

Ensure Financial Stability	
<b>Reconciled Bank Account Balances</b>	Refer to attached Reconciled Bank Account Balances as of 6/30/2023.
<b>Monthly Financial Statements</b>	Provided separately to Board of Directors.
<b>Monthly Financial Dashboard</b>	Provided separately to Board of Directors.
<b>AP Check Reconciliation Register</b>	Provided separately to Board of Directors.
<b>Capital Improvement Projects for Drinking Water</b>	Provided separately to Board of Directors.
<b>Capital Improvement Projects for Wastewater</b>	Provided separately to Board of Directors.
<b>Grant Management</b>	Refer to attached Grant Management Report.
Ensure Revenues are Consistent with System Usage	
<b>Water Shut-offs</b>	There were 43 water shut-offs for non-payment and 56 service shut-off requests.
<b>Repair/Replace Meters/MXUs/Batteries</b>	Drinking Water Distribution staff replaced 19 water meters, 134 batteries, and 66 MXUs.
Reduce Wet Weather Impacts to Infrastructure, Community, and Receiving Waters	
<b>Negotiate with PADEP/U.S. EPA/DOJ on Past and Future Practices</b>	CRW is preparing the annual update to the Nine Minimum Control (NMC) Plan due 8/10/2023.
<b>Develop Necessary Planning for Implementation of Green Infrastructure</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Design and planning for next phase of GSI (2024-2027) is underway.</li> </ul>
<b>Joint Pollutant Reduction Plan - Collaborate with Suburban Partners on MS4</b>	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.
<b>Obtain and Comply with Individual MS4 Permit</b>	CRW staff have received the required annual MS4 training at the Quarterly Meeting on 6/28/2023.
Operate Facilities with a High Standard of Care	
<b>Permit Compliance</b>	<p>The Drinking Water department met all primary and secondary Safe Drinking Water Act permit parameters for the month of June.</p> <p>The AWTF met all NPDES permit parameters for the month of June. Two Dry Weather Overflows were reported.</p>
<b>Notice of Violations (NOVs)</b>	<p>There were no NOVs received by the Drinking Water department in June.</p> <p>There were no NOVs received by the Wastewater department in June.</p>
<b>Preventative Maintenance</b>	<p>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 June.</p> <p>The Wastewater department completed all regularly scheduled preventative maintenance in the month of June.</p>
<b>CCTV</b>	A total of 10,704 feet (2.03 miles) of sewer pipes were assessed by closed circuit television (CCTV) footage during the month of June. A total of 2,269 feet (0.43 miles) of sewer pipes were flushed as well.
<b>Incident Response</b>	Wastewater responded to three (3) backup and overflow calls from residents during the month of June. CRW was responsible for none.



<p><b>Asset Management</b></p>	<p><b>Roadmap Implementation activity report:</b></p> <p><b>Decision Making Capital Planning Roadmap Implementation Group (RIG)</b></p> <ul style="list-style-type: none"> <li>• Engineering staff continue efforts to implement AM Design and Construction language into future projects.</li> </ul> <p><b>Information System Data Management Roadmap Implementation Group (RIG)</b></p> <ul style="list-style-type: none"> <li>• Meeting scheduled for 7/25/2023 to analyze post 'Cityworks realignment training' data to inform next steps.</li> </ul> <p><b>Operations &amp; Maintenance Roadmap Implementation Group (RIG)</b></p> <ul style="list-style-type: none"> <li>• Collection (system) Asset Management Plan (CAMP) final document received on 7/5/2023. Next step developing the 20-year planning horizon of collection system capital improvements will begin as the data cleaning efforts will conclude with final MS4 pipe review.</li> <li>• AWTF inventory and condition assessment pilot completed three days of field work on 7/12/2023. Lessons learned inform and improve the comprehensive inventory collection and assessment to be scheduled for August 2023.</li> </ul> <p><b>Organizational Framework Roadmap Implementation Group (RIG)</b></p> <ul style="list-style-type: none"> <li>• Updates for the Strategic Asset Management Plan Version 2 are being coalesced.</li> </ul> <p><b>InfoAsset Planner Year 2 Implementation Activity Report:</b></p> <ul style="list-style-type: none"> <li>• Meetings were held 6/22/2023 and 6/29/2023 to finalize the maintenance strategy for a cohort of stormwater pipes that will inform the 20-year CAMP capital improvement forecast.</li> </ul> <p><b>Other activities:</b></p> <ul style="list-style-type: none"> <li>• Dashboard development principals met 6/29/2023 to discuss budget, priorities and timeline for deliverables.</li> <li>• The Lead Service Line Inventory working group status report meeting was held on 6/20/2023.</li> <li>• Continue collaboration with Safety and Risk Management for the optimization of Computerized Maintenance Management Systems (CMMS) for incident tracking and North Front Street emergency response plan.</li> <li>• Created draft workflow diagram to demonstrate the 'to-be' process for tracking land development applications in Cityworks.</li> </ul>
<p><b>Development Review Summary</b></p>	<p>For details, see attached Development Stormwater Management Review Summary spreadsheet for June.</p>

Undertake Capital Improvement Projects - Refer to attached Capital Improvement Projects Report	
<b>Professional &amp; Contractor Services</b>	<p><b>Recommend Board approval of the following Resolutions, Task Orders, Change Orders and Agreements:</b></p> <p><b>Drinking Water:</b></p> <ul style="list-style-type: none"> <li>• Task Order 2023-15-01: Engineering Services for GIS Support [REDACTED]</li> <li>• Advanced Metering Infrastructure Upgrade Project - Recommendation of Award [REDACTED]</li> </ul> <p><b>Wastewater:</b></p> <ul style="list-style-type: none"> <li>• Task Order 2023-13-01: Engineering Services for PennDOT I-83 Expansion (Contract 2) [REDACTED]</li> <li>• Change Order No. 8 - AWTF Digester Rehabilitation Project [REDACTED]</li> <li>• Project Number 2023 - 208 - Maintenance Contract for Sewer Line Rehabilitation - Recommendation to Reject Bids</li> </ul> <p><b>Stormwater:</b></p> <ul style="list-style-type: none"> <li>• Change Order No. 2 - Camp Curtain YMCA GSI Project [REDACTED]</li> <li>• Change Order No. 2 - Bellevue Park Pond SW Retrofit Project [REDACTED]</li> </ul>
<b>Stormwater O&amp;M Agreements</b>	<b>Recommend Board approval of the following:</b> None.
<b>AWTF Primary Digesters Rehabilitation</b>	Closeout of all contracts is anticipated in August 2023.
<b>AWTF Energy Recovery Improvements</b>	The Interconnection Agreement and Transaction Confirmation with UGI Energy Services are being finalized for signature.
<b>Front Street Pumping Station Improvements</b>	Contract No.1 (General Construction) is expected to be closed out in August 2023.
Undertake Renewal and Replacement Projects	
<b>2022 Water System Improvements</b>	Installation of water main continues in the Sylvan Terrace neighborhood. The project is expected to be complete in Fall of 2023.
<b>Cameron Street Water Main - Phase 4</b>	Preliminary work is expected to begin in late July.
<b>2023 Sewer System Improvements (Excavation)</b>	The contractor continues construction with inlet replacement along 15th Street.
<b>2023 Sewer System Improvements (Trenchless)</b>	The contractor has begun cured in place piping (CIPP) lining activities on Sycamore Street.
<b>Arsenal Boulevard Sewer Improvements</b>	No update. We are working with property owners to acquire temporary and construction easements needed before advertising the project.
<b>Front Street Interceptor Rehabilitation - Phase 2</b>	The bypass piping between Forster Street and Seneca Street is operational. Cured-in-place piping (CIPP) lining activities for the upper phase will begin in late July.
<b>Water Facility Maintenance</b>	Drinking Water Maintenance staff performed repairs to various process units as described in the Drinking Water Department Monthly Report for June.
<b>Wastewater Facility Maintenance</b>	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 June
<b>Sinkhole Program</b>	Five (5) sinkholes were investigated by CRW in the month of June. One (1) was due to failure of a wastewater asset.
<b>Inlet Cleaning</b>	A total of 100 stormwater inlets were cleaned during the month of June, and 98 stormwater inlet inspections were performed.

<b>Operate as an Efficient, Sustainable and Resilient Water Utility</b>	
<b>DeHart Property Stewardship</b>	<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 [REDACTED] for the harvest and sale of wood products within MU 40 and 42 (approximately 135 acres). Harvest prescription will support overstory removal to release regeneration.</p>
<b>Sustainability</b>	No update.
<b>Internal Communications</b>	Intranet (Sharepoint) site continues to be used. The Q2 All Employee Meeting was hosted on 6/28/2023.

<b>Inform and Listen to Customers and Encourage Stewardship of our Systems</b>	
<b>Media Relations - Press and Social Media</b>	<p><b>PRESS RELEASES:</b> "Capital Region Water Announces Availability of 2023 Consumer Confidence Report."</p> <p><b>SOCIAL MEDIA TOPICS:</b> Facebook: 7 New Organic Followers (1,632 Total). Ten (10) Posts ; Highest Engaged Post: "Only Flush the 3 P's" (4,935 Reachs, 37 Reactions, 14 Shares); Other topics: Juneteenth, Water Quality Report Available, Customer Service Update; Board of Directors Meeting and Employee of the Month; Karen McKillip.</p> <p><b>Twitter:</b> 1 Tweets; Month overview: 148 total Impressions; 123 Profile Visits; 2 Mentions -1 New Followers.</p> <p><b>Instagram:</b> 6 New Followers (703 Total), Seven (7) Posts; Highest Engaged Post: "Employee of the Month: Karen McKillip" 41 Organic Reachs, 5 likes, 1 shares, 0 saves.</p> <p><b>2023 Demographics:</b> Most Active Age-range: 25-54; Gender division: 62% women / 37% Men; Locations: Harrisburg, Penbrook, Mechanicsburg, Steelton, Linglestown, Camp Hill and Lancaster.</p>
<b>Community Relations</b>	<p><b>Community Outreach:</b></p> <ul style="list-style-type: none"> <li>• One (1) community event: DeHart Day.</li> <li>• Zero (0) community meetings.</li> <li>• Delivered nine (9) door-to-door notifications impacting approximately three hundred nine (309) customers. Included eight (8) courtesy construction notices and one (1) door-to-door distribution of the 2023 Water Quality Report (a/k/a 2023 Consumer Confidence Report).</li> <li>• Zero (0) Everbridge alerts.</li> </ul>
<b>Public Communications</b>	<b>WHAT'S ON TAP COMMUNICATION:</b> The June monthly bill stuffer was distributed as a bill insert. Topics included: Source Water and Drinking Water Quality; DeHart Day 2023 Registration.
<b>Business Diversity</b>	No update.



<p><b>Office Management and Admin Professional Services and Construction</b></p>	<p><b>Incoming Correspondence Report:</b> Refer to attached Incoming Correspondence Report for June 2023.</p> <p><b>Street/Sidewalk-Cut Permits:</b> Three (3) Drinking Water and three (3) Wastewater permits were issued. One (1) Drinking Water and one (1) Wastewater permit was successfully completed, inspected, and closed by the City of Harrisburg's Engineer. One (1) Drinking Water Supplemental Permit was issued.</p> <p><b>Fleet Management (Acquisitions):</b> No update.</p>
<p><b>Right-to-Know Requests</b></p>	<p>CRW has received and responded to six (6) Right-to-Know requests during the period 6/22/2023 through 7/19/2023. 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><b>OOB Training:</b> No training, however, Office of Open Records advised that effective 7/31/2023, the implementation of the new e-file appeal process begins.</p> <p><b>RTK 2023-005 - Christine Kirchhoff (PennState)</b> - Requested (1) Long-Term Control Plan for Combined Sewer System circa 1998 and any more recent plans; (2) Annual Combined Sewer Overflow Reports from 1998-2014; and (3) most recent NPDES Permit or renewal. <b>Response due: 6/16/2023. Response provided 6/15/2023 for 30-day extension until 7/17/2023. Final Response provided: 7/17/2023.</b></p> <p><b>RTK 2023-006 - Beth J. Kern, Esq. (CGA Law Firm)</b> - Request for any and all documents, communications, etc. related to items 1 through 8 for the time period 1/1/2018 to current: <b>(1)</b> 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"). <b>(2)</b> Any and all documents, communications, etc., related to any and all sewer laterals or lines for the businesses located at the Property.</p> <p><b>(3)</b> Any and all documents, communications, etc., related to any and all sewer system maps for the businesses located at the Property; <b>(4)</b> Any and all sewer system maps showing any parts the sewer system for the businesses located at the property; <b>(5)</b> Any and all sewer system maps showing any parts of the sewer system owned by the Borough of Penbrook. <b>(6)</b> 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; <b>(7)</b> 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 <b>(8)</b> 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. <b>Response due: 6/27/2023. Response provided 6/22/2023 for 30-day extension until 7/27/2023.</b></p> <p><b>RTK 2023-007 (Tom Bates)</b> - Requested electronic scans of the design engineering drawings for the Wastewater Treatment Plant from the original 1959 Plant. <b>Response due: 6/29/2023. Response provided: 6/29/2023.</b> First follow-up request was made on 7/10/2023 for mechanical sheets 50-54. <b>First Follow-up Response provided: 7/10/2023.</b> Second follow-up request was made on 7/14/2023 for additional drawing sheets nos. 8, 11-14 and 23-24. <b>Second Follow-up Response provided: [REDACTED]</b></p> <p><b>RTK 2023-008 (Tom Bates)</b> - 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. <b>Response due: 7/20/2023. Response provided 7/20/2023 for 2-week extension until 8/3/2023. [REDACTED]</b></p> <p><b>RTK 2023-009 - Faisal Cheema (Indiana University, Bloomington IN)</b> - 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). <b>Response due: 7/20/2023. Response provided 7/20/2023 for 30-day extension until 8/21/2023. [REDACTED]</b></p> <p><b>RTK 2023-010 - Dina Pinsky (AFSCME)</b> - 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. <b>Response due: 7/20/2023. Response provided 7/20/2023 for 30-day extension until 8/21/2023. [REDACTED]</b></p>



**CAPITAL REGION**  
**WATER**

**DRINKING WATER DEPARTMENT  
MONTHLY REPORT**



MJ 16-inch Bell Clamp at Capital

**June 2023**

100 Pine Drive, Harrisburg, PA 17103 | 888-510-0606  
[capitalregionwater.com](http://capitalregionwater.com)



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## Plant Operations

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

Specific water quality results are summarized in Exhibit A. A total of 226.317 MG, averaging 7.544 MGD was withdrawn from the water supply source for treatment. As shown in Exhibit B, a total of 215.490 MG, averaging 7.185 MGD, of finished drinking water was pumped to the distribution system.

The DeHart water source was in service for 30 days. The Susquehanna River water source was in service for zero days.

The DeHart Watershed had below average rainfall in June (Exhibit C) and the DeHart Reservoir water level decreased (Exhibit D). An estimated 391.59 MG of water was released from the DeHart Reservoir to Clark Creek, averaging 13.05 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).

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## Plant Maintenance

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The Maintenance team performed approximately 51 preventative maintenance work orders and corrective maintenance work orders for the month of June 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.
- Installation of four new sample pumps was completed. The existing sample pumps were leaking and dated and a rebuild was not cost effective.
- Installed all PVC plumbing supply and discharge for dual channel PH sensor and PH Probes two with temperature.
- Replaced Fluoride Chemical Feed Pump 483A with a new feed pump.
- Installed sample piping for the clear well(s) C-17's per PADEP request.
- Continue to finish the wiring system and components for the new Lime Slurry Chemical feed system.
- Continued to label various instrumentation and electrical panels and disconnects throughout the plant.
- Repair of plumbing leak on the existing 805 Soda Ash Feeder.

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- Repair and installation of Water Service Center (WSC) warfare signage that was blown over by the wind.
  - Removal of the old caustic feeder system and all associated wiring and racking system.
  - Perform spring/summer landscape duties at the WSC, Front Street pump houses, DeHart Dam facility and the North Front Street administrative offices.
  - Complete maintenance of fleet vehicles and equipment.

## Distribution

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

- Repaired two leaking services during the month of June totaling 17,280 gallons of unmetered water.
- Repaired three water main break – 383,537 gallons of unmetered water.
- Replaced two fire hydrants.
- Repaired one fire hydrant.
- Completed 489 work orders.
- Completed 485 water, sewer, and stormwater locates.
- Worked with contractors on several water, sewer, and stormwater Capital Improvement projects.

## Water Quality

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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 will be collected in July.



**CAPITAL REGION™**

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**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
<b>Total Coliform: Presence/Absence</b>														
Distribution System	A	A	A	A	A	A	A	A	A	A	A	A	A	5% P
<b>Chlorine Residual, mg/L Free</b>														
Filter Plant Effluent	2.00	1.98	2.01	1.99	1.95	<b>1.98</b>							<b>1.99</b>	<b>0.2 - 4.0</b>
Distribution System	1.40	1.43	1.42	1.31	1.21	<b>1.19</b>							<b>1.33</b>	<b>&lt;0.02</b>
<b>Turbidity, NTU</b>														
Influent from DeHart	1.20	0.98	0.71	0.61	0.77	<b>1.02</b>							<b>0.88</b>	<b>NA</b>
Influent from Susquehanna	NA	NA	NA	NA	NA	<b>NA</b>								<b>NA</b>
Filter Plant Effluent	0.03	0.03	0.03	0.03	0.02	<b>0.03</b>							<b>0.03</b>	<b>0.30</b>
<b>pH, Std Units</b>														
Influent from DeHart	6.4	6.5	6.5	6.4	6.1	<b>6.0</b>							<b>6.31</b>	<b>NA</b>
Influent from Susquehanna	NA	NA	NA	NA	NA	<b>NA</b>								<b>NA</b>
Filter Plant Effluent	7.6	7.5	7.9	7.7	7.5	<b>7.4</b>							<b>7.59</b>	<b>6.5 - 8.5*</b>
Distribution System	7.1	7.7	8.1	8.0	8.0	<b>7.4</b>							<b>7.71</b>	<b>6.5 - 8.5*</b>
<b>Total Alkalinity, mg/L as CaCO3</b>														
Influent DeHart	5	5	5	5	5	<b>5</b>							<b>5.00</b>	<b>NA</b>
Influent from Susquehanna	NA	NA	NA	NA	NA	<b>NA</b>								<b>N/A</b>
Filter Plant Effluent	15	14	13	15	16	<b>18</b>							<b>15.17</b>	<b>&lt;15*</b>
Distribution System	13	14	15	14	15	<b>14</b>							<b>14.14</b>	<b>&lt;15*</b>
<b>Temperature, degrees C</b>														
Influent from DeHart	5.9	5.4	7.3	10.0	13.0	<b>14.2</b>							<b>9.30</b>	<b>NA</b>
Influent from Susquehanna	NA	NA	NA	NA	NA	<b>NA</b>								<b>N/A</b>
Filter Plant Effluent	6.6	6.4	7.2	9.8	12.0	<b>13.3</b>							<b>9.22</b>	<b>NA</b>
Distribution System	14.1	13.2	13.6	16.8	18.3	<b>20.9</b>							<b>16.15</b>	<b>NA</b>
<b>Fluoride, mg/L</b>														
Filter Plant Effluent	0.95	1.02	1.00	0.88	0.69	<b>0.77</b>							<b>0.89</b>	<b>2</b>
<b>Aluminum, mg/L</b>														
Filter Plant Effluent	0.02	0.02	0.02	0.01	0.02	<b>0.02</b>							<b>0.02</b>	<b>0.2*</b>
<b>Iron, mg/L</b>														
Influent from DeHart	0.11	0.06	0.04	0.05	0.07	<b>0.13</b>							<b>0.08</b>	<b>NA</b>
Influent from Susquehanna	NA	NA	NA	NA	NA	<b>NA</b>								<b>N/A</b>
Filter Plant Effluent	0.02	0.01	0.01	0.02	0.02	<b>0.01</b>							<b>0.02</b>	<b>0.3*</b>
Distribution System	0.07	0.00	0.00	0.01	0.00	<b>0.02</b>							<b>0.02</b>	<b>0.3*</b>
<b>Total Dissolved Solids, mg/L</b>														
Influent from DeHart	15	15	16	16	16	<b>17</b>							<b>15.95</b>	<b>NA</b>
Influent from Susquehanna	NA	NA	NA	NA	NA	<b>NA</b>								<b>N/A</b>
Filter Plant Effluent	37	34	35	37	39	<b>42</b>							<b>37.26</b>	<b>500*</b>
Distribution System	39	36	34	38	40	<b>44</b>							<b>38.50</b>	<b>500*</b>
<b>Total Hardness, mg/L</b>														
Influent from DeHart	8	8	8	8	8	<b>8</b>							<b>8.00</b>	<b>NA</b>
Influent from Susquehanna	NA	NA	NA	NA	NA	<b>NA</b>								<b>N/A</b>
Filter Plant Effluent	8	8	8	8	8	<b>8</b>							<b>8.13</b>	<b>NA</b>
Distribution System	10	6	6	6	6	<b>7</b>							<b>6.80</b>	<b>NA</b>
<b>Orthophosphate, mg/L</b>														
Filter Plant Effluent	1.20	1.24	1.27	1.27	1.20	<b>1.22</b>							<b>1.23</b>	<b>0.7 - 1.3*</b>
Distribution System	1.21	1.19	1.12	1.27	1.21	<b>1.18</b>							<b>1.20</b>	<b>0.7 - 1.3*</b>
<b>**Total Trihalomethanes, ug/L</b>														
Distribution System	34.2	NA	NA	42.8	NA	<b>NA</b>							<b>38.5</b>	<b>80.0</b>
<b>**Total Haloacetic Acids, ug/L</b>														
Distribution System	36.8	NA	NA	48.4	NA	<b>NA</b>							<b>42.6</b>	<b>60.0</b>
<b>Total Organic Carbon, mg/L</b>														
Influent from DeHart	2.16	NA	NA	1.90	NA	<b>NA</b>							<b>2.03</b>	<b>NA</b>
Influent from Susquehanna	NA	NA	NA	NA	NA	<b>NA</b>								<b>N/A</b>
Filter Plant Effluent	1.22	NA	NA	1.20	NA	<b>NA</b>							<b>1.21</b>	<b>NA</b>
Average Filter Run, Hours	115	112	120	119	112	<b>109</b>							<b>114.50</b>	<b>NA</b>

\*\*\* 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
<b>June</b>	<b>226.317</b>	<b>7.544</b>	<b>0.000</b>	<b>0.000</b>	<b>226.317</b>	<b>7.544</b>	<b>226.356</b>	<b>7.545</b>	<b>6.117</b>	<b>0.204</b>	<b>215.490</b>	<b>7.185</b>
July												
August												
September												
October												
November												
December												
<b>Total</b>	<b>1352.431</b>		<b>0.000</b>		<b>1352.431</b>		<b>1370.317</b>		<b>40.580</b>		<b>1309.632</b>	
<b>Average</b>	<b>225.405</b>	<b>7.470</b>	<b>0.000</b>	<b>0.000</b>	<b>225.405</b>	<b>7.470</b>	<b>228.386</b>	<b>7.570</b>	<b>6.763</b>	<b>0.224</b>	<b>218.272</b>	<b>7.235</b>

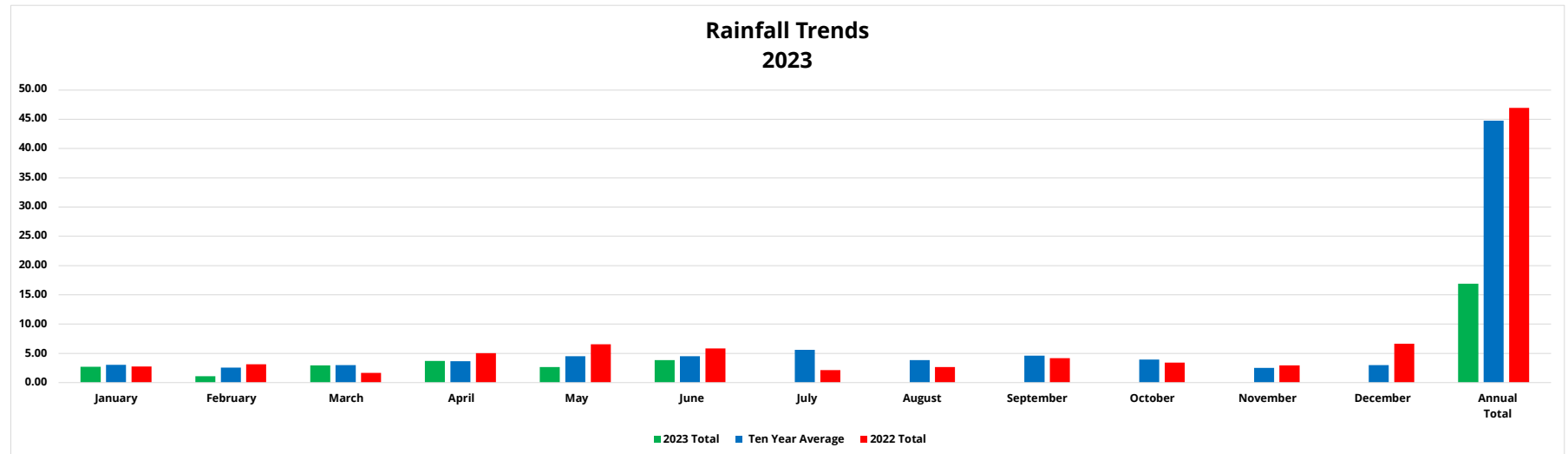
Peak Day Water Use  
Minimum Day Water Use

(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
<b>2023 Total</b>	2.70	1.09	2.93	3.71	2.63	3.85							16.91
<b>Daily Average</b>	0.087	0.039	0.095	0.124	0.085	0.128							0.558
<b>Ten Year Average</b>	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
<b>2022 Total</b>	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
<b>2023 AVG</b>	-162.9	-58.6	-98.7	1.1	1.8	-10.0						
<b>Ten Year AVG</b>	-22.6	-19.4	-19.5	-8.0	-2.1	-2.9	-7.2	-18.1	-26.2	-39.1	-44.5	-42.5
<b>2022 AVG</b>	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**

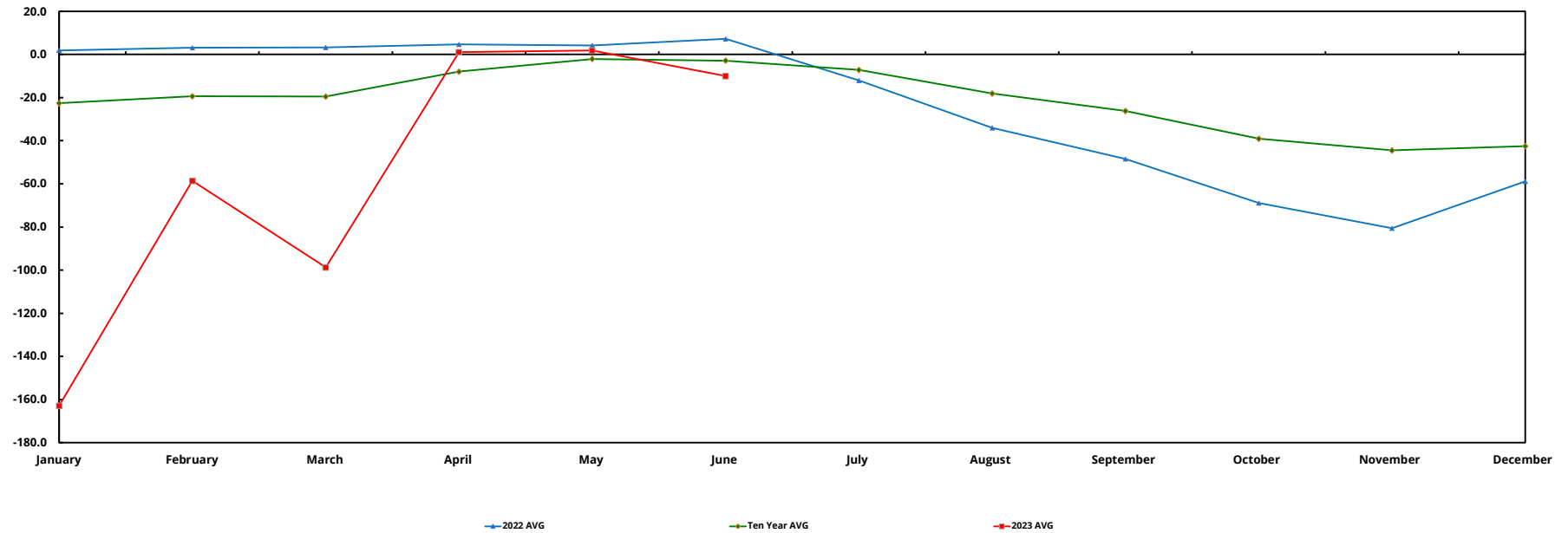
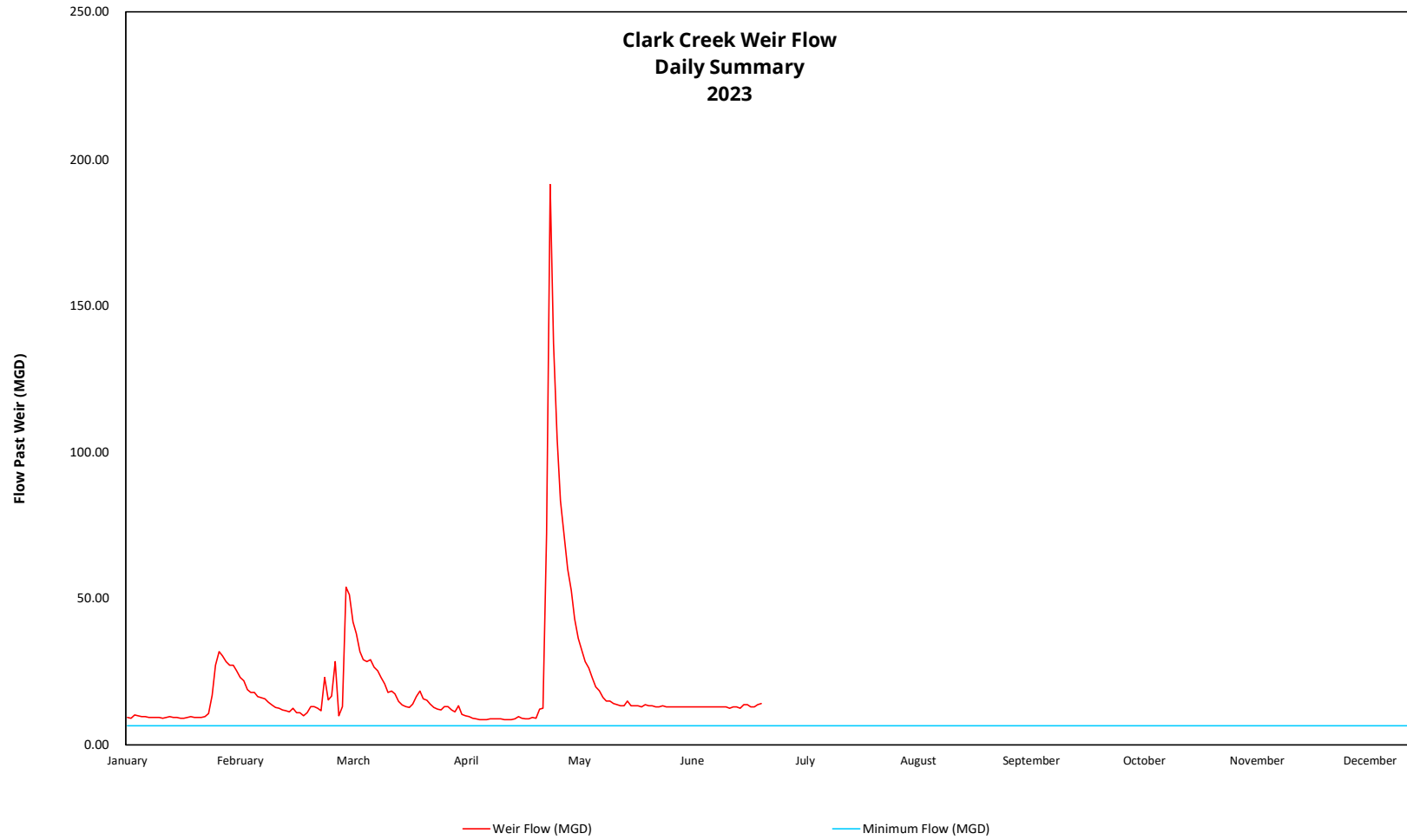


EXHIBIT E

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
<b>Water Services Center</b>														
<b>Electric Transmission</b>														
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
<b>Electric Generation</b>														
Total, kWh	214,200	172,800	198,000	174,600	122,400	135,000							169,500	1,017,000
Cost, Dollars	\$1,253.64	\$1,180.73	\$1,168.47	\$1,159.78	\$981.51	\$1,058.66							\$1,133.80	\$6,802.79
<b>Natural Gas</b>														
Total, Cu Ft	13,533	13,229	11,509	8,795	1,475	**							9,708	48,541
Cost, Dollars	\$12,244.94	\$11,133.40	\$9,875.88	\$8,238.84	\$1,838.65	**							\$8,666.34	\$43,331.71
<b>Sewer</b>														
Total, Gal	7,710,000	6,070,000	7,288,000	7,213,000	6,490,000	7,000,000							6,961,833	41,771,000
Cost, Dollars	\$71,240.40	\$56,086.80	\$67,341.12	\$66,359.60	\$59,967.60	\$64,680.00							\$64,279.25	\$385,675.52
<b>Refuse</b>														
Cost, Dollars	\$967.70	\$967.70	\$967.70	\$967.70	\$967.70	\$967.70							\$967.70	\$5,806.20
<b>Reservoir Park Pump Station</b>														
<b>Electric Transmission</b>														
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
<b>Electric Generation</b>														
Total, kWh	88,000	92,400	85,600	93,200	93,200	**							89,800	359,200
Cost, Dollars	\$1,350.22	\$1,214.10	\$1,215.18	\$1,292.31	**	**							\$1,267.95	\$5,071.81
<b>Natural Gas</b>														
Total, Cu Ft	982	629	473	466	9	**							512	2,559
Cost, Dollars	\$903.79	\$626.39	\$509.26	\$456.90	\$36.03	**							\$506.47	\$2,532.37
<b>Rockledge River Pump Station</b>														
<b>Electric Transmission</b>														
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	**							\$51.78	\$258.91
<b>Electric Generation</b>														
Total, kWh	1,200	1,200	600	**	600	**							900	3,600
Cost, Dollars	\$98.68	\$71.83	\$70.50	**	\$70.69	**							\$77.93	\$311.70
<b>Natural Gas</b>														
Total, Cu Ft	580	499	499	389	53	**							404	2,020
Cost, Dollars	\$543.32	\$515.95	\$524.07	\$378.07	\$75.04	**							\$407.29	\$2,036.45
<b>Union Square Booster Station</b>														
<b>Electric Transmission</b>														
Total, kWh	3,340	2,744	2,483	1,559	744	**							2,174	10,870
Cost, Dollars	\$305.46	\$132.56	\$138.65	\$118.51	\$52.69	**							\$149.57	\$747.87
<b>Electric Generation</b>														
Total, kWh	3,340	2,744	2,483	1,559	**	380							2,101	10,506
Cost, Dollars	\$130.77	\$113.42	\$101.36	\$95.50	**	\$81.60							\$104.53	\$522.65
<b>DeHart Facilities</b>														
<b>Electric Transmission</b>														
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
<b>Electric Generation</b>														
Total, kWh	3,131	2,289	2,308	2,945	2,396	1,346							2,403	14,415
Cost, Dollars	\$102.80	\$83.69	\$161.05	\$63.55	\$89.12	\$84.90							\$97.52	\$585.11
<b>Fuel Oil</b>														
Total, Gals.	2,251	0	0	0	0	0							375	2,251
Cost, Dollars	\$5,768.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00							\$961.33	\$5,768.00
<b>City Island Heat Trace</b>														
<b>Electric Transmission</b>														
Total, kWh	40	140	147	116	0	0							74	443
Cost, Dollars	\$7.57	\$16.44	\$9.59	\$8.42	\$4.36	\$4.37							\$8.46	\$50.75
<b>Electric Generation</b>														
Total, kWh	40	140	147	116	0	**							89	443
Cost, Dollars	\$61.81	\$61.93	\$119.36	\$61.83	\$61.47	**							\$73.28	\$366.40
<b>Expenditures YTD</b>													\$92,719	\$543,665

\*\* Not available at time report was developed

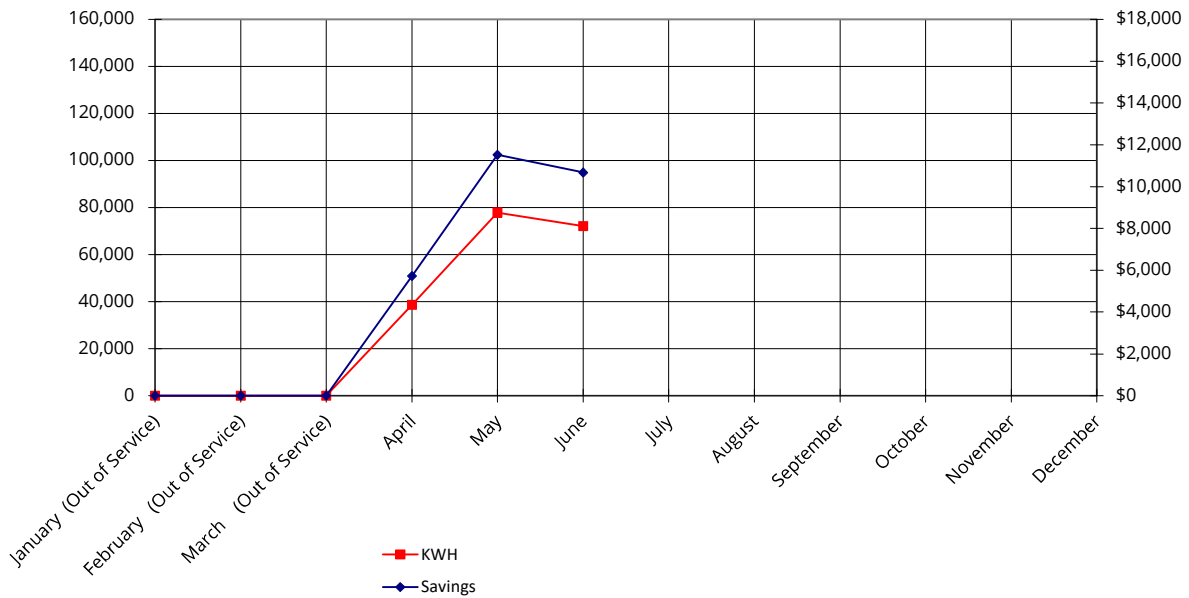
<b>Total Transmission</b>	<b>\$84,854</b>
<b>Total Generation</b>	<b>\$13,660</b>
<b>Total Refuse</b>	<b>\$5,806</b>
<b>Total Gas</b>	<b>\$47,901</b>
<b>Total Sewer</b>	<b>\$385,676</b>
<b>Total Fuel Oil</b>	<b>\$5,768</b>
<b>Total Utilities</b>	<b>\$537,858</b>

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
<b>June</b>	<b>72,100</b>	<b>\$10,671</b>
July		
August		
September		
October		
November		
December		
<b>Average</b>	<b>31,437</b>	<b>\$4,653</b>
<b>Year to Date</b>	<b>188,620</b>	<b>\$27,916</b>

\* 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
<b>Chlorine</b>														
Total Lbs.	6,294	5,518	5,991	5,949	6,112	5,938							5,967	35,802
Average, Chlorine Lbs./Day	203	197	193	198	197	198							197.7	
Average, Chlorine Dose, mg/L	6.9	1.6	2.6	3.2	3.4	3.2							3.5	
Chlorine Cost, \$/Lbs.	\$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							\$9,779.88	\$58,679.25
<b>Alum 48.5%</b>														
Total Lbs.	26,829	16,763	19,163	21,756	20,615	19,942							20,845	125,068
Average, Alum, Lbs./Day	866	599	618	725	665	664							689.5	
Average, Alum, mg/L	10.7	7.7	12.0	11.8	11.0	10.4							10.6	
Alum Cost, \$/Lbs.	\$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							\$2,522.05	\$15,132.29
<b>Lime</b>														
Total Lbs.	0	0	0	0	0	0							0	0
Average Lime, Lbs./Day	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	
Lime Cost, \$/Lbs.	\$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
<b>Soda Ash</b>														
Total Lbs.	17,400	12,350	13,050	13,650	17,400	20,350							15,700	94,200
Average Soda Ash, Lbs./Day	561	441	421	455	561	678							519.5	
Average, Soda Ash Dose, mg/L	19.2	13.5	19.0	7.2	9.0	25.4							15.5	
Soda Ash Cost, \$/Lbs.	\$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							\$5,777.53	\$34,665.20
<b>Fluoride</b>														
Total Lbs.	2,240	1,965	1,965	1,660	1,167	1,133							1,688	10,130
Average, Fluoride Lbs./Day	72	70	63	55	38	38							55.9	
Average, Fluoride (F-) Dose, mg/L	1.1	1.1	1.0	0.9	0.6	0.7							0.9	
Fluoride Cost, \$/Lbs.	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30							\$0.30	
Fluoride Total Cost, Dollars	\$672	\$590	\$590	\$498	\$350	\$340							\$506.67	\$3,040.00
<b>Sodium Hydroxide 50%</b>														
Total NaOH 50% dry Lbs.	35,623	31,225	33,907	33,665	34,585	33,603							33,768	202,608
Average NaOH 50%, dry Lbs./Day	1,149	1,115	1,094	1,122	1,116	1,120							1,119	
Average, NaOH 50%, mg/L	19.2	15.7	19.2	8.9	8.8	8.9							13.5	
NaOH 50% Cost, dry \$/Lbs	\$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							\$15,195.45	\$91,172.70
<b>Zinc Orthophosphate</b>														
Total Zn3(PO4)2, wet Lbs.	4,802	4,239	4,565	4,539	4,559	4,246							4,492	26,950
Average Zn3(PO4)2, wet Lbs./Day	155	151	147	151	147	142							148.8	
Average, Zn3(PO4)2 Dose, mg/L	2.5	2.5	2.5	2.5	2.5	2.4							2.5	
Zn3(PO4)2 Cost, wet \$/Lbs.	\$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							\$7,743.63	\$46,461.75
<b>Potassium Permanganate</b>														
Total KMnO4, Lbs.	0	0	0	0	0	0							0	0
Average KMnO4, Lbs./Day	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	
KMnO4 Cost, \$/Lbs.														
KMnO4 Total Cost, Dollars	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00							\$0.00	\$0.00
<b>Expenditure</b>													\$41,525.20	\$249,151.20
<b>Average Treated Cost per (MG)</b>														
<b>Total Treated Flow (MGD)</b>														0.000
<b>Average Treated Flow (MGD)</b>														228.386

**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							2,983	497
Street Restorations	0	0	7	1	15	6							29	5
Leak Detection Assessment Percent of Distribution System	8	8	8	8	8	8							48	8
Main Break Repair - Detected Non-Surfacing	0	0	0	0	0	0							0	0
Main Breaks Repaired - Emergency	2	1	1	0	1	3							8	1
Service Line Leaks Detected	0	0	0	0	0	0							0	0
Service Line Leaks Repaired	1	0	10	7	4	2							24	4
Valves - Exercised	0	0	0	21	1	0							22	4
Valves - Replaced	0	0	0	0	0	0							0	0
Hydrant Flow Tests	0	8	1	2	7	6							24	4
Hydrants Returned to Service	0	0	0	0	1	2							3	1
Water Tap - Disconnected	2	0	11	13	4	0							30	5
Water Tap - New Connection	2	0	0	0	0	0							2	0
Water Shutoffs - Delinquent Accounts	0	0	0	0	0	0							0	0
Water Shutoffs - Other	24	11	21	62	48	56							222	37
Water Shutoffs - Non Payment	0	0	21	41	31	43							136	23
Water Restoration Turn on Other	24	22	23	33	23	55							180	30
Water Turn on - Non Payment	0	1	6	24	4	38							73	12

**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
<b>Meter Installations</b>															
Replacement	Missing	6	3	4	5	7	6							31	5
	Leaking	2	3	2	5	2	2							16	3
	Frozen	20	4	3	1	1	1							30	5
	Non-registering	6	6	9	4	8	10							43	7
	Large Meters <sup>1</sup>	0	0	0	0	0	0							0	0
New Service	New Installation	2	0	0	0	0	0							2	0
<b>Meter Service</b>															
MXU's Replaced	MXU's Replaced	47	43	40	22	34	66							252	42
Batteries Replaced	Batteries Replaced	45	323	113	65	80	134							760	127
Meter Pits Serviced	Meter Pits Serviced	0	0	0	0	1	0							1	0
<b>Meter Calibrations</b>															
Small Meters <sup>2</sup>	Calibrated meters	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
Billed Metered Exported	Bulk Water Hauling	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							118,912	19,819
Billed Unmetered	Hydrant Flow Tests	0	12,300	4,000	4,305	14,094	14,304							49,003	8,167
Unbilled Unmetered	Hydrant Flushing (and Unbilled Authorized)	48,449	51,011	40,285	3,479,672	5,975,003	39,060							9,633,480	1,605,580
Leakage on Distribution Mains	Main Leaks	1,318,637	2,836,746	95,144	0	109,685	383,537							4,743,749	790,625
Leakage on Service Lines	Service Leaks	2,321,113	41,760	568,560	135,444	95,040	17,280							3,179,197	529,866
	<b>Total</b>	3,688,199	2,941,817	821,546	3,623,921	6,194,229	454,629	0	0	0	0	0	0	17,724,341	1,477,028



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## **WASTEWATER DEPARTMENT MONTHLY REPORT**



CRW Operations Sanitary Confinement Challenge Team Competes at PENNTEC 2023.

**June 2023**

1662 South Cameron Street, Harrisburg, PA 17104 | 888-510-0606  
[capitalregionwater.com](http://capitalregionwater.com)



## Overview

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The Wastewater department has had a long-standing goal of overhauling its data collection processes. Our data sources include information coming from the facility SCADA system, conditions and observations collected by operations staff, and in-house and contracted laboratory results of dozens of samples collected daily.

Water Information Management System (WIMS) was the software chosen as the central data repository for connecting these various sources into one central database. The implantation process has been long and difficult. Significant delays were brought about by the COVID-19 pandemic, a major upgrade to AWTF's SCADA software, and personnel changes have slowed progress.

However, a renewed push in recent months has finally put the department near the finish line. All required data paths have been established to connect the database with the SCADA system. The laboratory has been hard at work finalizing bench sheets for data entry. And the Facility Operations group created and has started utilizing forms for entry of their data as well. While more work is ahead, the AWTF will soon be collecting, storing, and analyzing nearly all of its process data in a digital format.

This transformation will result in a significant reduction in labor hours associated with that data collection. Tens of thousands of pages of paper per year will be spared. But most importantly, this upgrade ensures the most accurate and error-proof way of collecting and reporting our process data.

## Operations

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

Hydraulic loading to the AWTF averaged 16.2 million gallons per day (MGD). The treatment process achieved removal reductions of 98.2 percent CBOD, 96.8 percent Suspended Solids, 57.9 percent Phosphorus, and 92.6 percent Ammonia (Exhibit A).

The Contract Waste Hauling program collected \$79,844.46 in revenue from 1,655,980 gallons discharged (Exhibit G). This was the highest monthly revenue generated by the program since March 2021. Modern Landfill, once again, discharged over half a million gallons of leachate and was our largest monetary contributor. NSP discharged nearly half a million gallons of leachate due to rain near the end of the month.

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The Cogeneration Facility experienced a run time of 5 percent in June. Revenue is estimated at \$531.04 on 3600 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

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- Additional WIMS training enabled complete editing of all qualifiers and better knowledge of how the LabCal module works. The group is close to implementing a trial run with laboratory data.
- Completed and submitted all corrective actions for the new IDEXX fecal and E. Coli method from the supplemental assessment done by the PADEP.
- Completed the first round of sampling at each industrial user.

## Pretreatment

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- Amended, updated, and emailed all Industrial User permits as part of the response to the Pretreatment Compliance Inspections (PCI) done by the USEPA in time for their third quarter sampling.
- Digitizing last year's facility inspection reports so they can be emailed out ahead of inspections so each industrial user can make necessary changes before meeting with CRW. This will help streamline the inspection process for both parties.

## Plant Maintenance

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- Serviced standby generator and ran full load test at Market Street and Spring Creek Pump Stations.
- Completed installation of the chain and flight Mechanical Sludge Collection System for Primary Clarifier No. 4.
- Performed vehicle repairs in preparation for state inspections.
- Performed daily service of vehicular related repairs including, bulbs, batteries, tires, lubrication, oil filters, and flat tires.
- Provided weekly maintenance on JCB Loader.
- Performed maintenance tasks per requests at Administrative Offices.

## Field Construction

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- Repaired 14 inlets in various location throughout the city.
- Replaced storm inlet lateral at 26th and Woodlawn Streets. A 15-inch reinforced concrete pipe was replaced with 12-inch SDR. A total of 40 feet was replaced.
- Cleared a log jam in Paxton Creek by CSO #23 (Cameron and Calder).

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## Field Operations

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- Performed CCTV assessment of 10,704 feet (2.03 miles) of pipe.
- Flushed 2,269 feet (0.43 miles) of sewer pipe.
- Responded to three backup and overflow calls. None were the responsibility of CRW.
- Responded to five sinkhole calls. CRW was liable for one.
- Cleaned 100 stormwater inlets.
- Inspected 98 stormwater inlets.
- Two Dry Weather Overflows (DWO) occurred this month: one at CSO #013 Front and Cumberland Streets and one at CSO #026 South Cameron and Cumberland Streets. Both were due to blockages are various materials and storm debris.
- Cleaned No. 4 Primary Tank cross collector.
- A bar rack was installed at CSO #013, Front and Cumberland Streets to aid in rag removal.
- CCTV assessment for 2024 Sanitary Sewer Improvement project.

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## Environmental Compliance

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- Completed 27 inspections of FOG dischargers.
- Renewed 24 FOG discharge permits.
- Issued three FOG related NOVs.
- One investigation was conducted during the month of June:
  - Environmental Compliance received a report of an illicit discharge of petroleum products along Industrial Road. The fuel made its way to CRW's MS4 system and, eventually, Paxton Creek. PADEP responded to the event and took the lead on the investigation. In this instance, they preferred to handle violations/fines and will be issuing this site an individual stormwater permit.

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## Street Sweeping

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- Received four complaints this month, all were resolved.
- Repaired conveyor chain and sprockets on sweeper No. 2.
- Completed oil and hydraulic service for sweeper No. 3. Other sweepers to follow.
- Completed 752 miles of scheduled street sweeping within the City of Harrisburg.
- Used approximately 10,800 gallons of water for sweeping operations.
- Attended Green Stormwater Infrastructure training.
- Continued to assist cleaning storm inlets in scheduled sweeping areas.
- Attended Bellevue Pond GSI inspections.



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- When the days of the month fall on a fifth week, there is no scheduled sweeping. The sweeping department will be assigned specific assignments throughout the city to continue the upkeep in highly visible areas.
  - By the end of June, there were two days with a total of 59 miles swept (included with total miles).



**CAPITAL REGION™**

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**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	<b>16.2</b>							19.0	37.7
Carbonaceous Biochemical Oxygen Demand														
Influent, Mg/L	97	139	114	198	165	<b>197</b>							152	----
Effluent, Mg/L	4	3	4	4	3	<b>3</b>							4	25
Percent Removal, %	95.6	97.4	96.7	98.3	98.1	<b>98.2</b>							97.4	----
Effluent Loading, lb/d	681	469	596	821	507	<b>389</b>							577	7,860
Suspended Solids:														
Influent, Mg/L	156	222	173	187	175	<b>212</b>							188	----
Effluent, Mg/L	8	3	3	4	4	<b>6</b>							5	30
Percent Removal, %	95.0	98.5	98.1	96.6	97.5	<b>96.8</b>							97.1	----
Effluent Loading, lb/d	1,447	412	582	1,043	660	<b>954</b>							850	9,433
Nitrogen														
Total-N														
Influent, Mg/L	26	33	26	30	26	<b>7</b>							25	----
Effluent, Mg/L	5.0	4.0	5.7	4.3	3.7	<b>1.0</b>							4	Monitor
Percent Removal, %	80.5	87.9	78	85.6	85.5	<b>86.3</b>							84.0	----
Effluent Loading, lb/d	993	548	846	652	861	<b>554</b>							742	----
NH3-N														
Influent Mg/L	17	21	17	16	13	<b>15</b>							16	----
Effluent, Mg/L	1.9	1.2	1.4	1.6	0.4	<b>1.1</b>							1	11 (2)
Percent Removal, %	88.5	94.3	91.8	89.7	97.0	<b>92.6</b>							92.3	----
Effluent Loading, lb/d	359	168	248	258	74	<b>147</b>							209	4,716
Phosphorus:														
Influent, Mg/L	2.9	4.2	3.5	3.8	3.5	<b>4.0</b>							3.7	----
Effluent, Mg/L	0.8	1.6	1.2	1.6	1.4	<b>1.6</b>							1.4	2.0
Percent Removal, %	70.3	61.3	64.4	55.6	59.0	<b>57.9</b>							61.4	----
Effluent Loading, lb/d	152	222	194	237	215	<b>210</b>							205	629
pH:														
Influent, Std. Units	7.4	7.3	7.3	7.3	7.4	<b>7.4</b>							7.4	----
Effluent, Std. Units	7.4	7.4	7.4	7.4	7.5	<b>7.5</b>							7.4	6.0 - 9.0
Dissolved Oxygen:														
Effluent Minimum, Mg/L	8.0	8.8	7.8	8.3	7.6	<b>6.5</b>							7.8	5.0 Min.
Fecal Coliform:														
Effluent, No./100 ml	25	3	5	3	2	<b>2</b>							7	200/100 ml (1)
Chlorine Residual:														
Effluent, Mg/L	0.22	0.18	0.20	0.22	0.43	<b>0.44</b>							0.28	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
<b>June</b>	<b>16.200</b>	<b>5.883</b>	<b>10.317</b>	<b>5.130</b>	<b>0.173</b>	<b>0.300</b>	<b>0.130</b>	<b>0.150</b>	<b>1.300</b>	<b>3.820</b>	<b>1.987</b>	<b>2.900</b>	<b>0.310</b>	<b>4.250</b>
July														
August														
September														
October														
November														
December														
Average	18.95	7.48	11.47											2.73
Percent	100.00	39.50	60.50											16.36

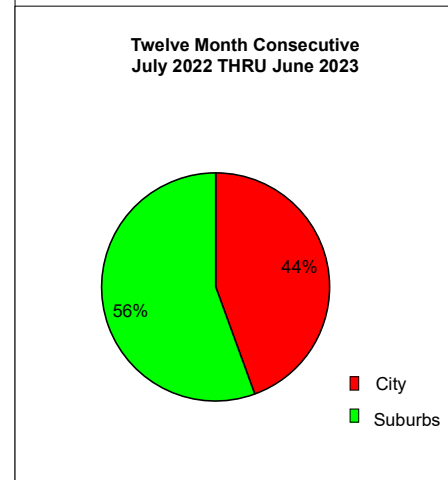
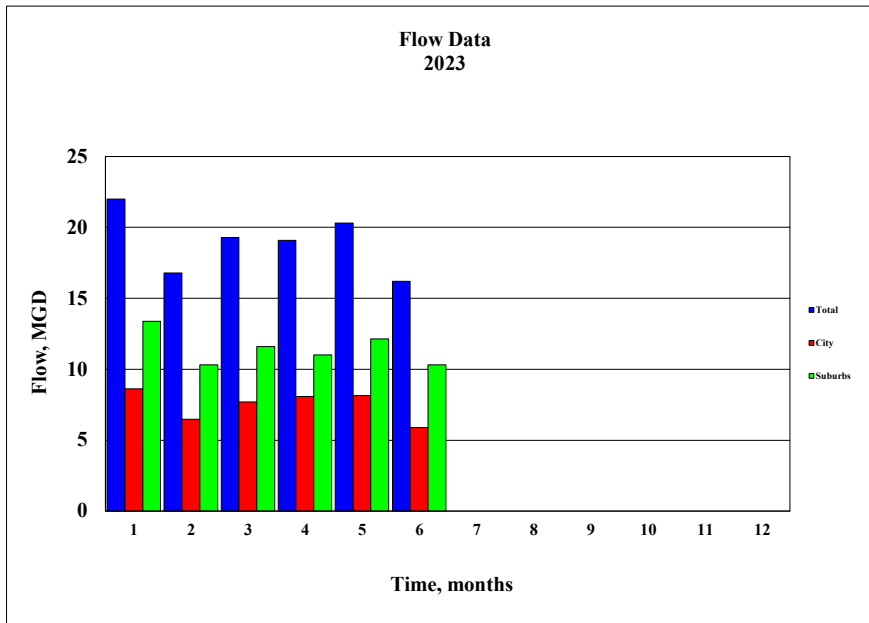


EXHIBIT C

**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
<b>Electric</b>														
Total, kWh	1,158,900	1,028,400	1,033,800	1,089,000	994,800		*						884,150	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		*						\$57,007.28	\$342,043.69
<b>Natural Gas</b>														
Total, Cu Ft	621.9	554.8	287.6	27.4	0.8		*						249	1,493
Average, Cu Ft/Day	20	20	9	1	0		*						10	-----
Cost, Dollars	\$6,237.14	\$5,423.45	\$3,026.40	\$377.30	\$147.32		*						\$2,535.27	\$15,211.61
<b>Water</b>														
Total, Gal.	1,187,000	1,298,000	928,000	977,000	932,000		*						1,064,400	5,322,000
Average, Gal./Day	38,290	46,357	29,935	32,567	30,065		*						35,443	-----
Cost, Dollars	\$15,616.58	\$16,764.32	\$12,938.52	\$13,445.18	\$12,979.88		*						\$11,957.41	\$71,744.48
<b>MicroC</b>														
Total, Gal.	0	0	0	0	258		0						43	258
Average, Gal./Day	0.0	0.0	0.0	0.0	8.3		0.0						1	-----
Cost, Dollars	\$0	\$0.00	\$0	\$0	\$1,029		\$0						\$171.57	\$1,029.42
<b>Sodium Hydroxide</b>														
Total, Gal.	0	0	0	0	0		0						0	0
Average, Gal./Day	0	0	0	0	0		0						0	-----
Cost, Dollars	0	0	0	0	0		0						\$0.00	\$0.00
<b>Chlorine Disinfection</b>														
Total, Lbs.	13,115	5,973	6,830	5,240	10,940		<b>8,630</b>						8,455	50,728
Average, Lbs./Day	423	223	220	175	353		<b>288</b>						280	-----
Avg Residual, Mg/L	0.22	0.18	0.20	0.22	0.43		<b>0.44</b>						0.28	-----
Cost, \$/Lbs.	\$1.64	\$1.64	\$1.64	\$1.64	\$1.64		<b>\$1.64</b>						\$1.64	-----
Total Cost, Dollars	\$21,508.60	\$9,795.72	\$11,201.20	\$8,593.60	\$17,941.60		<b>\$14,153.20</b>						\$13,865.65	\$83,193.92
<b>Phosphorous Removal</b>														
Total FeCl3, Gals.	3,113	2,950	3,113	3,589	4,429		<b>3,156</b>						3,392	20,350
Avg FeCl3, Gals./Day	100	105	100	120	143		<b>105</b>						112	-----
FeCl3 Cost, \$/Gal.	\$1.74	\$1.74	\$1.74	\$1.74	\$1.74		<b>\$1.74</b>						\$1.74	-----
FeCl3 Total Cost, Dollars	\$5,416.97	\$5,133.00	\$5,416.62	\$6,244.86	\$7,706.46		<b>\$5,491.44</b>						\$5,901.56	\$35,409.35

\* 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
<b>Total - 2022</b>				<b>343,800</b>	<b>\$40,207.41</b>
<b>Monthly Average - 2022</b>		<b>28</b>	<b>943</b>	<b>28,650</b>	<b>\$3,350.62</b>
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					
August 2023					
September 2023					
October 2023					
November 2023					
December 2023					
<b>Total - 2023</b>				<b>247,500</b>	<b>\$34,528.44</b>
<b>Monthly Average - 2023</b>		<b>34</b>	<b>1,373</b>	<b>41,250</b>	<b>\$5,754.74</b>

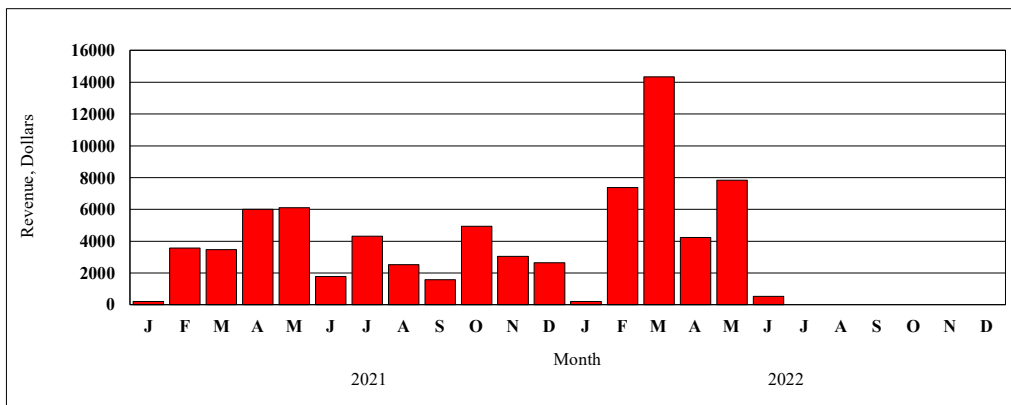


EXHIBIT E

**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
<b>Solids Removal</b>														
Process, Lbs.	704,819	890,443	1,557,518	1,554,485	1,206,679	<b>964,105</b>							1,146,341	6,878,049
CWH Program, Lbs.	196,727	230,186	125,669	137,543	502,270	<b>446,289</b>							273,114	1,638,684
Total Solids, Lbs.	901,546	1,120,629	1,683,187	1,692,028	1,708,949	<b>1,410,394</b>							1,419,455	8,516,733
<b>Sludge Dewatering</b>														
Feed Volume, Gals.	5,489,000	4,398,000	3,878,000	5,322,000	4,268,000	<b>5,185,000</b>							4,756,667	28,540,000
Feed Solids, %	1.5	1.5	1.5	1.4	1.5	<b>1.4</b>							1.4	-
Labor, Hours	635	519	531	651	691	<b>671</b>							616	3,698
Operations, Hours	1,181	977	1,014	672	691	<b>671</b>							868	5,206
Total Cake, Dry Tons	208	168	162	181	197	<b>228</b>							191	1,144
Total Cake, Wet Tons	1,264	1,089	1,040	1,164	1,223	<b>1,421</b>							1,200	7,201
Cake TS, %	16.5	15.9	15.6	15.6	16.1	<b>16.1</b>							16.0	-
Press Rate, Lbs./Hour	2,140	2,228	2,052	3,465	3,539	<b>4,237</b>							2,944	17,662
Polymer Dosage, Lbs	4,299	4,556	4,533	5,031	5,765	<b>7,226</b>							5,235	31,410
Polymer Dosage, Lbs/Dry Ton	24.3	26.4	28.6	29.2	29.5	<b>48.1</b>							31.0	-
<b>Disposal Cost</b>														
Labor, Dollars	\$12,208.54	\$9,982.89	\$10,200.05	\$12,502.61	\$13,282.94	<b>\$12,890.85</b>							\$11,844.65	\$71,067.89
Electrical, Dollars	\$519.82	\$430.06	\$445.98	\$295.64	\$304.08	<b>\$295.11</b>							\$381.78	\$2,290.68
Polymer, Dollars	\$8,383.05	\$8,885.16	\$8,839.35	\$9,810.45	\$11,241.75	<b>\$14,090.70</b>							\$10,208.41	\$61,250.46
Disposal, Dollars	\$47,358.20	\$52,886.50	\$47,998.60	\$25,793.27	\$70,097.60	<b>\$60,858.30</b>							\$50,832.08	\$304,992.47
Total Cost, Dollars	\$68,469.61	\$72,184.61	\$67,483.99	\$48,401.97	\$94,926.38	<b>\$88,134.96</b>							\$73,266.92	\$439,601.51
Cost Per Dry Ton, Dollars	\$329.18	\$429.67	\$416.57	\$267.41	\$481.86	<b>\$386.56</b>							\$385.21	

## 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
<b>Front Street Pump Station</b>														
Electric														
Total, kWh	153,600	97,200	78,000	61,200	96,000	<b>54,000</b>							90,000	540,000
Average, kWh/Day	4,955	3,471	2,516	2,040	3,097	<b>1,800</b>							2,980	----
Cost, Dollars	#####	\$6,179.35	\$5,794.20	\$4,760.30	\$6,808.76	<b>\$5,640.08</b>							\$6,559.09	\$39,354.56
Fuel Oil														
Total, Gals.	0	0	0	0	0	<b>0</b>							0	0
Average, Gals./Day	0	0	0	0	0	<b>0</b>							0	----
Cost, Dollars	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	<b>\$0.00</b>							0	\$0.00
Water														
Total, Gals.	284,000	318,000	276,000	291,000	326,000	*							299,000	1,495,000
Average, Gal./Day	9,161	11,357	8,903	9,700	10,516	*							9,928	----
Cost, Dollars	\$3,633.08	\$3,984.64	\$3,550.36	\$3,705.46	\$4,067.36	*								\$18,940.90
<b>Spring Creek Pump Station</b>														
Electric														
Total, kWh	38,400	50,240	40,640	38,400	56,320	<b>49,600</b>							45,600	273,600
Average, kWh/Day	1,239	1,794	1,311	1,280	1,817	<b>1,653</b>							1,516	----
Cost, Dollars	\$1,274.90	\$3,346.91	\$3,295.83	\$3,158.30	\$4,604.53	<b>\$3,047.64</b>							\$3,121.35	\$18,728.11
Fuel Oil														
Total, Gals.	0	0	0	0	0	<b>0</b>							0	0
Average, Gals./Day	0	0	0	0	0	<b>0</b>							0	----
Cost, Dollars	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	<b>\$0.00</b>							\$0.00	\$0.00
Water														
Total, Gals.	90,000	104,000	86,000	105,000	118,000	*							100,600	503,000
Average, Gal./Day	2,903	3,714	2,774	3,500	3,806	*							3,340	----
Cost, Dollars	\$1,006.59	\$1,151.35	\$965.23	\$1,161.69	\$1,296.11	*							\$1,116.19	\$5,580.97
<b>Market Street Pump Station</b>														
Electric														
Total, kWh	1,320	1,200	1,200	960	1,080	<b>720</b>							1,080	6,480
Average, kWh/Day	43	43	39	32	35	<b>24</b>							36	----
Cost, Dollars	\$151.91	\$153.90	\$174.52	\$157.79	\$253.89	<b>\$207.36</b>							\$183.23	\$1,099.37
Fuel Oil														
Total, Gals.	0	0	0	0	0	<b>0</b>							0	0
Average, Gals./Day	0	0	0	0	0	<b>0</b>							0	----
Cost, Dollars	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	<b>\$0.00</b>							\$0.00	\$0.00
<b>City Island Pump Station</b>														
Electric														
Total, kWh	40	40	40	40	40	<b>40</b>							40	240
Average, kWh/Day	1	1	1	1	1	<b>1</b>							1	----
Cost, Dollars	\$42.43	\$62.63	\$64.36	\$64.11	\$64.27	<b>\$83.86</b>							\$63.61	\$381.66

\* 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
<b>Total - 2022</b>	<b>13,212,877</b>	<b>\$384,858.78</b>	<b>2,799,825</b>	<b>\$99,434.60</b>	<b>16,012,612</b>	<b>\$484,293.48</b>
<b>Monthly Average - 2022</b>	<b>1,101,073</b>	<b>\$32,071.57</b>	<b>233,319</b>	<b>\$8,286.22</b>	<b>1,334,384</b>	<b>\$40,357.79</b>

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
<b>June</b>	<b>1,329,280</b>	<b>\$68,218.26</b>	<b>326,700</b>	<b>\$11,626.20</b>	<b>1,655,980</b>	<b>\$79,844.46</b>
July						
August						
September						
October						
November						
December						
<b>Total - 2023</b>	<b>7,883,630</b>	<b>\$296,403.78</b>	<b>1,524,850</b>	<b>\$54,047.70</b>	<b>9,408,480</b>	<b>\$350,451.48</b>
<b>Monthly Average - 2023</b>	<b>1,313,938</b>	<b>\$49,400.63</b>	<b>254,142</b>	<b>\$9,007.95</b>	<b>1,568,080</b>	<b>\$58,408.58</b>

