventions, generally the Western states allocate water to users following a prior appropriations doctrine whereas the Eastern states follow the riparian use doctrine. There are many fine books that present the details of state water laws, including for example, A Dan Tarlock, *Law of Water Rights and Resources*, Clark Boardman Environmental law series, New York, 1988-2010.

17 Op. cit., National Research Council, pages 123-130.

18 The City of San Diego CA, which imports 90 percent of its water, has attempted and failed to implement potable wastewater reuse since 2004. See: http://www.sandiego.gov/water/waterreuse/index.shtml

19 These include: the Environmental Protection Agency, Department of the Interior (Bureau of Reclamation), Department of Commerce, Department of Agriculture, Department of Energy, General Services Administration, U.S. Geologic Survey, US Army Corps of Engineers, and Department of Defense.

20 See: US Environmental Protection Agency, *Clean Watersheds Needs Survey 2008 Report to Congress*, EPA-832-R-10-002, Office of Wastewater Management, Washington DC.

21 Integrated water resources planning and management has been the focus of literally thousands of journal articles and hundreds of professional and scientific conferences over the years. As water grows scarcer and costlier, incremental progress toward this goal is inevitable. For a contemporary look at integrated water management as it relates to the UOTF, see: US Water Alliance, *Managing One Water*, 2010.

22 See, for example: Joe Zuback, *Strategies for Accelerating Adoption of New Cost-Saving Water Technologies and Solutions in a Risk-Adverse Market*, presented at the 104th annual meeting of the Water and Wastewater Equipment Manufacturers Association, Las Vegas NV, November 2, 2012.

23 Although both the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency have limited authorities to provide assistance to local entities for recycling projects (e.g., specific provisions for the Corps in 1992 and 1999 Water Resources Development Acts; a pilot program by EPA under the Alternative Water Sources Act; and general Clean Water Act water treatment and wastewater authorities), neither has an established, regularly funded program dedicated to such activities. For details, see: Betsy A. Cody and Nicole T. Carter, *The Title XVI Water Reuse Program: Implementation and Legislative Issues*, US Congressional Research Service, October 27, 2006.

24 For complete guidance on these and other DOE programs, see: http://www1.eere.energy.gov/wip/guidance.html

25 Most state loan funds are targeted at specific borrowers in the private sector or low-income households, so loan availability may be limited. For details, see: http://www1.eere.energy.gov/wip/pdfs/sep_rlf.pdf

26 The National Association of Clean Water Agencies has been on the forefront of advocating for SRF funding either in its current form or in the form of a Federal Clean Water Trust Fund. The Water Environment Federation also has been a strong supporter of SRF funding and more recently has called for a new Water Infrastructure Finance and Innovation Authority (WIFIA) to be created.

27 For details, see: http://water.epa.gov/infrastructure/greeninfrastructure/gi_support.cfm

28 Programs include the Conservation Reserve Program, Conservation Stewardship Program, Environmental Quality Incentives Program, and Wetlands Preserve Program. For details, see: National Association of Clean Water Agencies, *Controlling Nutrient Loadings to US Waterways: An Urban Perspective*, October 2011.

29 See: http://arpa-e.energy.gov/About/About.aspx

30 For details, see: http://www.werf.org/lift/Home/lift/Home.aspx?hkey=2cd855fd-d6da-44b2-a6ae-92c66436a704

31 This leader of this consortium is Southern Nevada Water Authority. Isle Utilities organizes the iTAG. See: http://www.isleutilities.com/

32 Op cit., National Research Council, p. 1.

33 General Electric Company, GE Water Reuse Survey, *Executive Summary of US Findings*, October 23, 2012.

34 Op Cit., National Research Council, p.155.

35 For details, see: http://www.watereum.org/

36 U.S. Environmental Protection Agency, Association of Metropolitan Water Agencies, American Public Works Association, American Water Works Association, National Association of Clean Water Agencies, National Association of Water Companies, and Water Environment Federation, *Effective Utility Management: A Primer for Water and Wastewater Utilities*. (June 2008). www.watereum.org/resources/

37 These methods are similar to the initiatives that NACWA pioneered in the 1990s in their guidance and sector workshops, *Thinking, Getting, and Staying Competitive: A Public Sector Handbook, and High-Performance Business Services*.

38 For a thorough examination of Lean and Six Sigma in the water and clean water sector, see: *Environmental Protection Agency, Resource Guide to Effective Utility Management and Lean: Improving Performance and Addressing Key Management Priorities at Water-Sector Utilities*, Environmental Protection Agency, November 2012 Review Draft.

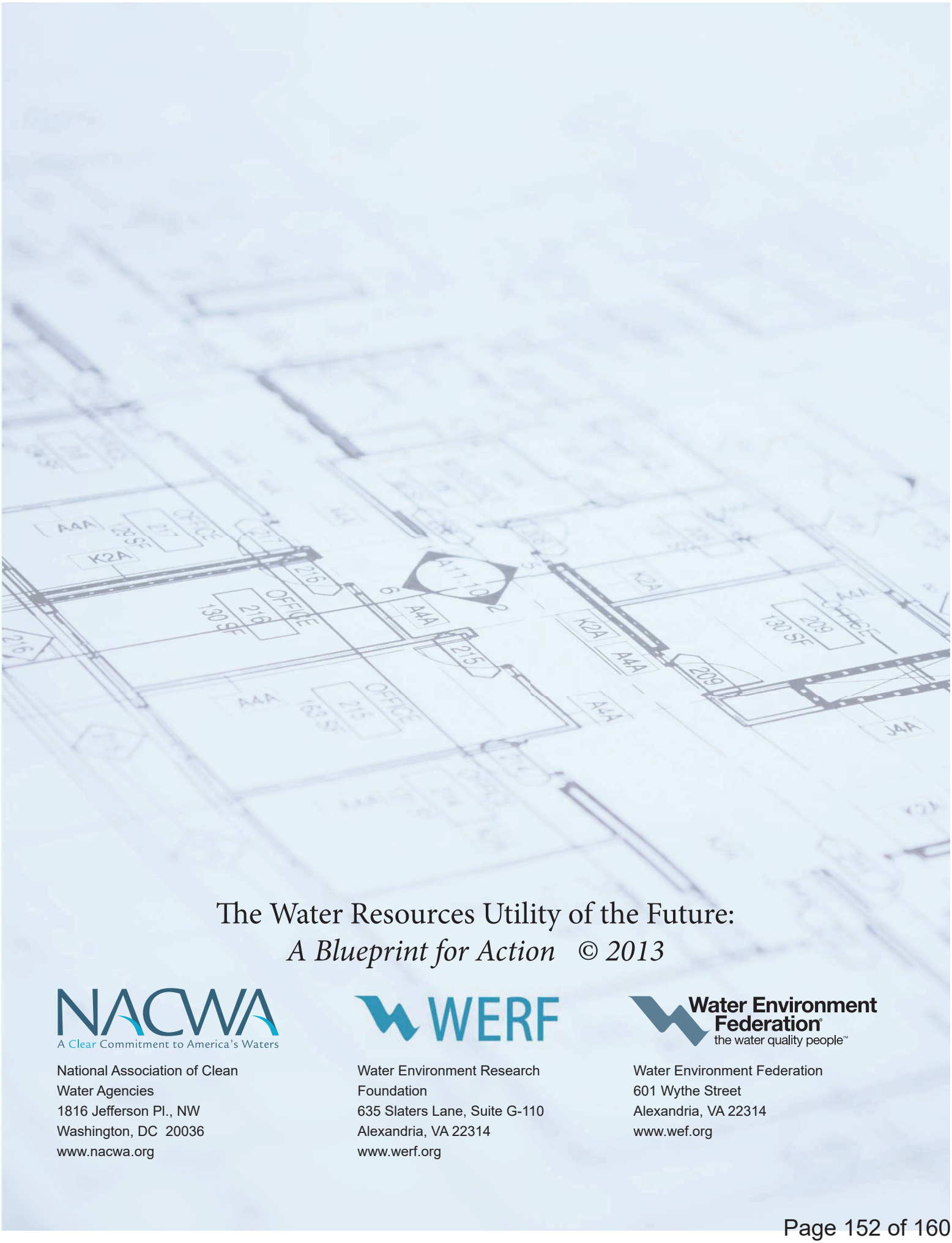
39 For details, see: http://www.wef.org/AWK/page.aspx?id=2477

40 Many initiatives are already under way to address resiliency of US water and wastewater infrastructure, including for example, the Water Utility Climate Alliance (members include Central Arizona Project, Denver Water, the Metropolitan Water District of Southern California, New York City Department of Environmental Protection, Portland Water Bureau, San Diego County Water Authority, San Francisco Public Utilities Commission, Seattle Public Utilities, Southern Nevada Water Authority and Tampa Bay Water). EPA has several programs addressing resiliency of infrastructure such as their CREAT software that enables utilities to evaluate the vulnerability of their assets to extreme weather events and broadly, plan resilient activities to reduce risks or EPA's Community-Based Water Resiliency Initiative to assess resilience of infrastructure to service interruptions. See: http://www.wucaonline.org/html/, http://water.epa.gov/infrastructure/watersecurity/climate/creat.cfm, or http://water.epa.gov/infrastructure/watersecurity/communities/

41 According to one recent analysis, there have been a little less than 200 recorded water rights transfers (short- and long-term sales and leases) a year over the period 1987-2007. See *Zachary Donohew, Property Rights and Western United States Water Markets*, The Australian Journal of Agricultural and Resource Economics, 53, pp.85-103, 2009.

42 Water use laws and conventions in Australia originally very similar to ours in the US underwent broad reform largely in response to sustained drought, which suggest a strong potential for learning and transfer. Australia's federal Commonwealth government is responsible for policy leadership, planning, and funding while states are responsible for laws that govern water use and allocation of water rights within their states. Australia's Water Management Act of 2000 created separate rights for extraction/diversion of surface or groundwater and for the right to use water at a specific place for a specific purpose. Using an extensive public involvement process, the Act also prioritized water uses in times of shortage, from highest to lowest: Domestic, environmental, commercial and urban uses, and irrigation. The Water Act in 2007 implemented Australia's National Water Initiative, which among other things, created the Murray-Darling Basin Authority to coordinate basin planning and water management in this watershed serving about a quarter of the country's population and most of its agricultural production across three of Australia's five mainland states. For details, see the website of Australia's National Water Commission at: http://nwc.gov.au/

43 For details on these issues and a general presentation of financial changes and challenges in the clean water sector, see National Association of Clean Water Agencies, *Two Sides of the Same Coin…Money Matters – Increased Investment and Regulatory Prioritization* (2011) and *The Message is Clear…Money Matters – Smarter Investment to Advance Clean Water* (2011)



The Water Resources Utility of the Future:
A Blueprint for Action © 2013

National Association of Clean Water Agencies
1816 Jefferson Pl., NW
Washington, DC 20036
www.nacwa.org

Water Environment Research Foundation
635 Slaters Lane, Suite G-110
Alexandria, VA 22314
www.werf.org

Water Environment Federation
601 Wythe Street
Alexandria, VA 22314
www.wef.org

ORGANICS PROCESSING AGREEMENT

This Organics Processing Agreement (this "Agreement") is made and entered into on _____ (the "Effective Date"), by and between the University Area Joint Authority ("UAJA"), a Pennsylvania authority located at 1576 Spring Valley Road, State College, Pennsylvania, 16801, and New Freedom Resources, LLC, a Pennsylvania limited liability company having an address of P.O. Box 1578, Mechanicsburg, PA 17055 ("New Freedom").

ARTICLE I: SCOPE AND TERM

1.01 Agreement. This Agreement sets forth the conditions under which UAJA will design, engineer, permit, build, own, operate, and maintain an addition to the Spring Creek Pollution Control Facility (the "Facility") to receive Organics for processing and disposal (the "Project"), and the conditions under which New Freedom will supply Organics to UAJA as part of the Project.

1.02 Term. This Agreement will commence on the Effective Date and continue for an initial term of ten (10) years (the "Initial Term"). The Agreement will renew automatically for additional five (5) year terms thereafter (each, a "Renewal Term") unless and until New Freedom gives written notice to UAJA at least ninety (90) days prior to the expiration of the Initial Term or the Renewal Term then in effect. The Initial Term and any Renewal Term may be collectively referred to herein as the "Term". This Agreement may be terminated by the parties in accordance with Article 5.

1.03 Fundamental Principle of Good Faith and Fair Dealing. In entering into this Agreement, UAJA and New Freedom each acknowledge and agree that all aspects of the relationship set forth herein will be governed by the fundamental principle of good faith and fair dealing, with the desire to work reasonably and mutually together to accomplish the stated goals. UAJA and New Freedom shall assure that each of their representatives, including their employees, will comply with such principles.

ARTICLE II: DEFINITIONS

Capitalized terms shall have the meanings set forth below, in addition to the designations appearing elsewhere in this Agreement:

2.01 "New Freedom" means the Organics Supplier.

2.02 "County" means Centre County, Pennsylvania.

2.03 "DEP" means the Department of Environmental Protection of the Commonwealth of Pennsylvania.

2.04 "Organics" means any solid, semi-solid, or liquid waste that is derived from plant or animal and is biodegradable without requiring excessive treatment or contamination removal. A list of acceptable Organics is contained in Exhibit A-1. If a material is not listed in Exhibit A-1, New Freedom can contact the UAJA for individual wastes to be appended to Exhibit A-1 or taken on a singular basis at the sole discretion of the of the UAJA. All wastes not included in Exhibit A-1, and not preapproved by the UAJA on a singular basis, shall be deemed unacceptable.

2.05 "Party" and "Parties" means one of or both of UAJA and New Freedom, as the case may be.

2.06 "Residual Waste" any residual waste that is separated by the UAJA from the processing of Organics including packaging, bone, plastics, or other inert materials.

2.07 "Services" shall mean all designing, engineering, permitting, building, operating, processing, and maintaining services and related activities that are provided by UAJA under the terms of this Agreement.

2.08 "UAJA" means University Area Joint Authority.

2.09 "Wastewater Treatment Plant" means the UAJA's wastewater treatment plant at 1576 Spring Valley Road, State College, Pennsylvania 16801.

ARTICLE III: INVOICING AND PAYMENT

3.01 Pricing, Discounts, and Terms. New Freedom shall pay a fee equal to $40 per wet ton of Organics delivered to UAJA. On each annual anniversary of the Effective Date during the Term, the fee will increase by 2.5%.

3.02 Invoicing. UAJA will issue invoices to New Freedom on a monthly basis. All fees are due and payable thirty (30) days from the date of the invoice. In the event that New Freedom disputes any invoice or portion thereof, New Freedom shall deliver written notice of the disputed invoice and the parties shall work reasonably and mutually together to resolve such dispute. If they are unable to resolve the dispute amicably within thirty (30) days of the date of such dispute notice from New Freedom, then either party may pursue any rights and remedies available law or under this Agreement All payments made under this Agreement shall be made in U.S. dollars via wire transfer, bank draft, or check unless otherwise agreed in writing by UAJA.

3.03 Late Payments, Collections, and Suspension of Service. A late payment charge of one and a half (1.5%) percent per month, or the maximum percentage rate permitted by law, if lower, shall be charged on all past due balances. New Freedom agrees to pay all costs and expenses incurred by UAJA in collecting or attempting to collect past due balances, including, but not limited to, third party collection fees, reasonable attorneys' fees, legal expenses, and court costs. If New Freedom's account is more than thirty (30) days overdue, UAJA shall be entitled to suspend all Services to New Freedom until such amounts are paid in full, provided that such suspension shall not limit any other remedies available to UAJA.

3.04 Costs of Delivery. All Organics delivered under the terms of this Agreement shall be F.O.B. UAJA's Facility unless otherwise agreed in writing by UAJA, with risk of loss passing to UAJA upon UAJA's acceptance of the Organics at the Facility. Unless otherwise agreed in writing by UAJA, New Freedom shall be responsible for all shipping charges and freight costs, taxes, insurance, and any other charge incidental to New Freedom's delivery of the Organics under this Agreement.

3.05 Non-Circumvention. During the Term of this Agreement, UAJA agrees that it will not solicit business from, or contract directly with (i) any customer of New Freedom who has contracted with New Freedom in connection with the delivery, processing and disposal of Organics at the Facility, or (ii) any other agent, broker or intermediary acting on behalf of such customer (or their respective affiliates) for the purposes of delivery, processing and disposal of Organics at the Facility. Notwithstanding the foregoing, nothing in this Section shall (i) apply to any person or entity with whom UAJA has had prior dealings or an existing relationship independent of New Freedom; (ii) apply to any person or entity that independently contacts UAJA without solicitation in violation of this Section; or (iii) restrict UAJA's participation in, or award of contracts pursuant to, any competitive procurement process or other process required by applicable law or UAJA policy. UAJA shall not be deemed in breach of this Section absent actual knowledge that a person or entity is subject to the restrictions set forth herein.

ARTICLE IV: REPRESENTATIONS AND WARRANTIES

4.01 Representations and Warranties of UAJA. UAJA hereby makes the following representations and warranties to New Freedom under this Agreement:

A. UAJA shall process all Organics delivered to UAJA by New Freedom according to the procedures set forth in Exhibit A-1.

B. UAJA is in the business of providing and accomplishing the Services set forth under this Agreement and will do so in a timely, professional, and workmanlike manner with a level of care, skill, practice, and judgment consistent with generally recognized industry standards and practices for similar services, including personnel with the requisite skill, experience, and qualifications.

C. UAJA will comply with all laws, rules, and regulations pertaining to the Services provided under this Agreement, including, without limitation, all environmental permitting laws and regulations implemented and/or enforced by the Pennsylvania Department of Environmental Protection, the U.S. Environmental Protection Agency, and the County.

D. UAJA will install, provide, and maintain all reading, metering, measuring, and weighing equipment necessary for accepting and processing New Freedom's Organics. UAJA will, moreover, allow New Freedom to inspect, observe tests, and, at upon reasonable advance notice and at New Freedom's sole cost and expense, conduct New Freedom's own tests of the metering equipment.

E. UAJA will accomplish all Services set forth in this Agreement in a manner that results in the production, using New Freedom's Organics, of a dried product that will meet the criteria set forth in 40 C.F.R. Part 503 for Class A Biosolids as the Organics will be mixed with Biosolids for further processing at the Facility (Drying).

4.02 Representations and Warranties of New Freedom. New Freedom hereby makes the following representations and warranties to UAJA under this Agreement:

A. All acceptable Organics that will be delivered by New Freedom to UAJA under this Agreement will be in conformance with Exhibit A-1, separated at the facilities of New Freedom's customers, at the times and on the terms reasonably agreed to by the parties. Throughout the term of the Agreement, New Freedom agrees to provide 100% of the acceptable Organics to UAJA, sorted and separated. For purposes of estimation only, the parties anticipate that the Organics to be delivered will be approximately 5,000 tons per year. UAJA acknowledges and agrees that New Freedom may curtail or cease delivery of Organics to the Facility due to unforeseen circumstances or any requirement of any laws or regulations as provided in Section D below.

B. New Freedom is in the business of providing and accomplishing its respective deliverables set forth under this Agreement and will do so in a timely, professional, and workmanlike manner with a level of care, skill, practice, and judgment consistent with generally recognized industry standards and practices for similar deliverables, including personnel with the requisite skill, experience, and qualifications.

C. New Freedom will comply with all laws, rules, and regulations pertaining to its deliverables set forth under this Agreement, including, without limitation, all environmental permitting laws and regulations implemented and/or enforced by the Pennsylvania Department of Environmental Protection, the U.S. Environmental Protection Agency, and the County.

D. Once Organics are delivered to UAJA, New Freedom shall have no right, title, or interest in or to any environmental attributes of the Organics, nor will New Freedom have any right,

title, or interest in or to any tax benefits based on the processing of such Organics, except as otherwise set forth by law. Provided, however, UAJA acknowledges and agrees that upon delivery of Organics to UAJA, all of New Freedom's obligations with respect to such delivered Organics shall end, and that New Freedom shall have no further liability or responsibility to UAJA or to any third parties thereafter arising out of or relating to such delivered Organics. UAJA shall indemnify, defend and hold New Freedom harmless from any and all claims, damages, liabilities, losses, costs, expenses (including reasonable attorneys' fees) arising from the UAJA's processing and/or disposal of the Organics at the Facility. New Freedom shall indemnify, defend and hold UAJA harmless from any and all claims, damages, liabilities, losses, costs, expenses (including reasonable attorneys' fees) arising from New Freedom's or its customers' sorting, segregation and transportation of Organics.

E. New Freedom will work reasonably and mutually with UAJA to accomplish UAJA's Services set forth in this Agreement, including, for example, UAJA's obtaining and maintaining all permits necessary for the processing of Organics at the Facility.

ARTICLE V: MISCELLANEOUS

5.01 Relationship of Parties. The parties to this Agreement are independent entities, and this Agreement will not be construed to create an agency, partnership, joint venture, or employment relationship between UAJA and New Freedom. Neither party is an agent, employee, or partner of the other party. Neither party will represent itself to be an employee or agent of the other party or enter into any agreement on the other party's behalf or in the other party's name. Each party will retain full control over the manner and means by which it conducts its business, and neither party will be entitled to waive any entitlement to workers' compensation, disability, retirement, insurance, stock options, or any other benefits afforded to its employees.

5.02 Mutual Representations. Each party represents and warrants to the other party that: (i) it is duly organized, validly existing, and in good standing as a corporation or other entity as represented herein under the laws and regulations of its jurisdiction of incorporation, organization, or chartering; (ii) it has, and throughout the Initial Term and any Renewal Term will retain, the full right, power, and authority to enter into this Agreement and perform its obligations hereunder; (iii) the execution of this Agreement by its representative whose signature is set forth at the end hereof has been duly authorized by all necessary action of the party; and (iv) when executed and delivered by such party, this Agreement will constitute the legal, valid, and binding obligation of such party, enforceable against such party in accordance with the Agreement terms, except as the enforceability thereof may be limited by bankruptcy and similar laws affecting creditors' rights generally and by general equitable principles.

5.03 Termination. This Agreement may by terminated by either party: (A) upon the commission of a material breach of any representation, warranty or covenant under this Agreement, including the non-payment of any amounts due hereunder, by the other party that is not cured within thirty (30) days of receipt of written notice from the non-breaching party; or (B) upon the bankruptcy or insolvency of the other party; or (C) a change in law or regulation that causes a regulatory agency (US Environmental Protection Agency or PA Department of Environmental Protection) to outlaw, forbid, or otherwise bar the importation of Organics at the UAJA. Except as otherwise set forth herein, if either party directly incurs any costs or expenses or any other liabilities, or suffers any loss due to the material breach of this Agreement by the other party, the breaching party shall indemnify the non-breaching party against such costs, expenses, liabilities, and losses, including any paid, payable, or past interests.

5.04 Choice of Law; Dispute Resolution. The Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania, without regard to principles of conflicts of law. Any and all claims, disputes or controversies (a "Dispute") arising under, out of, or in connection with this Agreement shall be communicated in a written notice to the other party (a "Dispute Notice") pursuant to Section

5.09 below. Each party shall appoint a representative to attempt to amicably negotiate a resolution of such Dispute. If the representatives of the parties have not been able to resolve the Dispute within fifteen (15) business days after the Dispute Notice has been given, the parties shall have the right to pursue any other remedies legally available to resolve such Dispute in either the Courts of the Common Pleas of Centre County of Pennsylvania, or in the United States District Court for the Middle District of Pennsylvania, to whose jurisdiction for such purposes both parties hereby irrevocably consents and submits. The parties shall be free to request that the court order mediation, if available under the then existing local rules of court.

5.05 Waiver of Special Damages. Furthermore, under no circumstances will either party be liable to the other for special, indirect, incidental, punitive or consequential damages for any matter arising from, relating to or connected with this Agreement, and each party expressly waives and releases all claims against the other party and its members, directors, officers, employees, agents, and representatives for the same. .

5.06 No Assignment. This Agreement may not be assigned, leased, sold, or otherwise transferred by either party without prior written consent from the other party, and any transfer made without such prior written consent shall be null and void.

5.07 Severability and Non-Waiver. If any provision of the Agreement shall be held void, voidable, invalid, or inoperative, no other provision hereof shall be affected as a result, and accordingly, the remaining provisions shall remain in full force and effect as though such void, voidable, invalid or inoperative provision had not been contained herein, provided, however, that if such void, voidable, invalid or inoperative provision is a material term or condition, the parties shall be compelled to supply a substitute provision, negotiated in good faith, which comes closest to their original intention. No provision of the Agreement shall be deemed to have been waived by any act or acquiescence on the part of either party, it being understood that waiver may only occur by an instrument in writing signed by an authorized officer of the party against whom such waiver is sought to be enforced. In the event of a waiver, whether in writing or by operation of law, such waiver shall not constitute a waiver of any other provision or of the same provision on another occasion.

5.08 Force Majeure. Except for obligations to make payments, neither UAJA nor New Freedom will be liable for delay or failure to perform obligations under this Agreement where the delay or failure results from a cause beyond either party's reasonable control, such as utility failures, acts of God, riots, war, terrorist activity, epidemic, pandemic (including the COVID-19 pandemic), natural catastrophes, governmental acts or omissions, or generalized lack of availability of raw materials.

5.09 Notice. All notices, demands and other communications provided for hereunder shall be in writing, sent by express, registered or certified mail, return receipt requested, email, telecopy, courier service or personal delivery, addressed to the parties as follows:

If to New Freedom: New Freedom Resources, LLC
P.O. Box 1578
Mechanicsburg, PA 17055
Attn: Mark Neff, President

If to UAJA: University Area Joint Authority
1576 Spring Valley Road
State College, PA, 16801
Attn: Cory Miller, Executive Director

5.10. Entire Agreement. This Agreement supersedes all prior or contemporaneous oral or written communications, proposals, and representations with respect to the subject matter and shall prevail over any conflicting or additional terms of any quote, order, previous agreement, acknowledgment, or similar communications between UAJA and New Freedom.

Signature page follows.

NOW THEREFORE, with the intent to be bound, the parties have executed this Agreement on the date written above.

UNIVERSITY AREA JOINT AUTHORITY:	NEW FREEDOM RESOURCES, LLC:
_____ *Signature*	_____ *Signature*
_____ *Printed Name*	_____ *Printed Name*
_____ *Title*	_____ *Title*

EXHIBIT A-1

ACCEPTABLE ORGANICS AND PROCEDURES

ACCEPTABLE ORGANICS

A) Pre-Consumer Leftover Food and Expired Food
B) Post-Consumer Leftover Food and Expired Food
C) Packaged and Prepared Food
D) Restaurant Waste
E) Food Byproducts, such as Coffee Grounds and Fruit Residuals (Apple Cores)
F) Industrial Food Production Wastes, such as cheese whey and animal innards
G) Industrial Organics Production Wastes such as glycerin
H) Fats, Oils and Greases
I) Cut Flowers
J) Pet Food
K) Putrescible Solids, such as organic sludges, manures, dissolved air float, fatty acid residues, and spent yeast
L) The above parameters will be verified through periodic observation and investigation by UAJA. Deviations in Acceptable Organics will be denoted by UAJA to New Freedom.
M) The Organics shall be screened for radioactivity in accordance with the UAJA's DEP issued permit.
N) If New Freedom provides Organics that are not acceptable or cannot be safely processed by the UAJA (e.g. radioactive contaminated materials), UAJA shall arrange for the off-site transport and disposal of the Organics. All costs associated with the off-site transport and disposal, and rehabilitation or cleaning of UAJA facilities shall be the responsibility of New Freedom.

ORGANICS PROCEDURES

A) All Organics shall be delivered to UAJA on a daily basis during UAJA's normal days and hours of operation.
B) UAJA shall monitor all loads of Organics for radiation prior to delivering such loads to the Wastewater Treatment Plant and divert any "out of specification" loads for disposal elsewhere in accordance with DEP regulations.