

Ensure Financial Stability	
Reconciled Bank Account Balances	Refer to attached Reconciled Bank Account Balances as of 7/31/2023.
Monthly Financial Statements	Provided separately to Board of Directors.
Monthly Financial Dashboard	Provided separately to Board of Directors.
AP Check Reconciliation Register	Provided separately to Board of Directors.
Capital Improvement Projects for Drinking Water	Provided separately to Board of Directors.
Capital Improvement Projects for Wastewater	Provided separately to Board of Directors.
Grant Management	Refer to attached Grant Management Report.
Ensure Revenues are Consistent with System Usage	
Water Shut-offs	There were 42 water shut-offs for non-payment and 56 service shut-off requests.
Repair/Replace Meters/MXUs/Batteries	Drinking Water Distribution staff replaced 19 water meters, 75 batteries, and 34 MXUs.
Reduce Wet Weather Impacts to Infrastructure, Community, and Receiving Waters	
Negotiate with PADEP/U.S. EPA/DOJ on Past and Future Practices	No update.
Develop Necessary Planning for Implementation of Green Infrastructure	<ul style="list-style-type: none"> • Phase 4 Stormwater Pro-Fi construction will commence at the beginning of July, starting with the Boys and Girls Club GSI and 4th and Harris and Green Street. • Design and planning for next phase of GSI (2024-2027) is underway.
Joint Pollutant Reduction Plan - Collaborate with Suburban Partners on MS4	The Paxton Creek Cooperative is actively working with PennDOT's vendor on the construction contract to determine a final change order to secure the additional sediment reduction required for the 2020-2025 Permit cycle.
Obtain and Comply with Individual MS4 Permit	No update.
Operate Facilities with a High Standard of Care	
Permit Compliance	The Drinking Water department met all primary and secondary Safe Drinking Water Act permit parameters for the month of July. The AWTF met all NPDES permit parameters for the month of July. Two Dry Weather Overflows were reported.
Notice of Violations (NOVs)	There were no NOVs received by the Drinking Water department in July. There were no NOVs received by the Wastewater department in July.
Preventative Maintenance	The Drinking Water Maintenance group conducted all scheduled preventative maintenance for the month to the water treatment plant equipment. Specific facility maintenance activities are outlined within the Drinking Water Department Monthly Report for July. The Wastewater department completed all regularly scheduled preventative maintenance in the month of July.
CCTV	A total of 6,926 feet (1.31 miles) of sewer pipes were assessed by closed circuit television (CCTV) footage during the month of July. A total of 2,590 feet (0.49 miles) of sewer pipes were flushed as well.
Incident Response	Wastewater responded to nine (9) backup and overflow calls from residents during the month of July. CRW was responsible for none.

Geographic Information System (GIS)	<ul style="list-style-type: none"> • Twenty-six (26) Pennsylvania One Call tickets were completed. One (1) was outside the CRW service area and twenty-five (25) required a map. • Bi-weekly meetings were held with KCI Technologies, Inc. • Progress continues with the development of the ESRI "Lead Service Line Inventory Solution". • One (1) in-person GIS update meeting was held. • Attended Operations (OPS) Challenge practices on 7/7/2023, 7/14/2023, 7/21/2023 and 7/28/2023. • GPS'd fifty-seven (57) hydrants and thirteen (13) hydrant valves.
Cityworks	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>
Asset Management	<p>Roadmap Implementation Activity Report:</p> <p>Decision Making Capital Planning Roadmap Implementation Group (RIG)</p> <ul style="list-style-type: none"> • Efforts to integrate Asset Management design and construction contract language are in progress. <p>Information System Data Management Roadmap Implementation Group RIG</p> <ul style="list-style-type: none"> • Kickoff meeting held 7/27/2023 for Subtask 3.3, Integrations and Interface, an evaluation for optimizing links between CRW's core enterprise systems. <p>Operations & Maintenance Roadmap Implementation Group RIG</p> <ul style="list-style-type: none"> • Meetings set for 8/23/2023 and 9/6/2023 to develop and review the rehabilitation criteria and outputs from the 20-year planning horizon of collection system capital improvements. • AWTF inventory and condition assessment project in progress. <p>Organizational Framework Roadmap Implementation Group RIG</p> <ul style="list-style-type: none"> • Met 7/24/2023 to identify and plan roadmap initiatives for 2024 budget year. <p>InfoAsset Planner Year 2 Implementation Activity Report:</p> <ul style="list-style-type: none"> • Preliminary work has begun to create rehabilitation and replacement schematics in support of the Collection System Asset Management Plan 20-Year Capital Improvement Plan. <p>Other activities:</p> <ul style="list-style-type: none"> • Second iteration of an asset inventory dashboard is currently under review. • The Lead Service Line Inventory working group attended several meetings to collaborate with Strategic Initiatives with developing external data collection tool and workflow. • Preparing Asset Management presentation for 8/16/2023 Community Ambassador meeting.
Development Review Summary	For details, see attached Development Stormwater Management Review Summary spreadsheet for July.

Undertake Capital Improvement Projects - Refer to attached Capital Improvement Projects Report	
Professional & Contractor Services	<p>Recommend Board approval of the following Resolutions, Task Orders, Change Orders and Agreements:</p> <p>Drinking Water:</p> <ul style="list-style-type: none"> • Task Order 2021-12-02: Engineering Services for 2022 Water System Improvements Project [REDACTED] • Task Order 2023-16-01: Engineering Services for 2024 Water System Improvements Project [REDACTED] <p>Wastewater:</p> <ul style="list-style-type: none"> • Task Order 2023-11-01: Engineering Services for Sewer Pipe CCTV Inspections - Phase 7 [REDACTED] • Resolution No. 2023-012 - Right of Entry with Department of General Services for Arsenal Boulevard Sewer Improvements Project • Procurement of PONDUS System [REDACTED] for AWTF Energy Recovery Improvements <p>Stormwater:</p> <ul style="list-style-type: none"> • Resolution No. 2013-013 - Wildwood Park Dredging - Memorandum of Understanding with Dauphin County.
Stormwater O&M Agreements	Recommend Board approval of the following: Refer to Resolution No. 2013-011 Stormwater Operations & Maintenance Agreement - N. 4th Street Townhomes with Tri County Housing Development Corporation, Inc.
AWTF Primary Digesters Rehabilitation	Closeout of the general construction contract is dependent upon resolution of the contractor's time delay claim.
AWTF Energy Recovery Improvements	CRW will procure the specialized PONDUS equipment in advance of the general contract to take advantage of Inflation Reduction Act (IRA) incentives (refer to Board agenda). The general construction contracts will be advertised for bids this Fall.
Front Street Pumping Station Improvements	Closeout of the general construction contract is dependent upon resolution of the contractor's time delay claim.
Undertake Renewal and Replacement Projects	
2022 Water System Improvements	Installation of the water main continues in the Sylvan Terrace neighborhood. Water main and service line installation is expected to be complete in September 2023.
2024 Water System Improvements	Refer to the Board agenda for action to approve engineering services. The project is expected to be bid in January 2024.
Cameron Street Water Main - Phase 4	Preliminary work to install temporary water (bypass) began in early August.
2023 Sewer System Improvements (Excavation)	The contractor continues excavation work around the area of Mulberry and Derry Streets.
2023 Sewer System Improvements (Trenchless)	The contractor completed cured-in-place pipe (CIPP) lining on Sycamore Street and continues pipe lining on Seneca Street.
Arsenal Boulevard Sewer Improvements	The Right-of-Entry document with the Department of General Services is on the Board agenda. Signing of sewer easement agreements with the last two property owners is expected by the end of August. The project will be advertised for bids this Fall.
Front Street Interceptor Rehabilitation - Phase 2	Cured-in-place pipe (CIPP) lining activity continues between Forster and Seneca Streets and is expected to be complete by the end of August.
Water Facility Maintenance	Drinking Water Maintenance staff performed repairs to various process units as described in the Drinking Water Department Monthly Report for July.
Wastewater Facility Maintenance	The Wastewater Maintenance group completed various repairs throughout the AWTF, pumping stations, and at the Administrative Offices throughout the month. A narrative is provided in the Wastewater Department Monthly Report for July.
Sinkhole Program	Thirteen (13) sinkholes were investigated by CRW in the month of July. Five (5) were due to failure of wastewater assets.
Inlet Cleaning	A total of 99 stormwater inlets were cleaned during the month of July, and 90 stormwater inlet inspections were performed.

Operate as an Efficient, Sustainable and Resilient Water Utility	
DeHart Property Stewardship	<p>In accordance with the DeHart Property Forest Management Plan, a regeneration harvest is underway in MUs 20, 34, 36, and 37 (approximately 155 acres). Harvest will improve forest health and release regeneration of a more desirable understory.</p> <p>Notice of Intent to Award was provided to Hoffman Brothers Lumber, Inc. for the harvest and sale of wood products within MU 40 and 42 (approximately 135 acres). Notice to Proceed will be issued pending receipt and approval of compliance documentation. Harvest prescription will support overstory removal to release regeneration.</p>
Sustainability	No update.
Internal Communications	Intranet (Sharepoint) site continues to be used. The Q3 newsletter, The Daily Flow, was issued on 7/13/2023.
Inform and Listen to Customers and Encourage Stewardship of our Systems	
Media Relations - Press and Social Media	<p>PRESS RELEASES: July 17th: "MUNICIPAL ALLIES FIGHT TO OVERTURN COMMONWEALTH COURT DECISION EXEMPTING STATE AGENCIES FROM PAYING STORMWATER BILLS".</p> <p>SOCIAL MEDIA TOPICS: Facebook: 2 New Organic Followers (1,635 Total). Eight (8) Posts ; Highest Engaged Post: "Employee of the Month: Brenda Rohrer" (400 Reaches, 29 Reactions, 9 Comments, 1 Share); Other topics: 7/4/2023 Office Closure, LIHWAP Information, Front Street Interceptor project updates, Broad Street Market Support and Amicas Brief Post. Twitter: 0 Tweets; Month overview: 39 total Impressions; 38 Profile Visits; 1 Mentions -2 New Followers. Instagram: 2 New Followers (705 Total), Five (5) Posts; Highest Engaged Post: "Employee of the Month: Brenda" 44 Organic Reaches, 4 likes, 0 shares, 0 saves. 2023 Demographics: Most Active Age-range: 25-54; Gender division: 62% women / 37% Men; Locations: Harrisburg, Penbrook, Mechanicsburg, Steelton, Linglestown, Camp Hill and Lancaster.</p>
Community Relations	<p>Community Outreach:</p> <ul style="list-style-type: none"> • Four (4) community events were attended: YMCA Harrisburg Mile on 7/19/2023; City of Harrisburg Parks Picnic at Reservoir Park on 7/19/2023; City of Harrisburg Parks Picnic at Seventh and Radnor Park on 7/23/2023; City of Harrisburg Parks Picnic at Wilson Park. on 7/24/2023. • One (1) facility tour: CReW Facility Tour - DeHart Dam and Reservoir. • Two (2) community meetings: Environmental Justice Community Information Listening Session on 7/13/2023, and the Community Ambassador Meeting on 7/20/2023. • Delivered nine (9) door-to-door notifications impacting approximately four hundred eighteen (418) customers. Included nine (9) courtesy construction notices. • Zero (0) Everbridge alerts.
Public Communications	WHAT'S ON TAP COMMUNICATION: The July monthly bill stuffer was distributed as a bill insert. Topics included: Consumer Confidence Report (CCR) a/k/a Annual Water Quality Report, available online and Water Conservation Tips.
Business Diversity	No update.

Administrative	
Risk Management	<p>Executive Summary: <u>Total Claims:</u> 22 New: 0* Open:7 Closed: 15</p> <p><u>Insurance Line Claim Count:</u> Auto: 2 General Liability: 11 Public Officials: 2 Workers Compensation: 7 <i>Note *New count included in Open</i></p>
Human Resources	For details, see attached Recruiting Status Report.
Procurement	<p>Procurement staff are coordinating the following bid packages on PennBid:</p> <ul style="list-style-type: none"> • Project Number 2023 - 206 - Precipitation and Wastewater Flow Monitoring Services • Project Number 2023 - 210 - Switchgear Replacement and Feeder Cables at AWTF • Project Number 2023 - 211 - Janitorial Services for Administrative Offices Building <p>Procurement staff continues to identify and assist in establishing contracts that include fixed rate pricing and discounts with frequently used vendors for goods and services.</p> <p>Procurement staff continues to assist staff in identifying vendors and requesting quotes for goods and services, as requested.</p> <p>Recommend Board approval of the following:</p> <ul style="list-style-type: none"> • Project Number 2023 - 209 - DeHart Dam Backup Generator [REDACTED] • Project Number 2023 - 212 - Maintenance Contract for Sewer Line Rehabilitation [REDACTED]

<p>Right-to-Know Requests</p>	<p>CRW has received and responded to two (2) new and five (5) prior Right-to-Know requests during the period 7/20/2023 through 8/16/2023. Other informational requests were identified as not being formal RTK requests and/or were transferred to the Customer Service Center for appropriate response throughout the month,</p> <p>OOOR Training: No update.</p> <p>RTK 2023-006 - Beth J. Kern, Esq. (CGA Law Firm) - Request for any and all documents, communications, etc. related to items 1 through 8 for the time period 1/1/2018 to current: (1) The sewer and water billing, bills and invoices sent to and records of payment received from the businesses located at Kline Village Plaza with addresses of 101 S. 25th Street, Harrisburg, PA 17104 and 101 Rear S. 25th Street, Harrisburg, PA 17104; Property IDs 09-101-003-000-0000 and 09-101-004-000-0000 (collectively the "Property"). (2) Any and all documents, communications, etc., related to any and all sewer laterals or lines for the businesses located at the Property. (3) Any and all documents, communications, etc., related to any and all sewer system maps for the businesses located at the Property; (4) Any and all sewer system maps showing any parts of the sewer system for the businesses located at the property; (5) Any and all sewer system maps showing any parts of the sewer system owned by the Borough of Penbrook. (6) Any and all documents, communications, etc., related to any and all sewer system maps for any parts of the sewer system owned by the Borough of Penbrook; (7) Any and all documents, communications, etc., related to the sewer and water billing, bills, and invoices sent to and records of payment received for any properties that are located outside of the Borough of Penbrook that have sewer laterals or lines connecting to and/or flowing into any parts of the sewer system owned by the Borough of Penbrook; and (8) Any and all documents, communications, etc., related to any and all sewer laterals or lines for any properties that are located outside of the Borough of Penbrook that have sewer laterals or lines connecting to and/or flowing into any parts of the sewer system owned by the Borough of Penbrook. Response due: 6/27/2023. Response provided 6/22/2023 for 30-day extension until 7/27/2023. Final Response provided: 7/27/2023.</p>
	<p>RTK 2023-007 (Tom Bates) - Requested electronic scans of the design engineering drawings for the Wastewater Treatment Plant from the original 1959 Plant. Response due: 6/29/2023. Final Response provided: 6/29/2023. First follow-up request was made on 7/10/2023 for mechanical sheets numbers 50-54. Final First Follow-up Response provided: 7/10/2023. Second follow-up request was made on 7/14/2023 for additional drawing sheets numbers 8, 11-14 and 23-24. Final Second Follow-up Response provided: 8/4/2023.</p>
	<p>RTK 2023-008 (Tom Bates) - Requested electronic scans of the drawings of the proposed sludge disposal system that pumped the sludge to the trash incinerator across the street (from the Advanced Wastewater Treatment Facility). As far as I know this was never built. I would assume this is from the 1970s or 1980s. Response due: 7/20/2023. Response provided 7/20/2023 for extension until 8/3/2023. Final Response provided: 8/2/2023.</p>
	<p>RTK 2023-009 - Faisal Cheema (Indiana University, Bloomington IN) - Request for (1) all kinds of water charges and rates (2000 to 2023); (2) record of public hearings related to all kinds of water rates (2000 to 2023); (3) institutional documents (city charters, administrative procedures, ordinances, utility regulatory documents, etc.) (2000 to 2023); (4) media accounts of all kinds of water rates (2000 to 2023); (5) Board meeting minutes (2000 to 2023); (6) City Council minutes of meetings related to water charges (2000-2023); (7) utility reports (e.g., Comprehensive Annual Financial Reports) (2000 to 2023); and (8) Regulatory documents (e.g., consumptive use permits, drought reports). Response due: 7/20/2023. Response provided: 7/20/2023 for 30-day extension until 8/21/2023. Final Response provided 8/15/2023.</p>
	<p>RTK 2023-010 - Dina Pinsky (AFSCME) - Requested minimum and maximum wages and job descriptions for the following job titles: Mechanic I, Mechanic II, Mechanic III, Mechanic IV, Lead Mechanic, Inspector I, Utility Worker, Collection Operator I, and Lead Collection Operator. Response due: 7/20/2023. Response provided 7/20/2023 for 30-day Extension until 8/21/2023. Final Response provided: 8/2/2023.</p>
	<p>RTK 2023-011 - Stephanie Vargas (SmartProcure) - Request for any and all purchasing records from 5/8/2023 to current. Specific information requested from the record-keeping system: (1) Purchase Order Number. If purchase orders are not used a comparable substitute is acceptable, i.e. invoice, encumbrance, or check number. (2) Purchase date. (3) Line item details (Detailed description of the purchase). (4) Line item quantity. (5) Line item price. (6) Vendor ID number, name, address, contact person and their email address. Response due: 8/9/2023. Response provided 8/9/2023 for 30-day extension until 9/8/2023. Final Response provided [REDACTED].</p>
	<p>RTK 2023-012 - Dina Pinsky (AFSCME) - Requested minimum and maximum wages and job descriptions for the following job titles (or whatever jobs you have that most closely match): Plant Operators, Electronics Technicians, Engineering Support Technicians, and/or Customer Service Representatives. Response due: 8/18/2023. Response provided 8/11/2023 for 30-day Extension until 9/18/2023. Final Response provided: [REDACTED].</p>



CAPITAL REGION™
WATER

**DRINKING WATER DEPARTMENT
MONTHLY REPORT**



Intake Tower and DeHart Dam Breast

July 2023

100 Pine Drive, Harrisburg, PA 17103 | 888-510-0606
capitalregionwater.com

Plant Operations

Capital Region Water's (CRW) Drinking Water department met all Federal Safe Drinking Water Act water quality standards for the month of July.

Specific water quality results are summarized in Exhibit A. A total of 238.920 MG, averaging 7.707 MGD was withdrawn from the water supply source for treatment. As shown in Exhibit B, a total of 228.528 MG, averaging 7.372 MGD, of finished drinking water was pumped to the distribution system.

The DeHart water source was in service for 31 days. The Susquehanna River water source was in service for zero days.

The DeHart Watershed had above average rainfall in July (Exhibit C) and the DeHart Reservoir water level decreased (Exhibit D). An estimated 266.97 MG of water was released from the DeHart Reservoir to Clark Creek, averaging 8.61 MGD for the month. This downstream flow, which is received by remote flow monitoring from the weir location and actual staff gauge readings, met the flow required by the State Water Allocation Permit (Exhibit E). An adjustment was made to the amount of water being diverted to Clark Creek.

Plant Maintenance

The Maintenance team performed approximately 43 preventative maintenance work orders and 11 corrective maintenance work orders for the month of July using the Cityworks maintenance management system for all water treatment plant equipment, pumping stations, and fleet vehicles.

- The DeHart Dam watershed was patrolled daily and maintained.
- The Water Service Center (WSC) took delivery of C-106, the Maintenance team's F-150-Pickup truck and applied all branding and identifiers to vehicle.
- Installed conduit and wire and mounted the two new remote heads for the two Aluminum Sulfate chemical feed line flow meters.
- Installed one new emergency light in the Operations Building basement area.
- Installed two (12-inch/15-inch) Weir levels on the discharge piping at the DeHart Dam facility.
- Continue to finish the wiring system and components for the new Lime Slurry Chemical Feed system.
- Completed the Zinc Orthophosphate piping and wiring for the upgraded, PADEP permitted chemical feed system.
- Flush out sample lines going into the Control Room lab.

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- The WSC Arc Flash Study is complete with all devices being labeled and receipt of the one-line electrical drawings.
 - DeHart Dam Control building rubber roof project is completed.
 - DeHart Dam roof parapet wall caps project is completed.
 - Installed new outrigger pads on backhoe and ramhoe (four pads on each unit).
 - Removal of fallen trees at the DeHart Dam Facility.

Distribution

The Distribution group completed the following work during the month of July:

- Repaired four leaking services during the month of July totaling 312,960 gallons of unmeasured water.
- Repaired one leaking valve – 370,368 gallons of unmeasured water.
- Replaced two fire hydrants.
- Repaired two fire hydrants.
- Completed 439 work orders.
- Completed 546 water, sewer, and stormwater locates.
- Worked with contractors on several water, sewer, and stormwater Capital Improvement projects.

Water Quality

In addition to overseeing the operation of both the accredited and process laboratories, the Water Quality Administrator also:

- Ensured collection of monthly regulatory samples for Total Coliform, and E. Coli.
- No taste or odor complaints.
- All quarterly PADEP sampling as well as UCMR5 sampling was collected in July.



CAPITAL REGION™

WATER

Drinking Water Exhibits

EXHIBIT A Water Quality Analysis - 2023

PARAMETERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Average	MCL Limits
Total Coliform: Presence/Absence														
Distribution System	A	A	A	A	A	A	A	A	A	A	A	A	A	5% P
Chlorine Residual, mg/L Free														
Filter Plant Effluent	2.00	1.98	2.01	1.99	1.95	1.98	1.99						1.99	0.2 - 4.0
Distribution System	1.40	1.43	1.42	1.31	1.21	1.19	1.10						1.29	>0.20
Turbidity, NTU														
Influent from DeHart	1.20	0.98	0.71	0.61	0.77	1.02	1.05						0.91	NA
Influent from Susquehanna	NA	NA	NA	NA	NA	NA	NA							NA
Filter Plant Effluent	0.03	0.03	0.03	0.03	0.02	0.03	0.03						0.03	0.30
pH, Std Units														
Influent from DeHart	6.4	6.5	6.5	6.4	6.1	6.0	5.9						6.24	NA
Influent from Susquehanna	NA	NA	NA	NA	NA	NA	NA							NA
Filter Plant Effluent	7.6	7.5	7.9	7.7	7.5	7.4	7.4						7.56	6.5 - 8.5*
Distribution System	7.1	7.7	8.1	8.0	8.0	7.4	7.9						7.74	6.5 - 8.5*
Total Alkalinity, mg/L as CaCO3														
Influent DeHart	5	5	5	5	5	5	5						5.00	NA
Influent from Susquehanna	NA	NA	NA	NA	NA	NA	NA							NA
Filter Plant Effluent	15	14	13	15	16	18	20						15.82	NA
Distribution System	13	14	15	14	15	14	20						14.97	NA
Temperature, degrees C														
Influent from DeHart	5.9	5.4	7.3	10.0	13.0	14.2	16.8						10.37	NA
Influent from Susquehanna	NA	NA	NA	NA	NA	NA	NA							NA
Filter Plant Effluent	6.6	6.4	7.2	9.8	12.0	13.3	15.4						10.09	NA
Distribution System	14.1	13.2	13.6	16.8	18.3	20.9	22.4						17.04	NA
Fluoride, mg/L														
Filter Plant Effluent	0.95	1.02	1.00	0.88	0.69	0.77	0.75						0.87	2
Aluminum, mg/L														
Filter Plant Effluent	0.02	0.02	0.02	0.01	0.02	0.02	0.02						0.02	0.2*
Iron, mg/L														
Influent from DeHart	0.11	0.06	0.04	0.05	0.07	0.13	0.24						0.10	NA
Influent from Susquehanna	NA	NA	NA	NA	NA	NA	NA							NA
Filter Plant Effluent	0.02	0.01	0.01	0.02	0.02	0.01	0.02						0.02	0.3*
Distribution System	0.07	0.00	0.00	0.01	0.00	0.02	0.00						0.01	0.3*
Total Dissolved Solids, mg/L														
Influent from DeHart	15	15	16	16	16	17	17						16.12	NA
Influent from Susquehanna	NA	NA	NA	NA	NA	NA	NA							NA
Filter Plant Effluent	37	34	35	37	39	42	45						38.43	500*
Distribution System	39	36	34	38	40	44	46						39.53	500*
Total Hardness, mg/L														
Influent from DeHart	8	8	8	8	8	8	8						8.00	NA
Influent from Susquehanna	NA	NA	NA	NA	NA	NA	NA							NA
Filter Plant Effluent	8	8	8	8	8	8	8						8.12	NA
Distribution System	10	6	6	6	6	7	7						6.79	NA
Orthophosphate, mg/L														
Filter Plant Effluent	1.20	1.24	1.27	1.27	1.20	1.22	1.17						1.22	0.7 - 1.3*
Distribution System	1.21	1.19	1.12	1.27	1.21	1.18	1.12						1.19	0.7 - 1.3*
**Total Trihalomethanes, ug/L														
Distribution System	34.2	NA	NA	42.8	NA	NA	57.0						44.7	80.0
**Total Haloacetic Acids, ug/L														
Distribution System	36.8	NA	NA	48.4	NA	NA	51.4						45.5	60.0
Total Organic Carbon, mg/L														
Influent from DeHart	2.16	NA	NA	1.90	NA	NA	2.10						2.05	NA
Influent from Susquehanna	NA	NA	NA	NA	NA	NA	NA							NA
Filter Plant Effluent	1.22	NA	NA	1.20	NA	NA	1.20						1.21	NA
Average Filter Run, Hours	115	112	120	119	112	109	112						114.11	NA

*** Not Available at Time of Report

* Values are related to DEP Secondary MCL

** Running Annual Quarterly Average

EXHIBIT B

Water Production Data - 2023

DeHart Withdrawal			River Withdrawal		Total Withdrawal		Treated Water		Process Water		Finished Water	
Month	Total (MG)	Average (MGD)	Total (MG)	Average (MGD)	Total (MG)	Average (MGD)	Total (MG)	Average (MGD)	Total (MG)	Average (MGD)	Total (MG)	Average (MGD)
January	233.562	7.534	0.000	0.000	233.562	7.534	239.964	7.741	6.487	0.210	229.172	7.393
February	202.799	7.243	0.000	0.000	202.799	7.243	210.336	7.513	4.938	0.176	202.279	7.224
March	235.779	7.606	0.000	0.000	235.779	7.606	233.913	7.546	6.770	0.218	223.545	7.211
April	228.546	7.618	0.000	0.000	228.546	7.618	226.774	7.559	10.158	0.339	216.616	7.221
May	225.428	7.272	0.000	0.000	225.428	7.272	232.974	7.515	6.110	0.197	222.530	7.178
June	226.317	7.544	0.000	0.000	226.317	7.544	226.356	7.545	6.117	0.204	215.490	7.185
July	238.920	7.707	0.000	0.000	238.920	7.707	239.368	7.722	5.935	0.191	228.528	7.372
August												
September												
October												
November												
December												
Total	1591.351		0.000		1591.351		1609.685		46.515		1538.160	
Average	227.336	7.503	0.000	0.000	227.336	7.503	229.955	7.592	6.645	0.219	219.737	7.255

Peak Day Water Use
Minimum Day Water Use

(MG) = Million Gallons
(MGD) = Million Gallons per Day

EXHIBIT C

Rainfall at the DeHart Reservoir - 2023
(inches)

Date	January	February	March	April	May	June	July	August	September	October	November	December	Annual Total
2023 Total	2.70	1.09	2.93	3.71	2.63	3.85	7.85						24.76
Daily Average	0.087	0.039	0.095	0.124	0.085	0.128	0.253						0.811
Ten Year Average	3.028	2.558	3	3.672	4.531	4.518	5.576	3.831	4.589	3.931	2.544	3.002	44.78
2022 Total	2.74	3.14	1.67	5.03	6.55	5.84	2.16	2.67	4.16	3.43	2.94	6.63	46.96

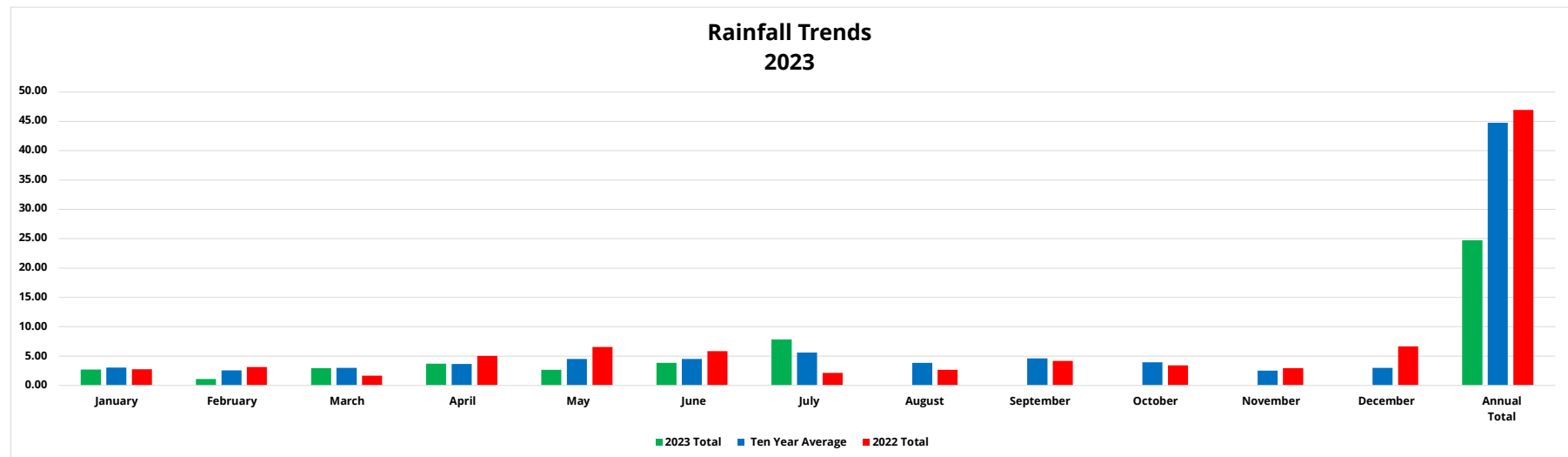


EXHIBIT D

Water Level at the DeHart Reservoir - 2023
(Inches from Spillway)

Date	January	February	March	April	May	June	July	August	September	October	November	December
2023 AVG	-162.9	-58.6	-98.7	1.1	1.8	-10.0	-20.1					
Ten Year AVG	-22.6	-19.4	-19.5	-8.0	-2.1	-2.9	-7.2	-18.1	-26.2	-39.1	-44.5	-42.5
2022 AVG	1.9	3.1	3.2	4.6	4.1	7.2	-12.1	-34.1	-48.5	-68.9	-80.6	-58.9

DeHart Reservoir Water Level Trends
2023

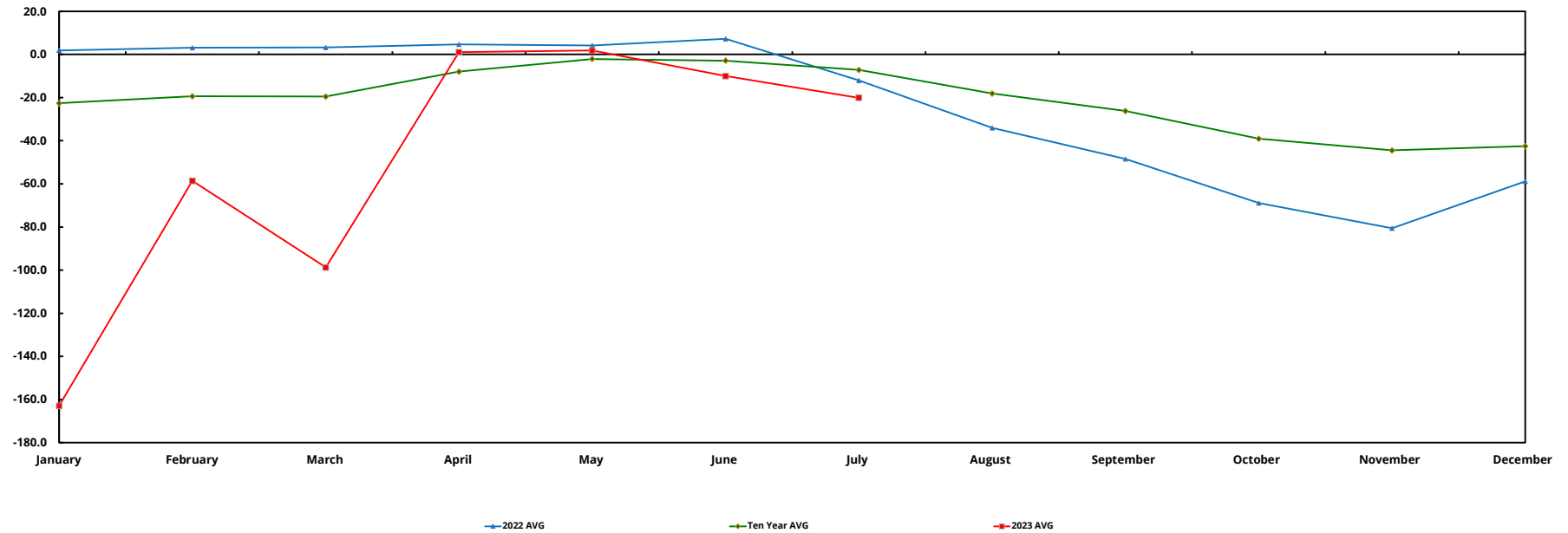


EXHIBIT E

Daily Conservation Release - 2023

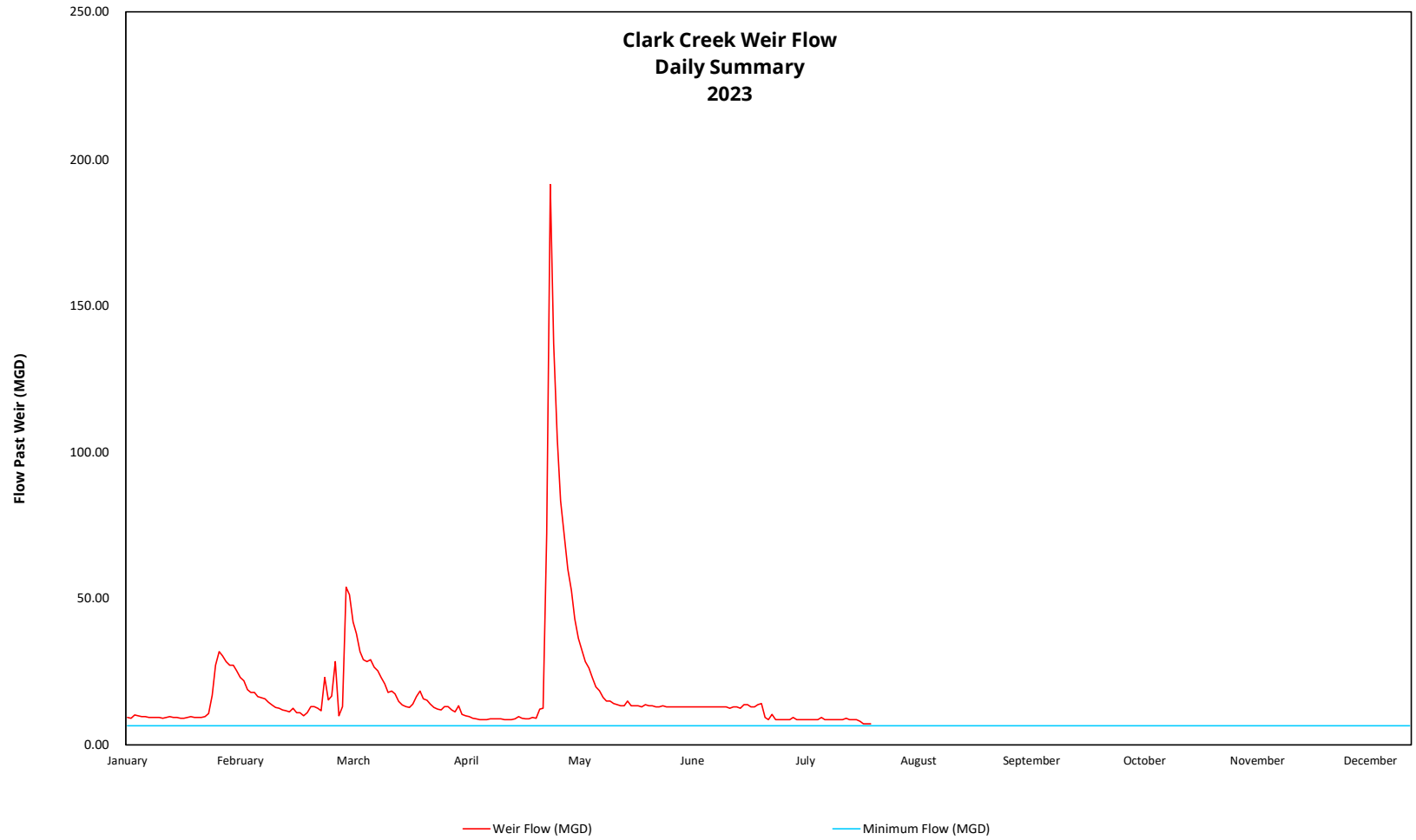




EXHIBIT F
Utility Usage - 2023

Location / Utility	January	February	March	April	May	June	July	August	September	October	November	December	Average	Total
Water Services Center														
Electric Transmission														
Total, kWh	214,200	172,800	198,000	174,600	122,400	135,000	**						169,500	1,017,000
Cost, Dollars	\$16,812.87	\$8,947.67	\$10,245.05	\$9,131.12	\$7,335.72	\$8,306.81	**						\$10,129.87	\$60,779.24
Electric Generation														
Total, kWh	214,200	172,800	198,000	174,600	122,400	135,000	127,800						163,543	1,144,800
Cost, Dollars	\$1,253.64	\$1,180.73	\$1,168.47	\$1,159.78	\$981.51	\$1,058.66	\$870.88						\$1,096.24	\$7,673.67
Natural Gas														
Total, Cu Ft	13,533	13,229	11,509	8,795	1,475	1,920	**						8,410	50,461
Cost, Dollars	\$12,244.94	\$11,133.40	\$9,875.88	\$8,238.84	\$1,838.65	\$1,880.96	**						\$7,535.45	\$45,212.67
Sewer														
Total, Gal	7,710,000	6,070,000	7,288,000	7,213,000	6,490,000	7,000,000	6,498,000						6,895,571	48,269,000
Cost, Dollars	\$71,240.40	\$56,086.80	\$67,341.12	\$66,359.60	\$59,967.60	\$64,680.00	\$60,041.52						\$63,673.86	\$445,717.04
Refuse														
Cost, Dollars	\$967.70	\$967.70	\$967.70	\$967.70	\$967.70	\$967.70	\$967.70						\$967.70	\$6,773.90
Reservoir Park Pump Station														
Electric Transmission														
Total, kWh	88,000	92,400	85,600	93,200	93,200	80,800	**						88,867	533,200
Cost, Dollars	\$3,704.13	\$3,935.15	\$3,650.18	\$3,737.99	\$3,808.93	\$3,292.40	**						\$3,688.13	\$22,128.78
Electric Generation														
Total, kWh	88,000	92,400	85,600	93,200	93,200	80,800	82,800	**					87,133	522,800
Cost, Dollars	\$1,350.22	\$1,214.10	\$1,215.18	\$1,292.31	\$1,417.70	\$1,323.10	**						\$1,302.10	\$7,812.61
Natural Gas														
Total, Cu Ft	982	629	473	466	9	0	**						427	2,559
Cost, Dollars	\$903.79	\$626.39	\$509.26	\$456.90	\$36.03	\$28.36	**						\$426.79	\$2,560.73
Wassukuhina River Pump Station														
Electric Transmission														
Total, kWh	1,200	1,200	600	1,200	600	**	**						960	4,800
Cost, Dollars	\$20.90	\$67.18	\$46.15	\$72.56	\$52.12	\$0.00	**						\$43.15	\$258.91
Electric Generation														
Total, kWh	1,200	1,200	600	**	600	1,200	**						960	4,800
Cost, Dollars	\$98.68	\$71.83	\$70.50	**	\$70.69	\$72.82	**						\$76.90	\$384.52
Natural Gas														
Total, Cu Ft	580	499	499	389	53	2	0						289	2,022
Cost, Dollars	\$543.32	\$515.95	\$524.07	\$378.07	\$75.04	\$30.13	\$28.36						\$299.28	\$2,094.94
Union Square Booster Station														
Electric Transmission														
Total, kWh	3,340	2,744	2,483	1,559	744	441	**						1,885	11,311
Cost, Dollars	\$305.46	\$132.56	\$138.65	\$118.51	\$52.69	\$0.00	**						\$124.65	\$747.87
Electric Generation														
Total, kWh	3,340	2,744	2,483	1,559	380	441	**						1,825	10,947
Cost, Dollars	\$130.77	\$113.42	\$101.36	\$95.50	\$81.60	\$70.49	**						\$98.86	\$593.14
DeHart Facilities														
Electric Transmission														
Total, kWh	3,131	2,289	2,308	2,945	2,396	1,346	**						2,403	14,415
Cost, Dollars	\$168.70	\$167.37	\$165.82	\$158.03	\$134.07	\$94.26	**						\$148.04	\$888.25
Electric Generation														
Total, kWh	3,131	2,289	2,308	2,945	2,396	1,346	2,137						2,365	16,552
Cost, Dollars	\$102.80	\$83.69	\$161.05	\$63.55	\$89.12	\$84.90	\$104.57						\$98.53	\$689.68
Fuel Oil														
Total, Gals.	2,251	0	0	0	0	0	1,370						517	3,621
Cost, Dollars	\$5,768.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,232.03						\$1,571.43	\$11,000.03
City Island Heat Trace														
Electric Transmission														
Total, kWh	40	140	147	116	0	0	**						74	443
Cost, Dollars	\$7.57	\$16.44	\$9.59	\$8.42	\$4.36	\$11.70	**						\$9.68	\$58.08
Electric Generation														
Total, kWh	40	140	147	116	0	0	0						63	443
Cost, Dollars	\$61.81	\$61.93	\$119.36	\$61.83	\$61.47	\$61.44	\$61.39						\$69.89	\$489.23
Expenditures YTD													\$91,361	\$615,863

** Not available at time report was developed

Total Transmission	\$84,861
Total Generation	\$17,643
Total Refuse	\$6,774
Total Gas	\$49,868
Total Sewer	\$445,717
Total Fuel Oil	\$11,000
Total Utilities	\$609,089

Exhibit G

Hydro-Turbine Generator Performance - 2023

Month	Kilowatt-hour (KWH)	Anticipated Savings *
January (Out of Service)	0	\$0
February (Out of Service)	0	\$0
March (Out of Service)	0	\$0
April	38,680	\$5,725
May	77,840	\$11,520
June	72,100	\$10,671
July	57,020	\$8,438
August		
September		
October		
November		
December		
Average	35,091	\$5,193
Year to Date	245,640	\$36,354

* Estimated savings based on electrical rate of \$0.148 per KWH

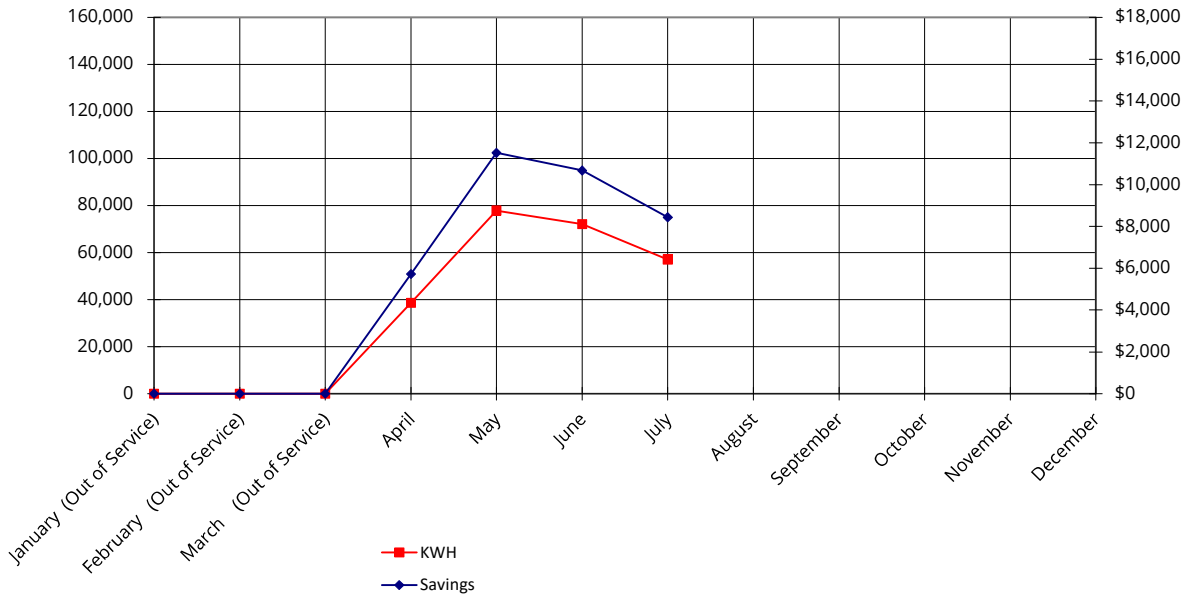


EXHIBIT H
Treatment Chemical Usage - 2023

Chemical	January	February	March	April	May	June	July	August	September	October	November	December	Average	Total
Chlorine														
Total Lbs.	6,294	5,518	5,991	5,949	6,112	5,938	6,279						6,012	42,081
Average, Chlorine Lbs./Day	203	197	193	198	197	198	203						198.4	
Average, Chlorine Dose, mg/L	6.9	1.6	2.6	3.2	3.4	3.4	3.1						3.4	
Chlorine Cost, \$/Lbs.	\$1,639	\$1,639	\$1,639	\$1,639	\$1,639	\$1,639	\$1,639	\$1,639					1.6	
Chlorine Total Cost, Dollars	\$10,316	\$9,044	\$9,819	\$9,750	\$10,018	\$9,732	\$10,291						\$9,852.93	\$68,970.54
Alum 48.5%														
Total Lbs.	26,829	16,763	19,163	21,756	20,615	19,942	19,413						20,640	144,481
Average, Alum, Lbs./Day	866	599	618	725	665	664	626						680.4	
Average, Alum, mg/L	10.7	7.7	12.0	11.8	11.0	10.4	10.0						10.5	
Alum Cost, \$/Lbs.	\$0.121	\$0.121	\$0.121	\$0.121	\$0.121	\$0.121	\$0.121	\$0.121					0.1	
Alum Total Cost, Dollars	\$3,246	\$2,028	\$2,319	\$2,632	\$2,494	\$2,413	\$2,349						\$2,497.32	\$17,481.27
Lime														
Total Lbs.	0	0	0	0	0	0	0						0	0
Average Lime, Lbs./Day	0	0	0	0	0	0	0						0.0	
Average, Lime Dose, mg/L	0.0	0.0	0.0	0.0	0.0	0.0	0.0						0.0	
Lime Cost, \$/Lbs.	\$0.86	\$0.86	\$0.86	\$0.86	\$0.86	\$0.86	\$0.86	\$0.86					\$0.86	
Lime Total Cost, Dollars	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00					\$0.00	\$0.00
Soda Ash														
Total Lbs.	17,400	12,350	13,050	13,650	17,400	20,350	23,950						16,879	118,150
Average Soda Ash, Lbs./Day	561	441	421	455	561	678	772						555.6	
Average, Soda Ash Dose, mg/L	19.2	13.5	19.0	7.2	9.0	10.8	12.0						13.0	
Soda Ash Cost, \$/Lbs.	\$0.368	\$0.368	\$0.368	\$0.368	\$0.368	\$0.368	\$0.368	\$0.368					0.4	
Soda Ash Total Cost, Dollars	\$6,403	\$4,545	\$4,802	\$5,023	\$6,403	\$7,489	\$8,814						\$6,211.26	\$43,478.80
Fluoride														
Total Lbs.	2,240	1,965	1,965	1,660	1,167	1,133	1,198						1,618	11,328
Average, Fluoride Lbs./Day	72	70	63	55	38	38	38						53.3	
Average, Fluoride (F-) Dose, mg/L	1.1	1.1	1.0	0.9	0.6	0.7	0.7						0.9	
Fluoride Cost, \$/Lbs.	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30					\$0.30	
Fluoride Total Cost, Dollars	\$672	\$590	\$590	\$498	\$350	\$340	\$359						\$485.63	\$3,399.40
Sodium Hydroxide 50%														
Total NaOH 50% dry Lbs.	35,623	31,225	33,907	33,665	34,585	33,603	35,534						34,020	238,142
Average NaOH 50%, dry Lbs./Day	1,149	1,115	1,094	1,122	1,116	1,120	1,146						1,123	
Average, NaOH 50%, mg/L	19.2	15.7	19.2	8.9	8.8	8.9	8.9						12.8	
NaOH 50% Cost, dry \$/Lbs.	\$0.450	\$0.450	\$0.450	\$0.450	\$0.450	\$0.450	\$0.450	\$0.450					0.5	
NaOH 50% Total Cost, Dollars	\$16,030	\$14,051	\$15,258	\$15,149	\$15,563	\$15,121	\$15,990						\$15,309.00	\$107,163.00
Zinc Orthophosphate														
Total Zn3(PO4)2, wet Lbs.	4,802	4,239	4,565	4,539	4,559	4,246	4,788						4,534	31,738
Average Zn3(PO4)2, wet Lbs./Day	155	151	147	151	147	142	154						149.5	
Average, Zn3(PO4)2 Dose, mg/L	2.5	2.5	2.5	2.5	2.5	2.4	2.5						2.5	
Zn3(PO4)2 Cost, wet \$/Lbs.	\$1,724	\$1,724	\$1,724	\$1,724	\$1,724	\$1,724	\$1,724	\$1,724					1.7	
Zn3(PO4)2 Total Cost, Dollars	\$8,279	\$7,308	\$7,870	\$7,825	\$7,860	\$7,320	\$8,255						\$7,816.61	\$54,716.27
Potassium Permanganate														
Total KMnO4, Lbs.	0	0	0	0	0	0	0						0	0
Average KMnO4, Lbs./Day	0	0	0	0	0	0	0						0.0	
Average, KMnO4 Dose, mg/L	0.0	0.0	0.0	0.0	0.0	0.0	0.0						0.0	
KMnO4 Cost, \$/Lbs.														
KMnO4 Total Cost, Dollars	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00						\$0.00	\$0.00
Expenditure														
Average Treated Cost per (MG)													\$42,172.75	\$295,209.27
Total Treated Flow (MGD)														0.000
Average Treated Flow (MGD)														229.955

EXHIBIT I

DISTRIBUTION DEPARTMENT ACTIVITIES - 2023

Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total	Average
PA One Call Locates	501	430	550	520	497	485	546						3,529	504
Street Restorations	0	0	7	1	15	6	1						30	4
Leak Detection Assessment Percent of Distribution System	8	8	8	8	8	8	8						56	8
Main Break Repair - Detected Non-Surfacing	0	0	0	0	0	0	0						0	0
Main Breaks Repaired - Emergency	2	1	1	0	1	3	1						9	1
Service Line Leaks Detected	0	0	0	0	0	0	0						0	0
Service Line Leaks Repaired	1	0	10	7	4	2	6						30	4
Valves - Exercised	0	0	0	21	1	0	55						77	11
Valves - Replaced	0	0	0	0	0	0	1						1	0
Hydrant Flow Tests	0	8	1	2	7	6	4						28	4
Hydrants Returned to Service	0	0	0	0	1	2	2						5	1
Water Tap - Disconnected	2	0	11	13	4	0	6						36	5
Water Tap - New Connection	2	0	0	0	0	0	5						7	1
Water Shutoffs - Delinquent Accounts	0	0	0	0	0	0	0						0	0
Water Shutoffs - Other	24	11	21	62	48	56	56						278	40
Water Shutoffs - Non Payment	0	0	21	41	31	43	42						178	25
Water Restoration Turn on Other	24	22	23	33	23	55	41						221	32
Water Turn on - Non Payment	0	1	6	24	4	38	21						94	13

EXHIBIT J

Metering Activities - 2023

Board Monthly Report	Distribution Monthly Report														
Activity	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total	Average
Meter Installations															
Replacement	Missing	6	3	4	5	7	6	1						32	5
	Leaking	2	3	2	5	2	2	2						18	3
	Frozen	20	4	3	1	1	1	0						30	4
	Non-registering	6	6	9	4	8	10	16						59	8
	Large Meters ¹	0	0	0	0	0	0	0						0	0
New Service	New Installation	2	0	0	0	0	0	0						2	0
Meter Service															
MXU's Replaced	MXU's Replaced	47	43	40	22	34	66	34						286	41
Batteries Replaced	Batteries Replaced	45	323	113	65	80	134	75						835	119
Meter Pits Serviced	Meter Pits Serviced	0	0	0	0	1	0	0						1	0
Meter Calibrations															
Small Meters ²	Calibrated meters	0	0	0	0	0	0	0						0	0

1 Large Meters are Meters 3" or greater that are calibrated at the customer's location by a contracted calibration service, assisted and witnessed by CRW staff

2 Small Meters are Meters 2" or less that are calibrated at the Water Services Center by CRW staff on a certified calibration stand

EXHIBIT K

Miscellaneous Water Usage (gals) - 2023

Category of Water Use	Description	Jan	Feb	Mar	APR	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total	Average
Process Water	Process Water	N/A	N/A	N/A	N/A	N/A	N/A	N/A						N/A	N/A
Billed Metered Exported	Bulk Water Hauling	N/A	N/A	N/A	N/A	N/A	N/A	N/A						N/A	N/A
Billed Metered	Hydrant Connections	0	0	113,557	4,500	407	448	11,883						130,795	18,685
Billed Unmetered	Hydrant Flow Tests	0	12,300	4,000	4,305	14,094	14,304	9,450						58,453	8,350
Unbilled Unmetered	Hydrant Flushing (and Unbilled Authorized)	48,449	51,011	40,285	3,479,672	5,975,003	39,060	277,818						9,911,298	1,415,900
Leakage on Distribution Mains	Main Leaks	1,318,637	2,836,746	95,144	0	109,685	383,537	370,363						5,114,112	730,587
Leakage on Service Lines	Service Leaks	2,321,113	41,760	568,560	135,444	95,040	17,280	312,960						3,492,157	498,880
	Total	3,688,199	2,941,817	821,546	3,623,921	6,194,229	454,629	982,474	0	0	0	0	0	18,706,815	1,558,901



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WASTEWATER DEPARTMENT MONTHLY REPORT



CRW Operations Sanitary Confinement Challenge Team Competes at PENNTEC 2023.

July 2023

1662 South Cameron Street, Harrisburg, PA 17104 | 888-510-0606
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Overview

The Wastewater department continued to focus heavily on WIMS implementation in July. Laboratory staff completed the arduous task of creating all laboratory bench sheets then assessing and adjusting each calculation for accuracy. Facility operations staff are now utilizing the system for entering their effluent testing data six times per day, and they are also utilizing the electronic logbook that WIMS provides rather than the paper-bound logbooks that have been in use for decades. This allows any user to quickly search for terms regarding plant equipment or conditions to retrieve an accurate history.

Operations also took a major step in digitizing their rounds checks. Every four hours, an operator is assigned a section of the AWTF to walk through, collect samples, check operating conditions, and record data from equipment that is not connected to the SCADA network. These observations and data have been recorded on paper spreadsheets since the plant's commissioning, resulting in thousands of pages of data each year. The first of several of these spreadsheets have been replicated in a WIMS app called Rio. Operators enter data into the required fields and the information is instantly stored in the WIMS database. It will take several more months to duplicate and program the remainder of the rounds check sheets into Rio, but this is a significant first step in reducing the volume of paper that is generated by this large operation. More importantly, it significantly reduces the chances for errors that currently exist with several transcriptions of this data.

Operations

During the month of July, the AWTF met all monthly average NPDES permit requirements. Two Dry Weather Overflows (DWO) were reported.

Hydraulic loading to the AWTF averaged 21.0 million gallons per day (MGD). The treatment process achieved removal reductions of 97.7 percent Carbonaceous Biochemical Oxygen Demand (CBOD), 97.2 percent Suspended Solids, 43.5 percent Phosphorus, and 95.9 percent Ammonia (Exhibit A).

The Contract Waste Hauling program collected \$69,369.17 in revenue from 1,635,310 gallons discharged (Exhibit G). This represents an excellent three-month stretch of high revenue. Modern Landfill, once again, was our largest monetary contributor while Natural Soil Products discharged just over 700,000 gallons of leachate due to large rain events this month.

The Cogeneration Facility experienced a run time of 32 percent in July. Revenue is estimated at \$5,044.84 on 34,200 Kilowatt-hours generated for the month. Decreased run time can be attributed to mechanical failure and long lead times on part replacement or repair.

Laboratory

- All WIMS bench sheets are calculating data correctly and sending necessary data to the QA/QC page which is flagging it correctly when out of compliance. The lab is continuing to set up LabCal to track sample results.
- The new fecal coliform and E. Coli method was approved by PADEP, and we are currently generating more accurate data as a result.
- Awaiting our new NPDES permit to modify sampling schedules, as necessary.

Pretreatment

- Completed second-quarter Industrial User data reviews and we are happy to report that seven of eight comply. Harrisburg Dairies had a few limit exceedances, but they are in the process of repairing/replacing parts of their pretreatment system to stay in compliance.
- AMES will be closing its location sometime in 2024, and the Swatara Landfill is in the process of decommissioning through the PADEP.

Plant Maintenance

- Replaced drive roller sprockets for sludge conveyor on the Belt Filter Press.
- Rebuilt Seepex polymer feed pumps on the Belt Filter Press.
- Replaced a 4-inch gas valve on inlet piping to Boiler No. 1.
- Replaced inlet piping to chlorine analyzer at the Chlorine Contact Tank.
- Repaired drain line on the King Tool gas filter to engines at the Cogeneration Plant.
- Excavated and repaired galvanized line at the Pista Grit Building.
- Serviced the standby generators full load test at Market Street and Spring Creek Pump Stations.
- Repaired damaged chain and flight on Primary Clarifier No. 3.
- Replaced high speed gear reducer on the SEW-EURODRIVE linear motion mixer at the Primary Digester.
- Repaired chain on the bar screen at the Spring Creek Pump Station.
- Performed vehicle repairs in preparation for state inspections.
- Provide weekly maintenance on JCB loader (G-84).
- Performed daily service for vehicular related repairs such as bulbs, batteries, tires, A/C, lube oil and filters, and flat tires.
- Performed maintenance tasks per request at Administrative Offices.

Field Construction

- Repaired 17 inlets in various locations throughout the city.
- Replaced inlet top with new C-top at 114 Conoy Street. Also replaced failing 15-inch inlet lateral with 12-inch Standard Dimension Ratio (SDR) pipe. The run was a total of 20 feet.
- Replaced an inlet box and top on Hanover Street with a new pre-cast box and M-top. Replaced 6 feet of clay inlet lateral with new 10-inch SDR pipe.
- A sinkhole was found at Harris and Logan Streets by a paving contractor. CRW was informed and a project was started to rectify the problem.

Field Operations

- Performed CCTV assessment of 6,926 feet (1.31 miles) of pipe.
- Flushed 2,590 feet (0.49 miles) of sewer pipe.
- Responded to nine backup and overflow calls. None were the responsibility of CRW.
- Responded to 13 sinkhole calls. CRW was liable for five.
- Cleaned 99 inlets.
- Inspected 90 inlets.
- Two Dry Weather Overflows (DWO) occurred this month at Combined Sewer Overflow (CSO) structures: one at CSO #039 S. Mulberry and Cameron Streets and one at CSO #016 Front and Liberty Streets.
- Completed CCTViing for the 2024 Sanitary Sewer Improvement Project.
- Completed two CSO preventative maintenance.
- 2017 Peterbilt Hydroexcavator (G-44) was transported to Johnstown for repairs.

Environmental Compliance

- Completed 14 inspections of Fats, Oils, and Grease (FOG) dischargers.
- Renewed ten FOG discharge permits.
- Issued one FOG-related Notice of Violation (NOVs) and one non-FOG-related Notice of Violation.
- Provided education packet to one newly identified FOG dischargers (either new business or previously unidentified). Spent time educating business owners/representative and provided them with a FOG Best Management Practices Manual, copy of Section 7.5 of the updated Wastewater and Stormwater Rules and Regulations, discharge permit request, cleaning log sign-off sheet, and introduction letter.
- Three investigations were conducted during the month of July:
 - CRW's Environmental Compliance Inspection was contacted by CRW's Construction Coordinator regarding an incident of food waste being dumped into a stormwater inlet in

the vicinity of 6th and Basin Streets. The investigation resulted in a Notice of Violation (NOV) being issued for the prohibited discharge.

- An investigation was conducted after CRW's Field Operations crew found a thick mat of scum on the surface of one of the Paxton Creek CSO's during a routine inspection. The source of the scum was identified as a local business upstream of the CSO, although a cause for the discharge could not be identified.
- An on-going investigation into the cause of dry weather overflows at the Front and Cumberland CSO yielded some results in July. Environmental Compliance was able to identify rags and other debris in multiple manholes immediately downstream of an apartment complex near the top of the Front and Cumberland CSO watershed. Educational information was provided to the apartment complex management.

Street Sweeping

- Received three complaints in the month of July. All were resolved.
- Replaced a battery in Sweeper No. 3.
- Completed 741 miles of scheduled street sweeping within the City of Harrisburg.
- Water usage was approximately 12,800 gallons.
- Continued to assist cleaning storm inlets in scheduled sweeping areas.
- When the days of the month fall on a fifth week, there is no scheduled sweeping. The Street Sweeping group will be assigned specific assignments throughout the city to continue the upkeep in highly visible areas. At the end of July, there was one day with a total of 34 miles swept (included with total miles.)



CAPITAL REGION™

WATER

Wastewater Exhibits

EXHIBIT A

**CAPITAL REGION WATER
ADVANCED WASTEWATER TREATMENT FACILITY**

Process Control - 2023

Parameters	January	February	March	April	May	June	July	August	September	October	November	December	Average	NPDES Limits
Volume, MGD	22.0	16.8	19.3	19.1	20.3	16.2	21.0						19.2	37.7
Carbonaceous Biochemical Oxygen Demand														
Influent, mg/L	97	139	114	198	165	193	145						150	----
Effluent, mg/L	4	3	4	4	3	3	3						3	25
Percent Removal, %	95.6	97.4	96.7	98.3	98.1	98.2	97.7						97.4	----
Effluent Loading, lb/d	681	469	596	821	507	470	582						589	7,860
Suspended Solids:														
Influent, mg/L	156	222	173	187	175	212	168						185	----
Effluent, mg/L	8	3	3	4	4	6	4						5	30
Percent Removal, %	95.0	98.5	98.1	96.6	97.5	96.8	97.2						97.1	----
Effluent Loading, lb/d	1,447	412	582	1,043	660	954	827						846	9,433
Nitrogen														
Total-N														
Influent, mg/L	26	33	26	30	26	30	23						28	----
Effluent, mg/L	5.0	4.0	5.7	4.3	3.7	5.2	4.5						5	Monitor
Percent Removal, %	80.5	87.9	78	85.6	85.5	82.8	80.3						83.0	----
Effluent Loading, lb/d	993	548	846	652	861	717	748						766	----
NH3-N														
Influent mg/L	17	21	17	16	13	15	12						16	----
Effluent, mg/L	1.9	1.2	1.4	1.6	0.4	1.1	0.5						1	11 (2)
Percent Removal, %	88.5	94.3	91.8	89.7	97.0	92.6	95.9						92.8	----
Effluent Loading, lb/d	359	168	248	258	74	150	86						192	4,716
Phosphorus:														
Influent, mg/L	2.9	4.2	3.5	3.8	3.5	4.0	3.1						3.6	----
Effluent, mg/L	0.8	1.6	1.2	1.6	1.4	1.6	1.7						1.4	2.0
Percent Removal, %	70.3	61.3	64.4	55.6	59.0	58.1	43.5						58.9	----
Effluent Loading, lb/d	152	222	194	237	215	223	301						221	629
pH:														
Influent, Std. Units	7.4	7.3	7.3	7.3	7.4	7.4	7.4						7.4	----
Effluent, Std. Units	7.4	7.4	7.4	7.4	7.5	7.5	7.4						7.4	6.0 - 9.0
Dissolved Oxygen:														
Effluent Minimum, mg/L	8.0	8.8	7.8	8.3	7.6	6.5	6.1						7.6	5.0 Min.
Fecal Coliform:														
Effluent, No./100 ml	25	3	5	3	2	2	4						6	200/100 ml (1)
Chlorine Residual:														
Effluent, mg/L	0.22	0.18	0.20	0.22	0.43	0.44	0.45						0.31	0.50

(1) Seasonal limit 2,000/100 ml Oct. 1 to Apr. 30 and 200/100 ml May 1 to Sept. 30.

(2) Seasonal Limit May 1 to Nov.1.

EXHIBIT B

**CAPITAL REGION WATER
ADVANCED WASTEWATER TREATMENT FACILITY**

Flow Monitoring Information, MGD - 2023

Month	Total			City Regions					Suburb Regions					Total Precip inches
	Flow	City	Suburbs	1	2	3	4	5	6	7	8	9	10	
January	22.000	8.622	13.378	8.110	0.192	0.300	-0.160	0.180	1.400	5.280	2.208	4.060	0.430	2.450
February	16.800	6.480	10.320	5.480	0.150	0.300	0.410	0.140	1.200	3.950	1.720	3.100	0.350	1.010
March	19.300	7.696	11.604	6.670	0.176	0.300	0.390	0.160	1.300	4.250	2.024	3.670	0.360	2.560
April	19.100	8.076	11.024	7.140	0.166	0.300	0.270	0.200	1.300	4.130	1.914	3.320	0.360	5.890
May	20.300	8.151	12.149	6.780	0.191	0.300	0.600	0.280	1.500	4.320	2.199	3.730	0.400	0.200
June	16.200	5.883	10.317	5.130	0.173	0.300	0.130	0.150	1.300	3.820	1.987	2.900	0.310	4.250
July	21.000	7.382	13.618	6.740	0.212	0.300	(0.060)	0.190	1.400	4.770	2.438	3.970	1.040	6.380
August														
September														
October														
November														
December														
Average	19.24	7.47	11.77											3.25
Percent	100.00	38.82	61.18											22.74

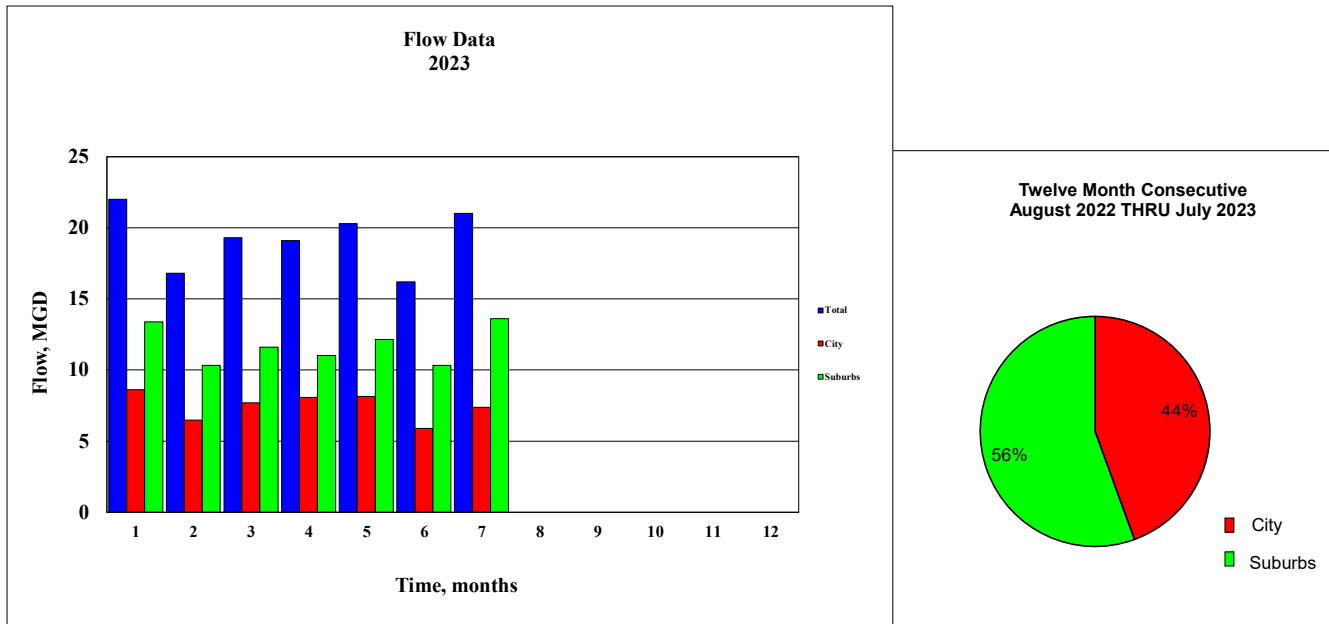


EXHIBIT C

**CAPITAL REGION WATER
ADVANCED WASTEWATER TREATMENT FACILITY**

Treatment Utility and Chemical Usage - 2023

Utility / Chemical	January	February	March	April	May	June	July	August	September	October	November	December	Average	Total
Electric														
Total, kWh	1,158,900	1,028,400	1,033,800	1,089,000	994,800	*	*						757,843	5,304,900
Average, kWh/Day	37,384	36,729	33,348	36,300	32,090	*	*						35,170	-----
Cost, Dollars	\$98,628.52	\$60,520.22	\$60,192.18	\$63,307.22	\$59,395.55	*	*						\$48,863.38	\$342,043.69
Natural Gas														
Total, Cu Ft	621.9	554.8	287.6	27.4	0.8	0.6	*						213	1,493
Average, Cu Ft/Day	20	20	9	1	0	0	*						8	-----
Cost, Dollars	\$6,237.14	\$5,423.45	\$3,026.40	\$377.30	\$147.32	\$147.14							\$2,559.79	\$15,358.75
Water														
Total, Gal.	1,187,000	1,298,000	928,000	977,000	932,000	1,218,000	*						1,090,000	6,540,000
Average, Gal./Day	38,290	46,357	29,935	32,567	30,065	40,600	*						36,302	-----
Cost, Dollars	\$15,616.58	\$16,764.32	\$12,938.52	\$13,445.18	\$12,979.88	\$15,937.12	*						\$12,525.94	\$87,681.60
MicroC														
Total, Gal.	0	0	0	0	258	0	0						37	258
Average, Gal./Day	0.0	0.0	0.0	0.0	8.3	0.0	0.0						1	-----
Cost, Dollars	\$0	\$0.00	\$0	\$0	\$1,029	\$0	\$0						\$147.06	\$1,029.42
Sodium Hydroxide														
Total, Gal.	0	0	0	0	0	0	0						0	0
Average, Gal./Day	0	0	0	0	0	0	0						0	-----
Cost, Dollars	0	0	0	0	0	0	0						\$0.00	\$0.00
Chlorine Disinfection														
Total, Lbs.	13,115	5,973	6,830	5,240	10,940	8,630	11,170						8,843	61,898
Average, Lbs./Day	423	223	220	175	353	288	360						292	-----
Avg Residual, mg/L	0.22	0.18	0.20	0.22	0.43	0.44	0.45						0.31	-----
Cost, \$/Lbs.	\$1.64	\$1.64	\$1.64	\$1.64	\$1.64	\$1.64	\$1.64						\$1.64	-----
Total Cost, Dollars	\$21,508.60	\$9,795.72	\$11,201.20	\$8,593.60	\$17,941.60	\$14,153.20	\$18,318.80						\$14,501.82	\$101,512.72
Phosphorous Removal														
Total FeCl3, Gals.	3,113	2,950	3,113	3,589	4,429	3,156	4,231						3,512	24,581
Avg FeCl3, Gals./Day	100	105	100	120	143	105	136						116	-----
FeCl3 Cost, \$/Gal.	\$1.74	\$1.74	\$1.74	\$1.74	\$1.74	\$1.74	\$1.74						\$1.74	-----
FeCl3 Total Cost, Dollars	\$5,416.97	\$5,133.00	\$5,416.62	\$6,244.86	\$7,706.46	\$5,491.44	\$7,361.94						\$6,110.18	\$42,771.29

* No data at time of report

EXHIBIT D

**CAPITAL REGION WATER
ADVANCED WASTEWATER TREATMENT FACILITY**

Cogeneration Electrical Production: 2022-2023

	Period	Percent Run Time	Daily Avg Kilowatt	Kilowatt Hours Produced	Estimated Revenue
January 2022		2	58	1,800	\$210.51
February 2022		37	1,093	30,600	\$3,578.67
March 2022		33	958	29,700	\$3,473.42
April 2022		43	1,710	51,300	\$5,999.54
May 2022		53	1,687	52,200	\$6,104.79
June 2022		23	510	15,300	\$1,789.34
July 2022		33	1,190	36,900	\$4,315.46
August 2022		28	697	21,600	\$2,526.12
September 2022		12	450	13,500	\$1,578.83
October 2022		34	1,365	42,300	\$4,946.99
November 2022		21	870	26,100	\$3,052.40
December 2022		20	726	22,500	\$2,631.38
<hr/>					
Total - 2022				343,800	\$40,207.41
Monthly Average - 2022		28	943	28,650	\$3,350.62
January 2023		2	58	1,800	\$210.51
February 2023		58	2,250	63,000	\$7,367.85
March 2023		75	3,135	97,200	\$14,337.97
April 2023		25	960	28,800	\$4,248.29
May 2023		38	1,713	53,100	\$7,832.78
June 2023		5	120	3,600	\$531.04
July 2023		32	1,103	34,200	\$5,044.84
August 2023					
September 2023					
October 2023					
November 2023					
December 2023					
<hr/>					
Total - 2023				281,700	\$39,573.28
Monthly Average - 2023		34	1,334	40,243	\$5,653.33

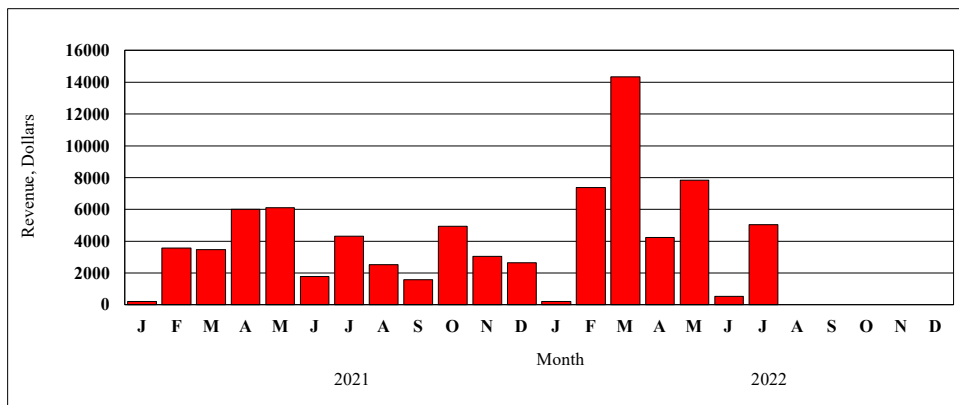


EXHIBIT E

**CAPITAL REGION WATER
ADVANCED WASTEWATER TREATMENT FACILITY**

Sludge Handling Information - 2023

Process	January	February	March	April	May	June	July	August	September	October	November	December	Average	Total
Solids Removal														
Process, Lbs.	704,819	890,443	1,557,518	1,554,485	1,206,679	964,105	1,146,178						1,146,318	8,024,227
CWH Program, Lbs.	196,727	230,186	125,669	137,543	502,270	446,289	315,199						279,126	1,953,883
Total Solids, Lbs.	901,546	1,120,629	1,683,187	1,692,028	1,708,949	1,410,394	1,461,377						1,425,444	9,978,109
Sludge Dewatering														
Feed Volume, Gals.	5,489,000	4,398,000	3,878,000	5,322,000	4,268,000	5,185,000	4,945,000						4,783,571	33,485,000
Feed Solids, %	1.5	1.5	1.5	1.4	1.5	1.4	1.5						1.5	-
Labor, Hours	635	519	531	651	691	671	1104						686	4,802
Operations, Hours	1,181	977	1,014	672	691	671	688						842	5,894
Total Cake, Dry Tons	208	168	162	181	197	228	238						197	1,382
Total Cake, Wet Tons	1,264	1,089	1,040	1,164	1,223	1,421	1,485						1,241	8,686
Cake TS, %	16.5	15.9	15.6	15.6	16.1	16.1	16.0						16.0	-
Press Rate, Lbs./Hour	2,140	2,228	2,052	3,465	3,539	4,237	4,316						3,140	21,978
Polymer Dosage, Lbs	4,299	4,556	4,533	5,031	5,765	7,226	5,208						5,231	36,618
Polymer Dosage, Lbs/Dry Ton	24.3	26.4	28.6	29.2	29.5	48.1	62.7						35.6	-
Disposal Cost														
Labor, Dollars	\$12,208.54	\$9,982.89	\$10,200.05	\$12,502.61	\$13,282.94	\$12,890.85	\$21,224.65						\$13,184.65	\$92,292.54
Electrical, Dollars	\$519.82	\$430.06	\$445.98	\$295.64	\$304.08	\$295.11	\$302.76						\$370.49	\$2,593.45
Polymer, Dollars	\$8,383.05	\$8,885.16	\$8,839.35	\$9,810.45	\$11,241.75	\$14,090.70	\$10,155.60						\$10,200.87	\$71,406.06
Disposal, Dollars	\$47,358.20	\$52,886.50	\$47,998.60	\$25,793.27	\$70,097.60	\$60,858.30	#####						\$64,034.78	\$448,243.47
Total Cost, Dollars	\$68,469.61	\$72,184.61	\$67,483.97	\$48,401.97	\$94,926.38	\$88,134.96	#####						\$87,790.79	\$614,535.52
Cost Per Dry Ton, Dollars	\$329.18	\$429.67	\$416.57	\$267.41	\$481.86	\$386.56	\$735.02						\$435.18	

CAPITAL REGION WATER ADVANCED WASTEWATER TREATMENT FACILITY

Conveyance Utility Usage - 2023

Location / Utility	January	February	March	April	May	June	July	August	September	October	November	December	Average	Total
Front Street Pump Station														
Electric														
Total, kWh	153,600	97,200	78,000	61,200	96,000	54,000	76,800						88,114	616,800
Average, kWh/Day	4,955	3,471	2,516	2,040	3,097	1,800	2,477						2,908	----
Cost, Dollars	#####	\$6,179.35	\$5,794.20	\$4,760.30	\$6,808.76	\$5,640.08	\$6,454.65						\$6,544.17	\$45,809.21
Fuel Oil														
Total, Gals.	0	0	0	0	0	0	0						0	0
Average, Gals./Day	0	0	0	0	0	0	0						0	----
Cost, Dollars	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00						0	\$0.00
Water														
Total, Gals.	284,000	318,000	276,000	291,000	326,000	355,000	*						308,333	1,850,000
Average, Gal./Day	9,161	11,357	8,903	9,700	10,516	11,833	*						10,245	----
Cost, Dollars	\$3,633.08	\$3,984.64	\$3,550.36	\$3,705.46	\$4,067.36	\$4,367.22	*							\$23,308.12
Spring Creek Pump Station														
Electric														
Total, kWh	38,400	50,240	40,640	38,400	56,320	49,600	54,080						46,811	327,680
Average, kWh/Day	1,239	1,794	1,311	1,280	1,817	1,653	1,745						1,548	----
Cost, Dollars	\$1,274.90	\$3,346.91	\$3,295.83	\$3,158.30	\$4,604.53	\$3,047.64	\$4,356.37						\$3,297.78	\$23,084.48
Fuel Oil														
Total, Gals.	0	0	0	0	0	0	0						0	0
Average, Gals./Day	0	0	0	0	0	0	0						0	----
Cost, Dollars	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00						\$0.00	\$0.00
Water														
Total, Gals.	90,000	104,000	86,000	105,000	118,000	137,000	*						106,667	640,000
Average, Gal./Day	2,903	3,714	2,774	3,500	3,806	4,567	*						3,544	----
Cost, Dollars	\$1,006.59	\$1,151.35	\$965.23	\$1,161.69	\$1,296.11	\$1,492.57	*						\$1,178.92	\$7,073.54
Market Street Pump Station														
Electric														
Total, kWh	1,320	1,200	1,200	960	1,080	720	840						1,046	7,320
Average, kWh/Day	43	43	39	32	35	24	27						35	----
Cost, Dollars	\$151.91	\$153.90	\$174.52	\$157.79	\$253.89	\$207.36	\$208.98						\$186.91	\$1,308.35
Fuel Oil														
Total, Gals.	0	0	0	0	0	0	0						0	0
Average, Gals./Day	0	0	0	0	0	0	0						0	----
Cost, Dollars	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00						\$0.00	\$0.00
City Island Pump Station														
Electric														
Total, kWh	40	40	40	40	40	40	0						34	240
Average, kWh/Day	1	1	1	1	1	1	0						1	----
Cost, Dollars	\$42.43	\$62.63	\$64.36	\$64.11	\$64.27	\$83.86	\$62.57						\$63.46	\$444.23

* No Data at time of report

EXHIBIT G

CAPITAL REGION WATER ADVANCED WASTEWATER TREATMENT FACILITY

Contract Waste Hauling Program 2022 - 2023

Month	Process		Septic		Total	
	Gallons	Revenue	Gallons	Revenue	Gallons	Revenue
January	557,788	\$18,254.25	78,450	\$2,770.20	636,238	\$21,024.45
February	1,253,749	\$35,714.94	150,975	\$5,336.00	1,404,724	\$41,051.04
March	1,266,410	\$37,456.11	168,400	\$5,918.40	1,434,810	\$43,374.51
April	832,860	\$24,607.44	189,750	\$6,795.00	1,022,610	\$31,402.44
May	1,599,990	\$46,377.27	250,650	\$8,874.90	1,850,640	\$55,252.17
June	583,370	\$18,218.79	315,100	\$11,217.60	898,470	\$29,436.39
July	352,570	\$12,137.31	252,900	\$8,969.40	605,470	\$21,106.71
August	248,100	\$8,169.21	287,600	\$10,209.60	535,610	\$18,378.81
September	1,589,990	\$44,824.05	311,600	\$11,046.60	1,901,590	\$55,870.65
October	1,738,680	\$48,922.56	342,650	\$12,173.40	2,081,330	\$61,095.96
November	1,412,550	\$39,494.61	293,700	\$10,537.20	1,706,250	\$50,031.81
December	1,776,820	\$50,682.24	158,050	\$5,586.30	1,934,870	\$56,268.54
Total - 2022	13,212,877	\$384,858.78	2,799,825	\$99,434.60	16,012,612	\$484,293.48
Monthly Average - 2022	1,101,073	\$32,071.57	233,319	\$8,286.22	1,334,384	\$40,357.79
January	2,332,260	\$65,162.88	208,150	\$7,173.90	2,540,410	\$72,336.78
February	1,424,370	\$47,326.95	191,150	\$6,694.20	1,615,520	\$54,021.15
March	944,920	\$28,533.96	265,650	\$9,491.40	1,210,570	\$38,025.36
April	579,580	\$19,060.38	265,600	\$9,473.40	845,180	\$28,533.78
May	1,273,220	\$68,101.35	267,600	\$9,588.60	1,540,820	\$77,689.95
June	1,329,280	\$68,218.26	326,700	\$11,626.20	1,655,980	\$79,844.46
July	1,372,660	\$59,957.87	262,650	\$9,411.30	1,635,310	\$69,369.17
August						
September						
October						
November						
December						
Total - 2023	9,256,290	\$356,361.65	1,787,500	\$63,459.00	11,043,790	\$419,820.65
Monthly Average - 2023	1,322,327	\$50,908.81	255,357	\$9,065.57	1,577,684	\$59,974.38

