



Monthly Management Report
CRW Directors and Staff

January 2023
As of February 15, 2023
Page 1 of 5

Ensure Financial Stability	
Reconciled Bank Account Balances	Refer to attached Reconciled Bank Account Balances as of 1/31/2023.
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 0 water shut-offs for non-payment, 0 were turned back on after payment from previous months' shut offs, and 24 service shut-off requests.
Repair/Replace Meters/MXUs/Batteries	Drinking Water Distribution staff replaced 38 water meters, replaced 45 batteries, and 47 MXUs.
Reduce Wet Weather Impacts to Infrastructure, Community, and Receiving Waters	
Negotiate with PADEP/U.S. EPA/DOJ on Past and Future Practices	CRW met with the agencies in late January to review the Water Quality Modeling Plan. A revised Plan was submitted on 2/3/2023 addressing all the agencies' comments.
Develop Necessary Planning for Implementation of Green Infrastructure	No update.
Joint Pollutant Reduction Plan - Collaborate with Suburban Partners on MS4	No update.
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.
	The AWTF met all NPDES permit parameters for the month of January. One Sanitary Sewer Overflow and one Dry Weather Overflow were reported.
Notice of Violations (NOVs)	There were no NOVs received by the Drinking Water department in January.
	There were no NOVs received by the Wastewater department in January.
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.
	The Wastewater department completed all regularly scheduled preventative maintenance in the month of January.
CCTV	A total of 6,837 feet (1.29 miles) of sewer pipe were assessed by CCTV footage during the month of January. A total of 6,020 feet (1.14 miles) of pipe were flushed as well.
Incident Response	Wastewater responded to seven (7) backup and overflow calls from residents during the month of January. CRW was liable for one (1).

Geographic Information System (GIS)	<ul style="list-style-type: none"> • Thirty-five (35) Pennsylvania One Call tickets were completed. Twenty-five (25) required maps and ten (10) had no CRW owned facilities in the project area. • Bi-weekly meetings were held with KCI Technologies, Inc. • Progress continues with the development of the ESRI "Lead Service Line Inventory Solution". • Approximately 125 assets were GPS'ed. • A meeting was held with Drinking Water's staff to demonstrate visual changes they will see in Cityworks relating to the implementation of the new water assets database. • Implementation of the new water assets database is complete. The redesign allows us to use an industry-standard database, enhances data integrity, and provides for more efficient data management.
Cityworks	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>
Asset Management	<p>Phase 1, year 2 activities for each of the Asset Management Roadmap Implementation Groups (RIG):</p> <p>Decision Making Capital Planning RIG</p> <ul style="list-style-type: none"> • Subtask 2.1 Design Requirements to standardize asset identification requirements on record drawings is in progress. <p>Information System Data Management RIG</p> <ul style="list-style-type: none"> • Actively working on future state commissioning and decommissioning asset workflows. <p>Operations & Maintenance RIG</p> <ul style="list-style-type: none"> • Activity continues on the development of the Collection System's Asset Management Plan (AMP) while simultaneously working to develop asset class plans to be incorporated into the AMP. <p>Organizational Framework RIG</p> <ul style="list-style-type: none"> • Task Order activities have not started.
Development Review Summary	<p>For details, see attached Development Stormwater Management Review Summary spreadsheet for February.</p>

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"> • Change Order No. 1 for WSC Flocculator Improvements (General Contract) [REDACTED] • Change Order No. 1 for WSC Flocculator Improvements (Electrical Contract) [REDACTED] • Change Order No. 2 for 2022 Street Restoration [REDACTED] <p>Wastewater:</p> <ul style="list-style-type: none"> • Task Order 2023-05-01 IDIQ Engineering Services [REDACTED] <p>Stormwater:</p> <ul style="list-style-type: none"> • Task Order 2021-08-04 CBH2OPP Phase 4 PENNVEST SW Pro-Fi Design [REDACTED]
------------------------------------	--

Stormwater O&M Agreements	Recommend Board approval of the following: None.
AWTF Primary Digesters Rehabilitation	No update. The contractors are addressing punch list items and site cleanup.
AWTF Energy Recovery Improvements	No update. Permit applications are being reviewed by PADEP.
Front Street Pumping Station Improvements	All work is complete and contracts are being prepared for closeout.
WSC Flocculator Equipment Replacement	Installation of new equipment is ongoing in Basins 303 and 304.

Undertake Renewal and Replacement Projects

2022 Water System Improvements	Installation of water main continues in the Sylvan Terrace neighborhood.
Cameron Street Water Main - Phase 4	The project is advertised and bids are due 2/28/2023.
2023 Sewer System Improvements (Excavation)	The contractor began construction with inlet replacement on Berryhill Street.
2023 Sewer System Improvements (Trenchless)	The contractor continues to provide submittals for approval before physical construction can begin.
Arsenal Boulevard Sewer Improvements	No update. We are working with property owners to acquire temporary and construction easements which are needed before advertising the project.
Front Street Interceptor Rehabilitation - Phase 2	A subcontractor continues preparing and staging the temporary bypass pipe. The pipe is being inspected before the cured-in-place pipe liner can be ordered.
Water Facility Maintenance	Drinking Water Maintenance staff performed repairs to various process units as described in the Drinking Water Department Monthly Report.
Wastewater Facility Maintenance	The Wastewater Maintenance group completed various repairs throughout the AWTF, pumping stations, and at the North Front Street office building throughout the month of January. A narrative is provided in the Wastewater Department Monthly Report.
Sinkhole Program	Five sinkholes were investigated by CRW in the month of January. Wastewater was liable for two.
Inlet Cleaning	A total of 109 stormwater inlets were cleaned during the month of January, and 107 stormwater inlet inspections were performed.

Operate as an Efficient, Sustainable and Resilient Water Utility

DeHart Property Stewardship	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.
Sustainability	Development of a Request for Proposal (RFP) is underway for a solar project.
Internal Communications	Intranet (Sharepoint) site continues to be used. The Q1 internal newsletter, The Daily Flow, was released. The Q1 all employee meeting was held on 1/31/2023.

Inform and Listen to Customers and Encourage Stewardship of our Systems	
Media Relations - Press and Social Media	<p>PRESS RELEASES: N/A</p> <p>SOCIAL MEDIA TOPICS: Facebook: 1 New Organic Followers (1,610 Total). 5 Posts & 4 Stories; Highest Engaged Post: "Are you curious about the pipes in Riverfront Park?" (400 Reachs, 23 Reactions, 0 Comments, 3 Shares); Other topics: MLK Day posts, Day of Service - Litter Cleanup, Feedback Session Invitations.</p> <p>Twitter: 0 Tweets; Month overview: 154 total Impressions; 24 Profile Visits; -4 New Followers; 0 Mentions.</p> <p>Instagram: 5 New Followers (673 Total), 3 Posts and 3 Stories; Highest Engaged Post: "Are you curious about the pipes in Riverfront Park?" 220 Organic Reachs, 15 likes, 1 comment, 7 shares, 2 saves.</p> <p>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"> • One (1) community event (Martin L. King Day of Service Litter Cleanup with Friends of Midtown). • Three (3) community meetings (CRW Community Ambassadors, Harrisburg Community Council, and Harrisburg University). • Delivered four (4) door-to-door notifications impacting approximately twenty-six (26) customers. Included one (1) case of water delivery, and three (3) project notifications. • Zero (0) Everbridge alerts.
Public Communications	<p>WHAT'S ON TAP COMMUNICATION: The January monthly bill stuffer was distributed as a bill insert. Topics included: "A Letter from the CEO" Special Edition.</p>
Diversity	No update.

Administrative	
Risk Management	<p>Insurance Claims: No update.</p> <p>Training: No update.</p>
Human Resources	For details, see attached Recruiting Status Report.
Procurement	<ul style="list-style-type: none"> • Procurement staff are assisting [REDACTED] with obtaining quotes for 2023 budgeted [REDACTED] • Procurement staff are continuing to identify and assist in establishing contracts that includes fixed rate pricing and discounts with vendors frequently used for goods and services. <p>Recommend Board approval of the following:</p> <ul style="list-style-type: none"> • Procurement of ROTORK Backwash, Filter-to-Waste and Isolation Valve Actuators from [REDACTED] • Procurement of Zinc Orthophosphate from [REDACTED] • Resolution No. 2023-003 for Purchasing Guide for Bid Threshold Effective, January 1, 2023

Information Technologies (IT)	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>
Office Management and Admin Professional Services and Construction	<p>Incoming Correspondence Report: Refer to attached Incoming Correspondence Report for January 2023.</p> <p>Street/Sidewalk-Cut Permits: Six (6) Sewer permits were issued. Three (3) Sewer permits were successfully completed, inspected, and closed by the City of Harrisburg's Engineer.</p> <p>Fleet Acquisitions: Assisting Operations staff in compiling 2023 budgeted vehicles and equipment specifications and obtaining quotes from vendors.</p>
Right-to-Know Requests	<p>CRW has received and responded to three (3) Right-to-Know requests during the period 1/19/2023 through 2/15/2023. 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>OOR Training: None.</p> <p>RTK 2022-018 - Maribel Sola - All water shutoffs by CRW for the past six months for commercial or residential properties. Response due: 1/4/2023. Response provided 1/4/2023 for 30-day extension until 2/3/2023. Response provided 1/27/2023.</p> <p>RTK 2023-001 - American Transparency - An electronic file (ie Excel, PDF, Word) of any and all employees including part-time, temporary, seasonal employees and elected officials for year of 2022 (fiscal or calendar year). Each employee record should contain the year of compensation, first name, middle initial, last name, hire date (mm-dd-yyyy), base salary amount, bonus amount, overtime amount, gross annual wages and position title. Response due: 1/31/2023. Response provided 1/31/2023.</p> <p>RTK 2023-002 - Carolina Ramos Barrios (SmartProcure) - Request for any and all purchasing records from 9/19/2022 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. The request is limited to readily available records without physically copying, scanning or printing paper documents. Any editable electronic document is acceptable. Response due: 2/9/2023. Response provided 2/9/2023.</p>



CAPITAL REGION[™]

WATER

DRINKING WATER DEPARTMENT MONTHLY REPORT



Twenty-four (24)-inch Finished Water Isolation Valves ROTORK Actuators. These serve upon intermediate power loss at the WTP automatically closing the valves; thus preventing the backflow from turning the finished water pumps in reverse and eliminates stress on the flanged areas of the Finished Water train.

January 2023

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

Plant Operations

The Capital Region Water (CRW) Drinking Water department met all Federal Safe Drinking Water Act water quality standards for the month of January. Specific water quality results are summarized in Exhibit A. A total of 233.562 MG, averaging 7.534 MGD was withdrawn from the water supply source for treatment. As shown in Exhibit B, a total of 229.172 MG, averaging 7.393 MGD, of finished drinking water was pumped to the distribution system.

The DeHart water source was in service 31 days. The Susquehanna River water source was in service for zero days. There were no odor, taste, or service complaints throughout the exercise, or in the entire month of January.

The DeHart Watershed had below average rainfall in January (Exhibit C) and the DeHart reservoir water level decreased (Exhibit D). An estimated 420.15 MG of water was released from DeHart reservoir to Clark Creek, averaging 13.55 MGD for the month. This downstream flow, which is received by remote flow monitoring from the weir location and actual staff gauge readings, was in compliance with the flow required by the State Water Allocation Permit (Exhibit E).

The Flocculator project has been completed on the A basin side; the B basin side is in process and should be completed in several weeks.

Plant Maintenance

The Maintenance team performed approximately 51 preventative maintenance work orders and one corrective maintenance work order for the month of January 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 Maintenance team performed equipment checks and PM's after the River Run.
- The Maintenance team removed and installed two twenty-four-inch ROTORK Actuators with remote heads on the finished water line trains.
- The Maintenance team prepared the flooring for the new Lime Slurry project. This included grinding and leveling a large portion of the area.
- The new Aluminum Sulfate Chemical Injection System is complete and ready to go online upon further DEP inspection.
- The Maintenance team repaired leaking fittings on the DeHart supply side of the system.
- The Lime Silo Demolition project is wrapping up with a substantial portion completed.

- The Maintenance team continues to do snow removal and perform other winter duties at the Water Service Center, pump houses, and DeHart Dam facility.
- The Maintenance team continues to maintain the distribution and maintenance fleet vehicles and equipment.

Distribution

The Distribution group completed the following work during the month of January.

- Repaired Three leaking services during the month totaling 2,321,113 gallons of unmetered water.
- Repaired Two main break totaling 1,353,640 gallons of unmetered water.
- Completed 434 work orders.
- Completed 501 water, sewer, and stormwater locates.
- Work 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 regulatory samples for Total Coliform, and E. Coli samples as well as quarterly THM/HAA, and TOC/Alk.
- Sampled the first quarter of the Fifth Unregulated Contaminant Monitoring Rule (UCMR5) program for the year.



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												2.00	0.2 - 4.0
Distribution System	1.40												1.40	<0.02
Turbidity, NTU														
Influent from DeHart	1.20												1.20	NA
Influent from Susquehanna	NA												N/A	NA
Filter Plant Effluent	0.03												0.03	0.30
pH, Std Units														
Influent from DeHart	6.4												6.43	NA
Influent from Susquehanna	NA												N/A	NA
Filter Plant Effluent	7.6												7.57	6.5 - 8.5*
Distribution System	7.1												7.12	6.5 - 8.5*
Total Alkalinity, mg/L as CaCO3														
Influent DeHart	5												5.00	NA
Influent from Susquehanna	NA												N/A	NA
Filter Plant Effluent	15												14.81	<15*
Distribution System	13												13.42	<15*
Temperature, degrees C														
Influent from DeHart	5.9												5.90	NA
Influent from Susquehanna	NA												N/A	NA
Filter Plant Effluent	6.6												6.60	NA
Distribution System	14.1												14.11	NA
Fluoride, mg/L														
Filter Plant Effluent	0.95												0.95	2
Aluminum, mg/L														
Filter Plant Effluent	0.02												0.02	0.2*
Iron, mg/L														
Influent from DeHart	0.11												0.11	NA
Influent from Susquehanna	NA												N/A	NA
Filter Plant Effluent	0.02												0.02	0.3*
Distribution System	0.07												0.07	0.3*
Total Dissolved Solids, mg/L														
Influent from DeHart	15												15.34	NA
Influent from Susquehanna	NA												N/A	NA
Filter Plant Effluent	37												37.08	500*
Distribution System	39												38.94	500*
Total Hardness, mg/L														
Influent from DeHart	8												8.00	NA
Influent from Susquehanna	NA												N/A	NA
Filter Plant Effluent	8												8.24	NA
Distribution System	10												9.95	NA
Orthophosphate, mg/L														
Filter Plant Effluent	1.20												1.20	0.7 - 1.3*
Distribution System	1.21												1.21	0.7 - 1.3*
**Total Trihalomethanes, ug/L														
Distribution System	34.2												34.2	80.0
**Total Haloacetic Acids, ug/L														
Distribution System	36.8												36.8	60.0
Total Organic Carbon, mg/L														
Influent from DeHart	1.22												1.22	NA
Influent from Susquehanna	NA												N/A	NA
Filter Plant Effluent	2.16												2.16	NA
Average Filter Run, Hours	115												115.00	NA

*** Not Available at Time of Report

* Values are related to DEP Secondary MCL

** Running Annual Quarterly Average

EXHIBIT B

Water Production Data - 2023

Month	DeHart Withdrawal		River Withdrawal		Total Withdrawal		Treated Water		Process Water		Finished Water	
	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												
March												
April												
May												
June												
July												
August												
September												
October												
November												
December												
Total	233.562		0.000		233.562		239.964		6.487		229.172	
Average	233.562	7.534	0.000	0.000	233.562	7.534	239.964	7.741	6.487	0.210	229.172	7.393

Peak Day Water Use 5/31/2020 6.966 (MG) = Million Gallons
 Minimum Day Water Use 5/1/2020 6.081 (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												2.70
Daily Average	0.087												0.087
Ten Year Average	3.37	2.572	3.62	4.68	4.138	5.112	4.81	4.154	5.72	5.37	3.83	4.21	51.586
2022 Total	2.70	3.14	1.67	5.03	6.55	5.84	2.16	2.67	4.16	3.43	2.94	6.63	46.92

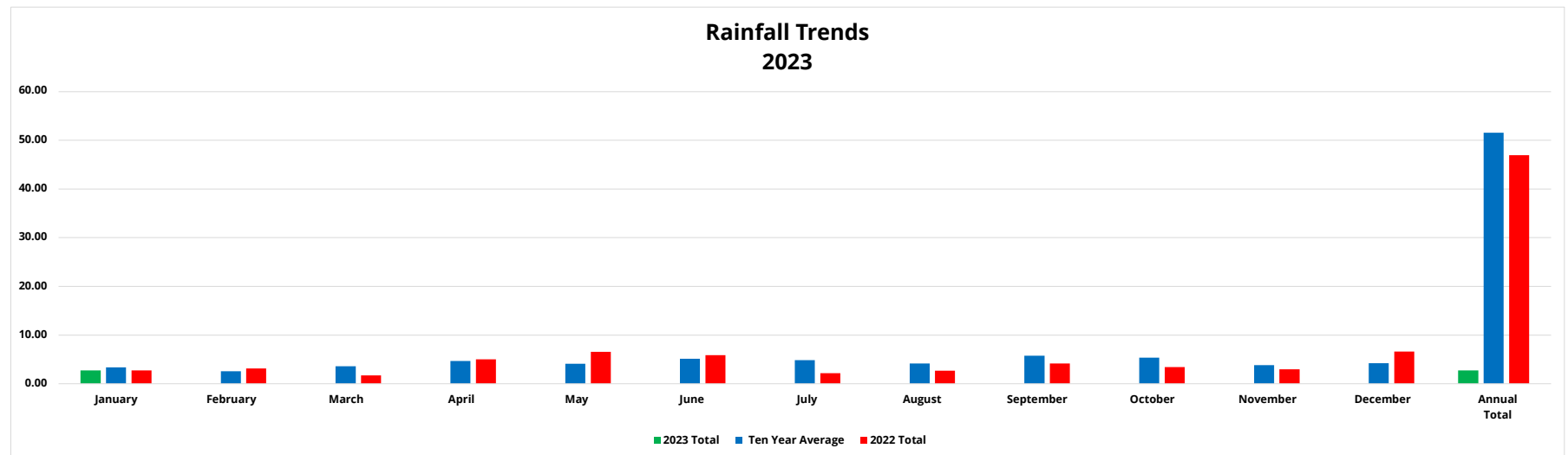


EXHIBIT D

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											
Ten Year AVG	-38.8	-36.6	-27.4	-14.4	-12.5	-15.0	-12.0	-42.0	-60.5	-73.5	-75.0	-62.6
2022 AVG	-162.9	3.1	3.2	4.6	4.1	7.2	-12.1	-34.1	-48.5	-68.9	-80.6	319.0

DeHart Reservoir Water Level Trends
2023

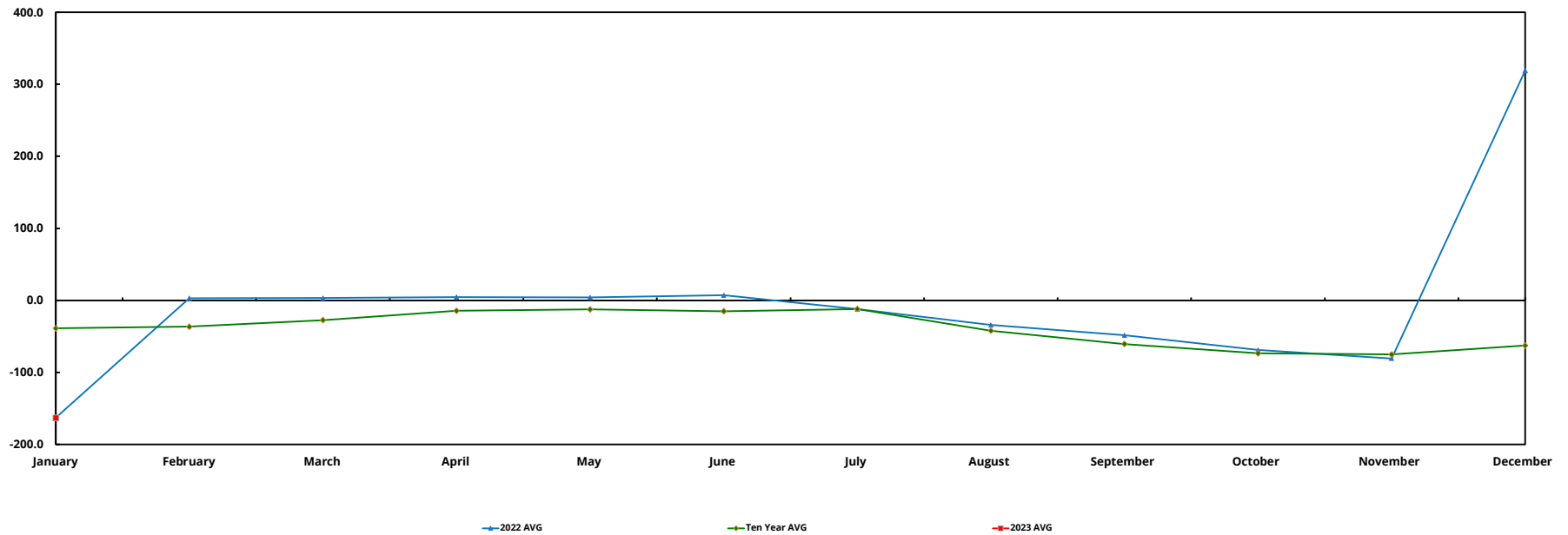


EXHIBIT E

Daily Conservation Release - 2023

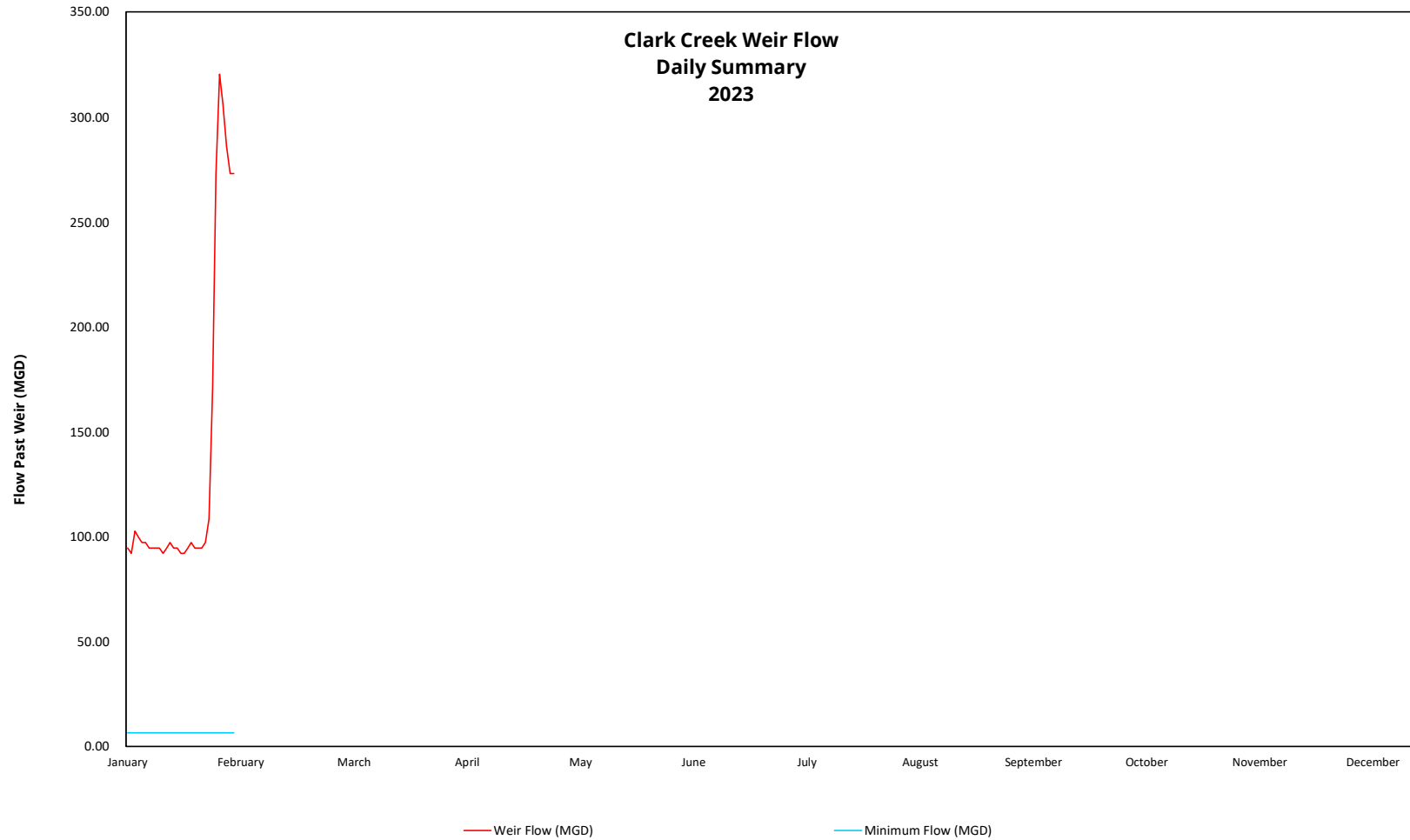




EXHIBIT F
Utility Usage - 2023

Location / Utility	January	February	March	April	May	June	July	August	September	October	November	December	Average	Total
Water Services Center														
Electric Transmission														
Total, kWh	0												0	0
Cost, Dollars	\$0.00												\$0.00	\$0.00
Electric Generation														
Total, kWh	0												0	0
Cost, Dollars	\$0.00												\$0.00	\$0.00
Natural Gas														
Total, Cu Ft	0												0	0
Cost, Dollars	\$0.00												\$0.00	\$0.00
Sewer														
Total, Gal	0												0	0
Cost, Dollars	\$0.00												\$0.00	\$0.00
Refuse														
Cost, Dollars	\$0.00												\$0.00	\$0.00
Reservoir Park Pump Station														
Electric Transmission														
Total, kWh	0												0	0
Cost, Dollars	\$0.00												\$0.00	\$0.00
Electric Generation														
Total, kWh	0												0	0
Cost, Dollars	\$0.00												\$0.00	\$0.00
Natural Gas														
Total, Cu Ft	0												0	0
Cost, Dollars	\$0.00												\$0.00	\$0.00
Northwestern River Pump Station														
Electric Transmission														
Total, kWh	0												0	0
Cost, Dollars	\$0.00												\$0.00	\$0.00
Electric Generation														
Total, kWh	0												0	0
Cost, Dollars	\$0.00												\$0.00	\$0.00
Natural Gas														
Total, Cu Ft	0												0	0
Cost, Dollars	\$0.00												\$0.00	\$0.00
Union Square Booster Station														
Electric Transmission														
Total, kWh	0												0	0
Cost, Dollars	0												\$0.00	\$0.00
Electric Generation														
Total, kWh	0												0	0
Cost, Dollars	0												\$0.00	\$0.00
DeHart Facilities														
Electric Transmission														
Total, kWh	0												0	0
Cost, Dollars	\$0.00												\$0.00	\$0.00
Electric Generation														
Total, kWh	0												0	0
Cost, Dollars	\$0.00												\$0.00	\$0.00
Fuel Oil														
Total, Gals.	0												0	0
Cost, Dollars	\$0.00												\$0.00	\$0.00
City Island Heat Trace														
Electric Transmission														
Total, kWh	0												0	0
Cost, Dollars	\$0.00												\$0.00	\$0.00
Electric Generation														
Total, kWh	0												0	0
Cost, Dollars	\$0.00												\$0.00	\$0.00
Expenditures YTD													\$0	\$0

** Not available at time report was developed

Total Transmission	\$0
Total Generation	\$0
Total Refuse	\$0
Total Gas	\$0
Total Sewer	\$0
Total Fuel Oil	\$0
Total Utilities	\$0

Exhibit G

Hydro-Turbine Generator Performance - 2023

Month	Kilowatt-hour (KWH)	Anticipated Savings *
January (Out of Service)	0	\$0
February		
March (Out for Service)		
April (Out of Service)		
May (Partial Out of Service)		
June		
July (out of srv/waiting on parts)		
August (out of service)		
September (out of service)		
October (out of service)		
November (out of service)		
December (out of service)		
Average		
Year to Date	0	\$0

* Estimated savings based on electrical rate of \$0.058 per KWH

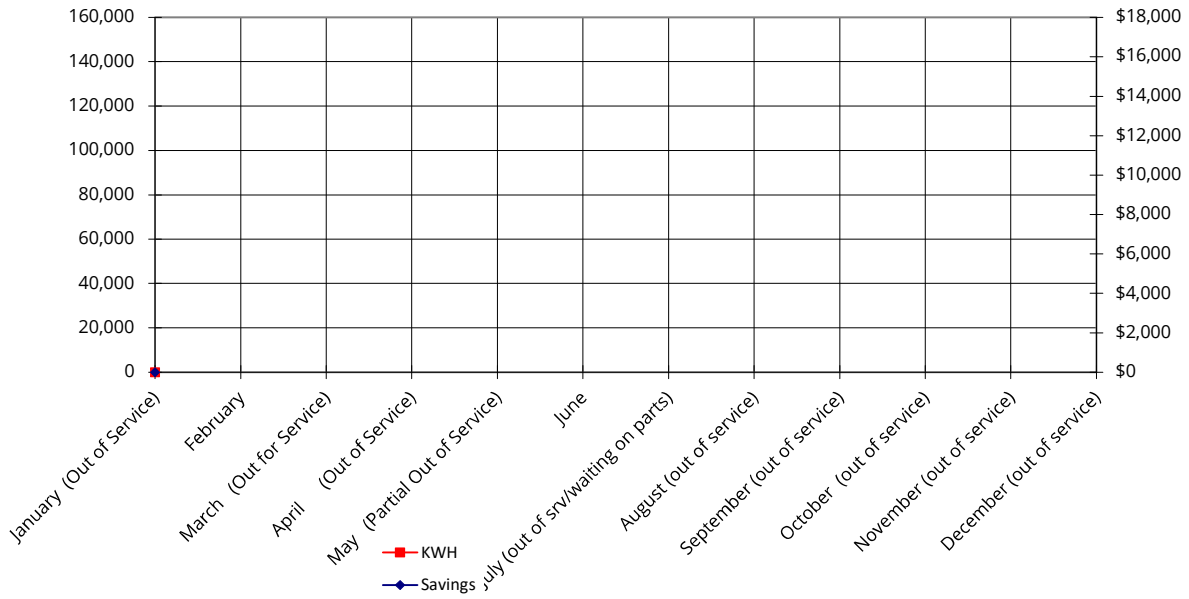




EXHIBIT H
Treatment Chemical Usage - 2023

Chemical	January	February	March	April	May	June	July	August	September	October	November	December	Average	Total
Chlorine														
Total Lbs.	6,294												6,294	6,294
Average, Chlorine Lbs./Day	203												203.0	
Average, Chlorine Dose, mg/L	6.9												6.9	
Chlorine Cost, \$/Lbs.	\$1.639												1.6	
Chlorine Total Cost, Dollars	\$10,316												\$10,315.87	\$10,315.87
Alum 48.5%														
Total Lbs.	26,829												26,829	26,829
Average, Alum, Lbs./Day	866												866.0	
Average, Alum, mg/L	10.7												10.7	
Alum Cost, \$/Lbs.	\$0.121												0.1	
Alum Total Cost, Dollars	\$3,246												\$3,246.31	\$3,246.31
Lime														
Total Lbs.														0
Average Lime, Lbs./Day														
Average, Lime Dose, mg/L														
Lime Cost, \$/Lbs.	\$0.86												\$0.86	
Lime Total Cost, Dollars	\$0.00												\$0.00	\$0.00
Soda Ash														
Total Lbs.	17,400												17,400	17,400
Average Soda Ash, Lbs./Day	561												561.0	
Average, Soda Ash Dose, mg/L	19.2												19.2	
Soda Ash Cost, \$/Lbs.	\$0.368												0.4	
Soda Ash Total Cost, Dollars	\$6,403												\$6,403.00	\$6,403.00
Fluoride														
Total Lbs.	2,240												2,240	2,240
Average, Fluoride Lbs./Day	72												72.0	
Average, Fluoride (F-) Dose, mg/L	1.1												1.1	
Fluoride Cost, \$/Lbs.	\$0.30												\$0.30	
Fluoride Total Cost, Dollars	\$672												\$672.00	\$672.00
Sodium Hydroxide 50%														
Total NaOH 50% dry Lbs.	35,623												35,623	35,623
Average NaOH 50%, dry Lbs./Day	1,149												1,149	
Average, NaOH 50%, mg/L	19.2												19.2	
NaOH 50% Cost, dry \$/Lbs	\$0.450												0.5	
NaOH 50% Total Cost, Dollars	\$16,030												\$16,030.35	\$16,030.35
Zinc Orthophosphate														
Total Zn3(PO4)2, wet Lbs.	4,802												4,802	4,802
Average Zn3(PO4)2, wet Lbs./Day	155												155.0	
Average, Zn3(PO4)2 Dose, mg/L	2.5												2.5	
Zn3(PO4)2 Cost, wet \$/Lbs.	\$1.724												1.7	
Zn3(PO4)2 Total Cost, Dollars	\$8,279												\$8,278.65	\$8,278.65
Potassium Permanganate														
Total KMnO4, Lbs.	0												0	0
Average KMnO4, Lbs./Day	0												0.0	
Average, KMnO4 Dose, mg/L	0.0												0.0	
KMnO4 Cost, \$/Lbs.	\$0.00												\$0.00	
KMnO4 Total Cost, Dollars	\$0.00												\$0.00	\$0.00
	0													
Expenditure													\$44,946.18	\$44,946.18
Average Treated Cost per (MG)														#DIV/0!
Total Treated Flow (MGD)														0.000
Average Treated Flow (MGD)														239.964

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												501	501
Street Restorations	0												0	0
Leak Detection Assessment <i>Percent of Distribution System</i>	8												8	8
Main Break Repair - Detected Non-Surfacing	0												0	0
Main Breaks Repaired - Emergency	2												2	2
Service Line Leaks Detected	0												0	0
Service Line Leaks Repaired	1												1	1
Valves - Exercised	0												0	0
Valves - Replaced	0												0	0
Hydrant Flow Tests	0												0	0
Hydrants Returned to Service	0												0	0
Water Tap - Disconnected	2												2	2
Water Tap - New Connection	2												2	2
Water Shutoffs - Delinquent Accounts	0												0	0
Water Shutoffs - Other	24												24	24
Water Shutoffs - Non Payment	0												0	0
Water Restoration Turn on Other	24												24	24
Water Turn on - Non Payment	0												0	0

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												6	6
	Leaking	2												2	2
	Frozen	20												20	20
	Non-registering	6												6	6
	Large Meters ¹	0												0	0
New Service	New Installation	2												2	2
Meter Service															
MXU's Replaced	MXU's Replaced	47												47	47
Batteries Replaced	Batteries Replaced	45												45	45
Meter Pits Serviced	Meter Pits Serviced	0												0	0
Meter Calibrations															
Small Meters ²	Calibrated meters	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												0	N/A
Billed Metered Exported	Bulk Water Hauling	N/A												0	N/A
Billed Metered	Hydrant Connections	0												0	0
Billed Unmetered	Hydrant Flow Tests	0												0	0
Unbilled Unmetered	Hydrant Flushing (and Unbilled Authorized)	48,449												48,449	48,449
Leakage on Distribution Mains	Main Leaks	1,318,637												1,318,637	1,318,637
Leakage on Service Lines	Service Leaks	2,321,113												2,321,113	2,321,113
	Total	3,688,199												3,688,199	3,688,199



CAPITAL REGION[™]

WATER

Wastewater

Wastewater





CAPITAL REGION™

WATER

WASTEWATER DEPARTMENT MONTHLY REPORT



AWTF snowfall, circa 2003.

January 2023

1662 South Cameron Street, Harrisburg, PA 17104 | 888-510-0606
capitalregionwater.com

Overview

January started the new year in typical fashion, with a heavy focus on the submission of requisitions to generate purchase orders for use throughout the year. There was a good deal of procurement work to prepare orders for vehicles and equipment with long lead times. A coordination meeting between Operations and Procurement staff was held in support of these efforts.

The Wastewater department enjoyed its first month at full-staffing levels in more than two years. Training of several new CReW Members continued throughout the month.

In February, staff will turn its attention to a slew of annual regulatory reporting that is due in March, including:

- Annual PAG-08 Report for Beneficial Use of Biosolids
- Sara Title III, Tier II Report for Hazardous Chemicals
- Annual Air Quality Emissions Report to DEP
- Support for the Chapter 94 Municipal Wasteload Management Report

Operations

During the month of January, the AWTF met all monthly average NPDES permit requirements. One Sanitary Sewer Overflow and One Dry Weather Overflow were reported.

Hydraulic loading to the AWTF averaged 22.0 million gallons per day (MGD). The treatment process achieved removal reductions of 95.4 percent CBOD, 95.0 percent Suspended Solids, 70.3 percent Phosphorus, and 88.5 percent Ammonia (Exhibit A).

Data from the Contract Waste Hauling program for January was not available at the time of reporting, though it is estimated that revenue is continuing its strong trend. January's figures will be included in next reporting.

The Cogeneration Facility experienced an average run time of 2 percent in January. Revenue is estimated at \$210.51 on 1,800 Kilowatt-hours generated for the month. The decrease in runtime is due to mechanical failures that could not be repaired for most of the month.

Laboratory

- CRW Reached out to our new DEP accreditation officer to make an update on the accreditation renewal and FOA for Colilert Fecal and E. Coli.
- Disposed of our expired/unused hazardous lab reagents and chemicals through ACV Environmental.
- Worked on troubleshooting our polyseed concentration for BOD/CBOD analysis so we can pass IDOCs and bring this analysis in-house.
- Continuing to work on WIMS bench sheet set up.

Pretreatment

- Prepared for a USEPA Industrial Pretreatment Program inspection set to take place on February 1st and 2nd.
- Updated and organized IU files with current SMR data.
- Reached out to Harrisburg Dairies for new point of contact to acquire third and fourth quarter SMR data that is past due.

Plant Maintenance

- Repaired the polymer transfer line for the Belt Press Filter Press.
- Rebuilt the Rotary Lobe Pump for the divert transfer line at the Chemical Storage building.
- Repaired the drive assembly and corner sweeps on Final Clarifier No. 3.
- Continued to re-lamp/repair all lighting fixtures throughout the facility.
- Serviced standby generator and ran a full load test at Market Street and Spring Creek Pump Stations.
- Installed new drive paddle motors on No. 2 and 3 Classifiers at the Grit Removal System.
- Replaced outlet valve and check valve on Plant Drain Pump No. 2.
- Installed a new Gorman Rupp pump at Plant Drain Pump Station.
- Repaired the waste dumpster at Spring Creek Pump Station.
- Rebuilt Rotary Lobe Scum Pump No. 2 at Thickened Sludge Pump Station.
- Installed a new hot water heater in truck garage.
- Performed 11 vehicular repairs in preparation for state inspections.
- Provided weekly maintenance on the JCB Loader.
- Performed daily service for vehicular related repairs including bulbs, batteries, tires, lube oil and filters, and flat tires.
- Performed maintenance tasks per request at 3003 NFS Offices.

Field Construction

- Repaired five inlets in various locations in the city.
- Replaced 20 feet of damaged storm pipe at the intersection of 4th and Calder Streets.
- Raised a manhole at the intersection of Turner Alley and Emerald Street to allow access for engineering.
- Performed two spot repairs at the intersection of 2nd and Lewis Streets. Inlet laterals were sheered at the wall of the manhole due to a water main break. Total linear footage of repairs was 25 feet.
- Responded to three service requests.

Field Operations

- Total CCTV footage of sewer pipe assessed this month was 6,837' (1.29 miles).
- Total of pipe flushed this month was 6,020' (1.14 miles).
- Responded to seven backup and overflow calls from residents. CRW was liable for one.
- Responded to five sinkhole calls. Wastewater was liable for two.
- Cleaned 109 stormwater inlets.
- Inspected 107 stormwater inlets.
- Hydro-excavated at Second and Lewis Streets for Field Construction group.
- Worked on various projects for Engineering.
- Started new FOG treatment site in the alley of Hale Avenue and Kensington Street.
- There was one dry weather overflow at CSO #045 South Paxton Street.

Environmental Compliance

- Completed 20 inspections of Fats, Oils, and Grease (FOG) dischargers.
- Issued 17 new FOG discharge permits.
- Issued 14 FOG-related Notice of Violation (NOVs).
- 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 January.
- CRW's Environmental Compliance Inspector was contacted by PADEP regarding a complaint of oil leaking from a 55-gallon barrel in the 1500 block of Drummond Street. It was determined CRW's collections and conveyance system was not impacted by the leak, and the complaint was turned over to the City of Harrisburg.



- CRW's Field Operations Crew reported significant amounts of grease in a storm inlet near the Broad Street Market. An investigation was conducted, and the results were inconclusive. Education materials outlining illicit discharge detection and elimination are being prepared for all business in the Broad Street Market and suspected violators will be receiving Notices of Violation.
- During a meeting with CRW and community ambassadors, it was reported a garage on 1700 block of Holly Street was habitually allowing oil to leak into a nearby storm inlet. An investigation was conducted, including a tour with the community ambassador, and the results were inconclusive. The area was added to a watch list to be checked regularly.

Street Sweeping

- Received three complaints in January.
- Continued to wait for parts to finish all repairs for Sweeper No. 2.
- Completed 405 miles of scheduled street sweeping within the City of Harrisburg.
- There was no water usage this month.
- 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. Street Sweeping group will be assigned specific assignments throughout the city to continue the upkeep in highly visible areas. The end of January, the Street Sweeping group swept an additional 20 miles (included in total miles swept) and continued to clean off storm inlets.



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												22.0	37.7
Carbonaceous Biochemical Oxygen Demand														
Influent, mg/L	100												100	----
Effluent, mg/L	4												4	25
Percent Removal, %	95.4												95.4	----
Effluent Loading, lb/d	498												498	7,860
Suspended Solids:														
Influent, mg/L	156												156	----
Effluent, mg/L	8												8	30
Percent Removal, %	95.0												95.0	----
Effluent Loading, lb/d	1,447												1,447	9,433
Nitrogen														
Total-N														
Influent, mg/L	26												26	----
Effluent, mg/L	5.0												5	Monitor
Percent Removal, %	80.5												80.5	----
Effluent Loading, lb/d	993												993	----
NH3-N														
Influent mg/L	17												17	----
Effluent, mg/L	1.9												2	11 (2)
Percent Removal, %	88.5												88.5	----
Effluent Loading, lb/d	359												359	4,716
Phosphorus:														
Influent, mg/L	2.9												2.9	----
Effluent, mg/L	0.8												0.8	2.0
Percent Removal, %	70.3												70.3	----
Effluent Loading, lb/d	152												152	629
pH:														
Influent, Std. Units	7.4												7.4	----
Effluent, Std. Units	7.4												7.4	6.0 - 9.0
Dissolved Oxygen:														
Effluent Minimum, mg/L	8.0												8.0	5.0 Min.
Fecal Coliform:														
Effluent, No./100 ml	12												12	200/100 ml (1)
Chlorine Residual:														
Effluent, mg/L	0.22												0.22	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 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												1,158,900	1,158,900
Average, kWh/Day	37,384												37,384	-----
Cost, Dollars	\$98,628.52												\$98,628.52	\$98,628.52
Natural Gas														
Total, Cu Ft		*											0	0
Average, Cu Ft/Day		*												-----
Cost, Dollars		*											\$0.00	\$0.00
Water														
Total, Gal.		*												0
Average, Gal./Day		*												-----
Cost, Dollars		*											\$0.00	\$0.00
MicroC														
Total, Gal.	0												0	0
Average, Gal./Day	0.0												0	-----
Cost, Dollars	\$0												\$0.00	\$0.00
Sodium Hydroxide														
Total, Gal.	0												0	0
Average, Gal./Day	0												0	-----
Cost, Dollars	0												\$0.00	\$0.00
Chlorine Disinfection														
Total, Lbs.	13,115												13,115	13,115
Average, Lbs./Day	423												423	-----
Avg Residual, mg/L	0.22												0.22	-----
Cost, \$/Lbs.	\$1.64												\$1.64	-----
Total Cost, Dollars	\$21,508.60												\$21,508.60	\$21,508.60
Phosphorous Removal														
Total FeCl3, Gals.	3,113												3,113	3,113
Avg FeCl3, Gals./Day	100												100	-----
FeCl3 Cost, \$/Gal.	\$1.74												\$1.74	-----
FeCl3 Total Cost, Dollars	\$5,416.62												\$5,416.62	\$5,416.62

* 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					\$0.00
March 2023					\$0.00
April 2023					\$0.00
May 2023					\$0.00
June 2023					\$0.00
July 2023					\$0.00
August 2023					\$0.00
September 2023					\$0.00
October 2023					\$0.00
November 2023					\$0.00
December 202					\$0.00
<hr/>					
Total - 2023				1,800	\$210.51
Monthly Average - 2023		2	58	1,800	\$17.54

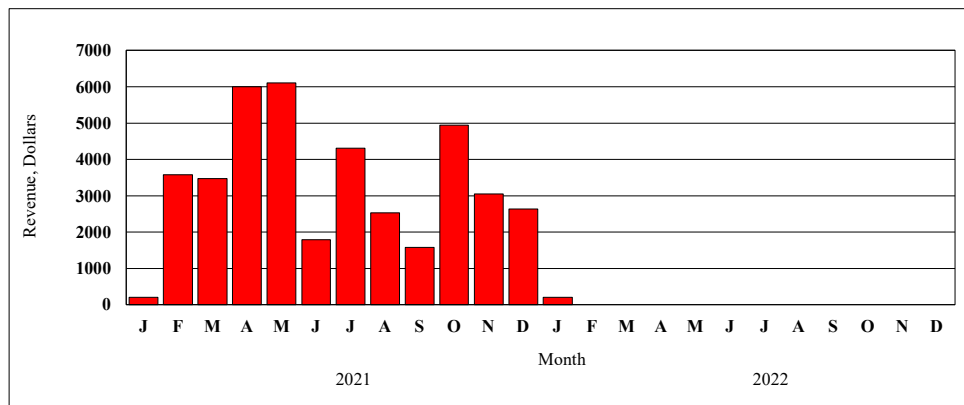


EXHIBIT E

**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.	901,546												901,546	901,546
CWH Program, Lbs.														0
Total Solids, Lbs.	901,546												901,546	901,546
Sludge Dewatering														
Feed Volume, Gals.	5,489,000												5,489,000	5,489,000
Feed Solids, %	1.5												1.5	-
Labor, Hours	635												635	635
Operations, Hours	1,181												1,181	1,181
Total Cake, Dry Tons	208												208	208
Total Cake, Wet Tons	1,264												1,264	1,264
Cake TS, %	16.5												16.5	-
Press Rate, Lbs./Hour	2,140												2,140	2,140
Polymer Dosage, Lbs	4,299												4,299	4,299
Polymer Dosage, Lbs/Dry Ton	24.3												24.3	-
Disposal Cost														
Labor, Dollars	\$12,208.54												\$12,208.54	\$12,208.54
Electrical, Dollars	\$519.82												\$519.82	\$519.82
Polymer, Dollars	\$8,383.05												\$8,383.05	\$8,383.05
Disposal, Dollars	\$43,033.40												\$43,033.40	\$43,033.40
Total Cost, Dollars	\$64,144.81												\$64,144.81	\$64,144.81
Cost Per Dry Ton, Dollars	\$308.39												\$308.39	

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	*													0
Average, kWh/Day	*													----
Cost, Dollars	*													\$0.00
Fuel Oil														
Total, Gals.	0												0	0
Average, Gals./Day	0												0	----
Cost, Dollars	\$0.00												0	\$0.00
Water														
Total, Gals.	*													0
Average, Gal./Day	*													----
Cost, Dollars	*													\$0.00
Spring Creek Pump Station														
Electric														
Total, kWh	38,400												38,400	38,400
Average, kWh/Day	1,239												1,239	----
Cost, Dollars	\$1,274.90												\$1,274.90	\$1,274.90
Fuel Oil														
Total, Gals.	0												0	0
Average, Gals./Day	0												0	----
Cost, Dollars	\$0.00												\$0.00	\$0.00
Water														
Total, Gals.	*													0
Average, Gal./Day	*													----
Cost, Dollars	*													\$0.00
Market Street Pump Station														
Electric														
Total, kWh	1,320												1,320	1,320
Average, kWh/Day	43												43	----
Cost, Dollars	\$112.61												\$112.61	\$112.61
Fuel Oil														
Total, Gals.	0												0	0
Average, Gals./Day	0												0	----
Cost, Dollars	\$0.00												\$0.00	\$0.00
City Island Pump Station														
Electric														
Total, kWh	40												40	40
Average, kWh/Day	1												1	----
Cost, Dollars	\$42.43												\$42.43	\$42.43

* No Data at time of report