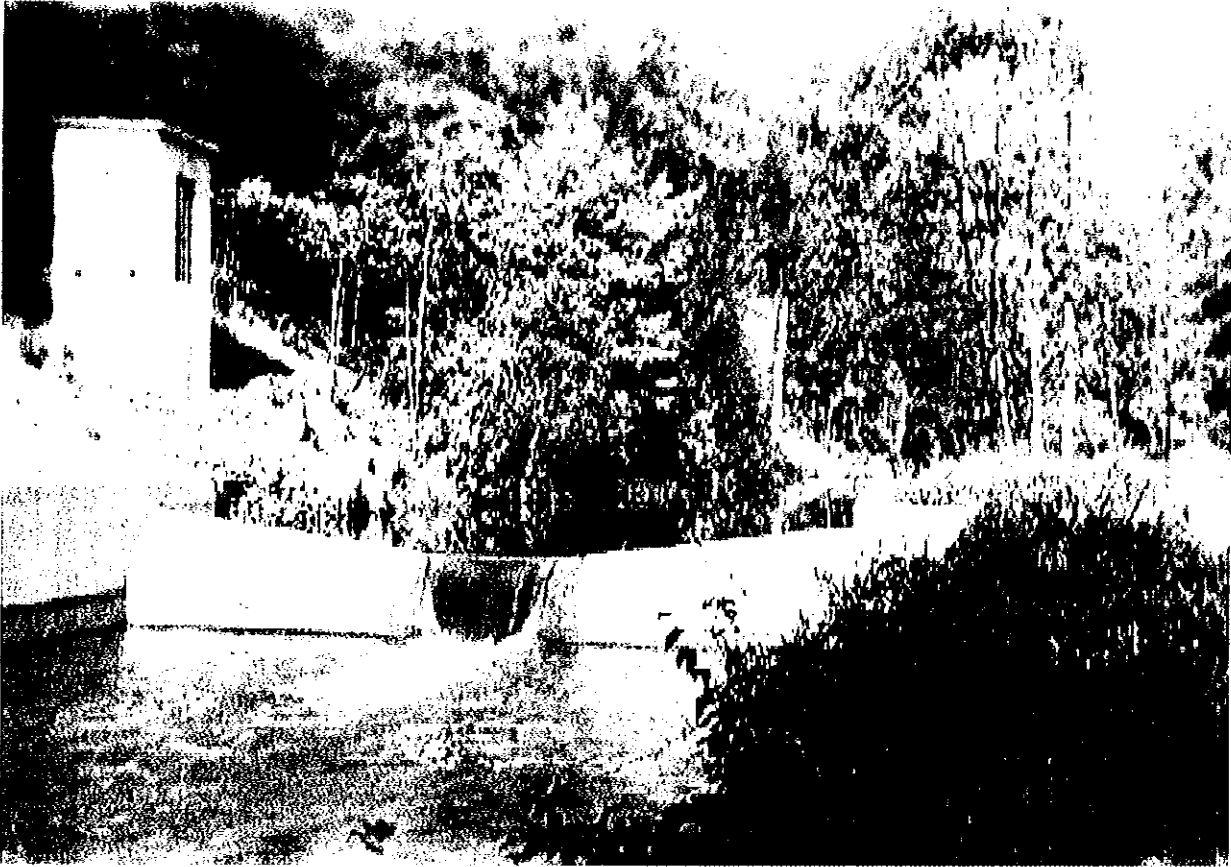


THE CITY OF HARRISBURG
DEPARTMENT OF PUBLIC WORKS
BUREAU OF WATER

MONTHLY REPORT



An early photo of the Carsonville Weir.

October 2011

Linda D. Thompson, Mayor
City of Harrisburg

J. Marc Kurowski ,Chairman
The Harrisburg Authority

Ernest Hoch, Director
Department of Public Works

Raly Bey, Director
Bureau of Water

GENERAL

During the month of October 2011, the Bureau of Water met all Federal Safe Drinking Water Act Primary Water Quality Standards. Shown in Exhibit B, a total of 232.02 million gallons (MG) of water were treated and distributed to the Harrisburg Water System. A total of 254.95 MG were withdrawn from our water supply sources. A total of 254.95 MG were withdrawn from DeHart Reservoir; 0 MG were withdrawn from Susquehanna River; and United Water of Pennsylvania withdrew 0 MG via their raw water interconnect. Data collected through August is presented in Exhibit B with flows in MGD. The data is broken down into the DeHart Reservoir and Susquehanna River sources.

OPERATIONS

During the month of October 1, 2011 through October 31, 2011, the DeHart Water Treatment Train was in service thirty one days and the Susquehanna Water Treatment Train was in service zero days. An estimated 1385.8 million gallons were released from the DeHart to Clark's Creek, averaging 45.8 MGD during the month. This down stream flow, which is received by remote flow monitoring from the weir location and actual staff gauge readings, exceeded the flow required by the State Water Allocations Permit (Exhibit E).

During the month of October, the Hydro-Turbine generator operated for 0 days and produced 0.0 kWh (kilowatt-hours) with an anticipated savings of \$0.00 (refer to Exhibit G).

The DeHart watershed had average rainfall in October (Exhibit C). The pH of the rainfall during this period averaged 6.28 units. The DeHart water level increased (Exhibit D).

October 2011 Accomplishments

Operations Division

- Attended monthly Bureau Safety Committee and Staff meetings.
- Analyzed data gathered from reservoir and stream monitoring.
- Continued monitoring flow of Clark Creek entering the reservoir.
- Patrolled watershed as scheduled/required.
- Completed basin cleaning.

Water Quality Division

- Attended monthly Bureau Safety Committee and Staff meetings.
- Continued to maintain the water quality control and assurance schedules.
- Prepared monthly reports for submittal to the DEP.
- Assisted other Divisions in the Bureau as needed.

Maintenance Division

- Attended monthly Bureau Safety Committee and Staff meetings.
- Prepared work schedules and supervise personnel assigned to the DeHart Dam Complex.
- Received estimates for the concrete damage in the spillway at DeHart.
- Received estimates to repair/replace the broken electrical line to the intake tower at DeHart.
- Continued scheduled preventive maintenance, and repaired equipment as required.
- Continued seasonal grass cutting and lawn maintenance.
- Installed and programmed a new PLC for Claritrac's 309 and 310.
- Installed stainless steel piping, hose reels, and completed the new wash bay.
- Replaced brake lines and water pump on the DeHart backhoe.
- Performed scheduled cleaning duties at Bureau Facilities.
- Continued Pulpwood Sales 8, and 9.
- Continued Timber Harvest #7.
- Continued to pick up trash along Route 325.
- Assisted other bureau divisions as required.

Distribution Metering Division

- Attended monthly Bureau Safety Committee and Staff meetings.
- Continued the sale of bulk water.
- Continued to work on the meter report forms and the vacant coded list.
- Assisted other Bureaus and Departments as needed.
- Performed (483) service calls.
- Finish 6 street restoration.
- Repaired Sinkhole 1145 Rolleston St.
- Continued working on water meter battery change outs.
- Drop off sewer and water valve box extensions for Paxton St. project.
- Located 2 manholes Paxton St.
- Replaced valve box at 19th St. & Market St.
- 28th & Canby St sealed off interconnection vault for the paving project.

- Supplied valve box extensions for 28th & Canby St paving project.
- Tested 7 large water meters.
- Sent 2 employees to Hydrants, Valves & Water meter training.
- Disconnected 2 water services for city demo project.

Goals for November 2011

Operations Division

- Attend monthly Bureau Safety Committee and Staff meetings.
- Monitor the reservoir for pH, algae and levels of stratification in order to determine appropriate intake levels and possible treatment.
- Continue to analyze data collected from stream and reservoir sampling.
- Prepare monthly report.
- Return Hydro-turbine to service.

Water Quality Division

- Attend monthly Bureau Safety Committee and Staff meetings.
- Continue to maintain the water quality control and assurance schedules.
- Complete annual sampling required by PADEP.
- Obtain required annual Heavy Metals sample.
- Prepare corrections to Water Quality Manual in conjunction with PADEP onsite inspection.

Maintenance Division

- Attend monthly Bureau Safety Committee and Staff meetings.
- Prepare work schedules and supervise personnel assigned to the DeHart Dam Complex.
- Continue scheduled preventive maintenance, and repair equipment as required.
- PM all grass cutting equipment, winterize and clean for offseason.
- Troubleshoot hydro-turbine and put it back in service.
- Replace roof on the 6 bay garage at DeHart.
- Clean the intake tower screens at DeHart.
- Perform scheduled cleaning duties at Bureau Facilities.
- Continue Pulpwood Sales 8, and 9.
- Continue Timber Harvest #7.
- Continue to pick up trash along Route 325.
- Continue to locate the mountain line.
- Assist other bureau divisions as required.

Distribution Metering Division

- Attend monthly Bureau Safety Committee and Staff meetings.
- Continue bulk water sales.
- Continue to work on the meter report forms, the vacant coded list, and street restorations.
- Continue to repair or replace fire hydrants as required.
- Continue to assist other departments and divisions as needed.

- Continue to perform tap removals based on the demolition list.
- Continued working on water meter battery change out.

EXHIBIT A

Process Control Water Quality Analysis - 2011

PARAMETERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Average	MCL Limits
<u>Total Coliform Presence/Absence</u>														
DeHart Influent	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Susquehanna Influent	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Distribution System	A	A	A	A	A	A	A	A	A	A	A	A	<1	< 5% Positive
<u>Chlorine Residual, mg/L Free</u>														
Filter Plant Effluent	1.79	1.79	1.77	1.84	1.80	1.80	1.81	1.79	1.88	1.99			1.83	
Distribution System	1.09	0.99	1.00	1.03	0.95	0.89	0.84	0.73	0.07	0.71			0.83	> 0.02
<u>Turbidity, NTU</u>														
Influent from DeHart	0.65	0.52	0.77	0.78	0.85	0.89	0.64	0.65	1.56	0.95			0.83	
Influent from Susquehanna	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			NA	NA
Filter Plant Effluent	0.66	0.66	0.65	0.64	0.65	0.64	0.64	0.65	0.65	0.65			0.65	< 0.30
<u>pH, Std Units</u>														
Influent from DeHart	5.95	5.77	5.66	5.69	5.51	5.51	5.48	5.46	5.34	5.53			5.58	
Influent from Susquehanna	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			NA	NA
Filter Plant Effluent	7.78	7.60	7.63	7.88	7.83	7.82	7.60	7.93	7.66	7.87			7.84	
Distribution System	7.18	7.15	7.17	7.68	7.43	7.30	7.26	7.17	7.21	7.35			7.29	
<u>Total Alkalinity, mg/L</u>														
Influent DeHart, as CaCO3	5.31	5.32	5.05	4.41	4.46	5.54	4.73	5.49	5.75	5.57			5.16	
Influent Susquehanna, as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			NA	NA
Filter Plant Effluent, as CaCO3	14.35	14.59	14.56	13.38	13.74	14.87	17.76	25.11	26.45	25.68			18.05	
Distribution System	11.20	12.45	13.70	12.60	11.47	12.90	15.30	21.05	23.90	23.60			15.82	
<u>Temperature, C</u>														
Influent from DeHart	5.44	5.46	7.00	9.50	12.66	14.93	16.59	17.67	17.62	16.11			12.30	
Influent from Susquehanna	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			NA	NA
Filter Plant Effluent	5.12	5.46	6.76	9.33	12.12	13.77	15.05	16.20	16.91	15.65			11.64	
Distribution System	9.75	10.50	11.03	12.49	16.42	19.83	22.95	23.36	21.40	19.09			16.69	
<u>Fluoride, mg/L</u>														
Filter Plant Effluent	0.96	0.93	0.83	0.82	0.81	0.85	0.72	0.89	0.85	0.90			0.86	2.00
<u>Aluminum, mg/L</u>														
Filter Plant Effluent	0.03	0.02	0.02	0.03	0.02	0.02	0.01	0.02	0.03	0.03			0.02	0.20
<u>Iron, mg/L</u>														
Influent from DeHart	0.11	0.10	0.03	0.03	0.09	0.15	0.14	0.28	0.47	0.47			0.20	
Influent from Susquehanna	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			NA	NA
Filter Plant Effluent	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01			0.01	0.30
Distribution System	0.03	0.09	0.03	0.04	0.05	0.12	0.03	0.04	0.04	0.05			0.05	0.30
<u>Total Dissolved Solids, mg/L</u>														
Influent from DeHart	14.69	15.68	15.15	14.21	13.71	13.83	14.04	14.17	12.20	11.78			13.97	
Influent from Susquehanna	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			NA	NA
Filter Plant Effluent	34.58	36.12	37.38	36.99	37.01	39.76	39.54	43.94	48.59	44.19			39.81	
Distribution System	35.20	36.64	37.70	37.56	38.03	39.96	40.30	48.42	49.80	47.29			41.09	
<u>Total Hardness, mg/L</u>														
Influent from DeHart	7.98	8.07	7.84	7.73	7.32	7.18	7.40	7.44	7.72	7.11			7.58	
Influent from Susquehanna	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			NA	NA
Filter Plant Effluent	15.42	15.56	16.42	16.45	16.40	18.47	20.06	22.18	25.48	21.26			18.77	
Distribution System	13.50	15.87	19.50	16.17	16.30	18.65	20.47	21.90	25.50	23.47			19.13	
<u>Orthophosphate, mg/L</u>														
Filter Plant Effluent	1.12	1.08	1.11	1.13	1.20	1.13	1.09	1.07	1.05	0.99			1.10	
Distribution System	1.16	1.13	1.20	1.35	1.28	1.31	1.25	1.28	1.19	1.28			1.24	
<u>Total Trihalomethanes, mg/L</u>														
Distribution System	0.03	NA	NA	NA	0.05	NA	NA	NA	0.09	NA			0.06	0.08
<u>Total Haloacetic Acids, mg/L</u>														
Distribution System	0.04	NA	NA	NA	0.05	NA	NA	NA	0.06	NA			0.05	0.06
<u>Total Organic Carbon, mg/L</u>														
Influent from DeHart	1.90	NA	NA	NA	2.30	NA	NA	NA	2.80	NA			2.33	
Influent from Susquehanna	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			NA	NA
Filter Plant Effluent	1.20	NA	NA	NA	1.40	NA	NA	NA	1.60	NA			1.40	
Average Filter Run, Hours	83.30	81.91	82.08	78.13	84.00	83.39	83.97	83.83	80.15	84.03			82.48	

Note: Total Hardness = Calcium Hardness + Magnesium Hardness, mg/L as CaCO3

* Running Annual Quarterly Average

EXHIBIT B

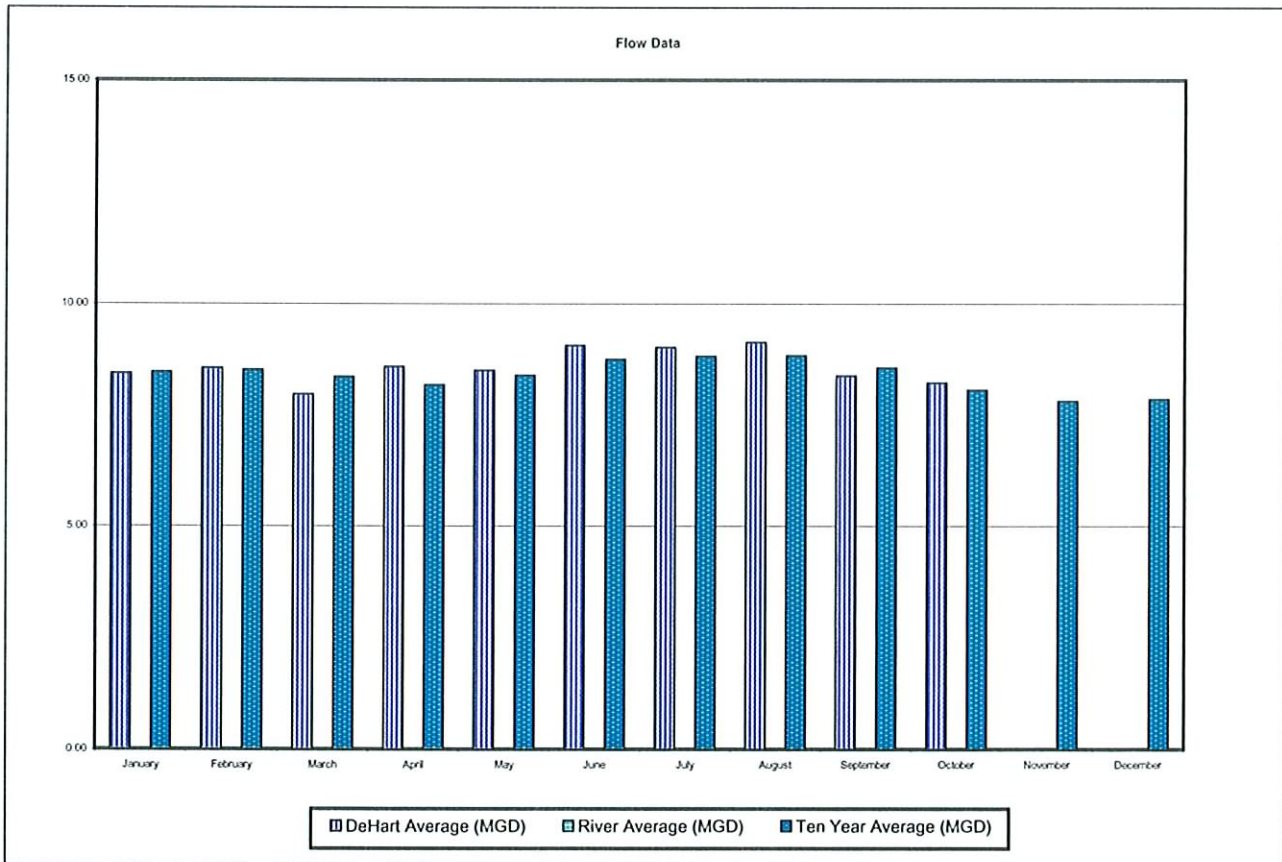
Flow Monitoring and Water Withdrawal Information 2011

Month	DeHart Total (MG)	DeHart Average (MGD)	River Total (MG)	River Average (MGD)	* U.W.P.A. Interconnect (MG)	Total Water Withdrawn (MG)	Total Water Withdrawn Avg. (MGD)	Finished Water (MG)	Finished Water (MGD)	Ten Year Average (MGD)	Process Water (MG)	Waste to Sewer (MG)
January	261.66	8.44	0.00	0.00	0.00	261.66	8.44	245.77	7.93	8.47	2.86	5.92
February	239.64	8.56	0.00	0.00	0.00	239.64	8.56	225.70	8.06	8.52	2.82	5.46
March	246.93	7.97	0.00	0.00	0.00	246.93	7.97	235.66	7.60	8.36	2.87	5.44
April	257.70	8.59	0.00	0.00	0.00	257.70	8.59	239.24	7.97	8.17	3.24	4.94
May	263.55	8.50	0.00	0.00	0.00	263.55	8.50	250.32	8.07	8.39	4.13	5.49
June	271.77	9.06	0.00	0.00	0.00	271.77	9.06	257.42	8.58	8.75	5.46	5.85
July	279.58	9.02	0.00	0.00	0.00	279.58	9.02	272.34	8.79	8.82	5.65	5.92
August	283.20	9.14	0.00	0.00	0.00	283.20	9.14	267.97	8.64	8.83	5.70	5.55
September	259.89	8.38	0.00	0.00	0.00	259.89	8.38	245.86	7.93	8.56	5.32	7.74
October	254.95	8.22	0.00	0.00	0.00	254.95	8.22	232.02	7.48	8.06	3.26	7.04
November										7.81		
December										7.85		
Total	2,618.87	85.87	0.00	0.00	0.00	2,618.87	85.87	2,472.30	81.06	100.59	41.31	59.35
Average	261.89	8.59	0.00	0.00	0.00	261.89	8.59	247.23	8.11	8.38	4.13	5.94

* U.W.P.A. Denotes United Water Pennsylvania

Peak Day Water Use for Report Month (MGD) 9.34 on 10/1/11

Minimum Day Water Use for Report Month (MGD) 7.09 on 10/26/11



Rainfall Trends
2011

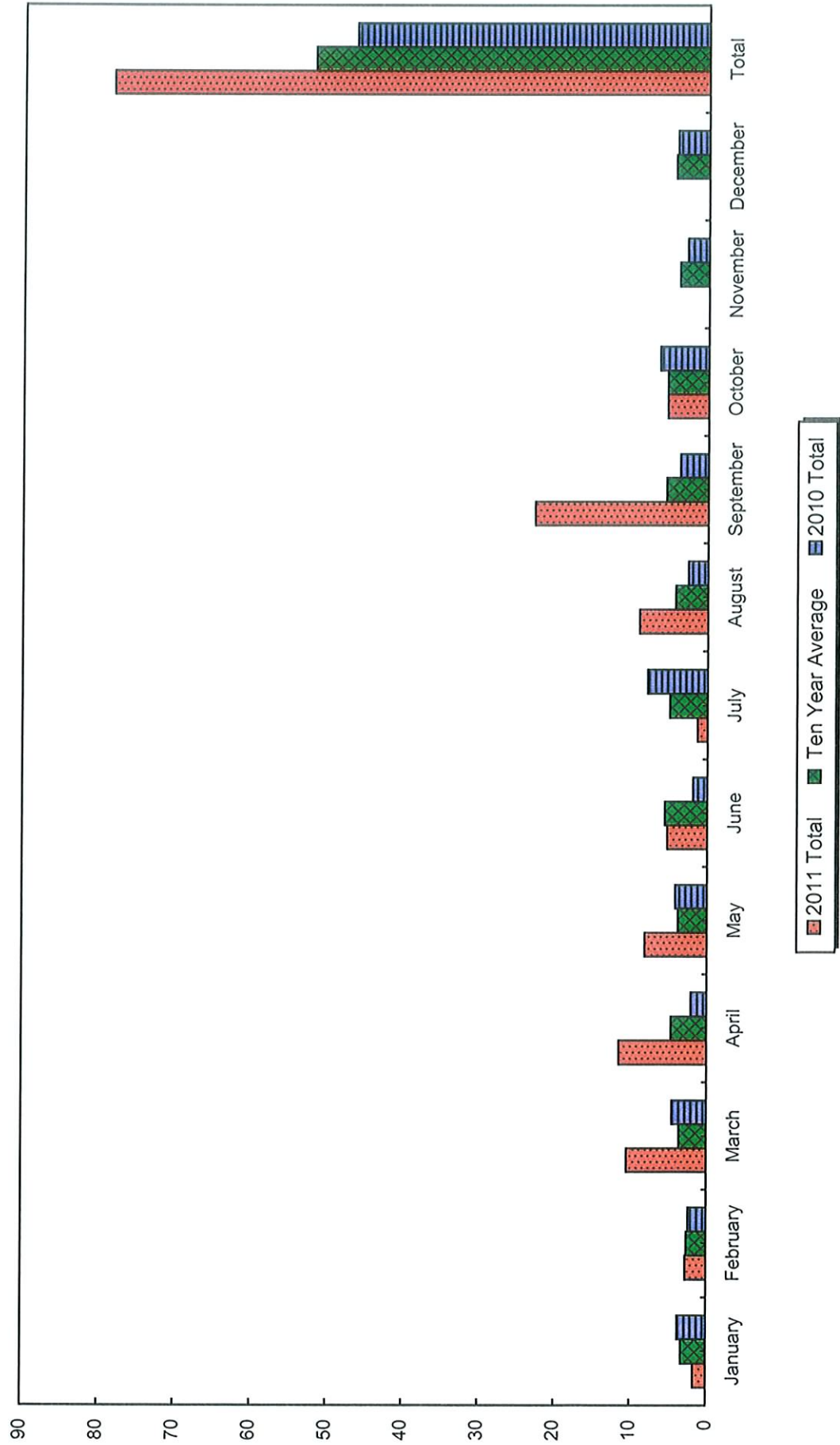


EXHIBIT D

Water Level at the DeHart Reservoir - 2010

Date	January	February	March	April	May	June	July	August	September	October	November	December
2011 AVG	-74.3	-83	-9.61	6.23	5.16	3.43	-6.7	-23.6	1.16	4.19		
Ten Year AVG	-43.59	-41.06	-30.96	-16.62	-14.38	-17.01	-29.03	-45.54	-63.99	-76.78	-81.38	-68.66
2010 AVG	3.83	3.03	4.93	3.1	2.06	-9.93	-29.41	-53.25	-84.03	-97.16	-114.3	-78.6

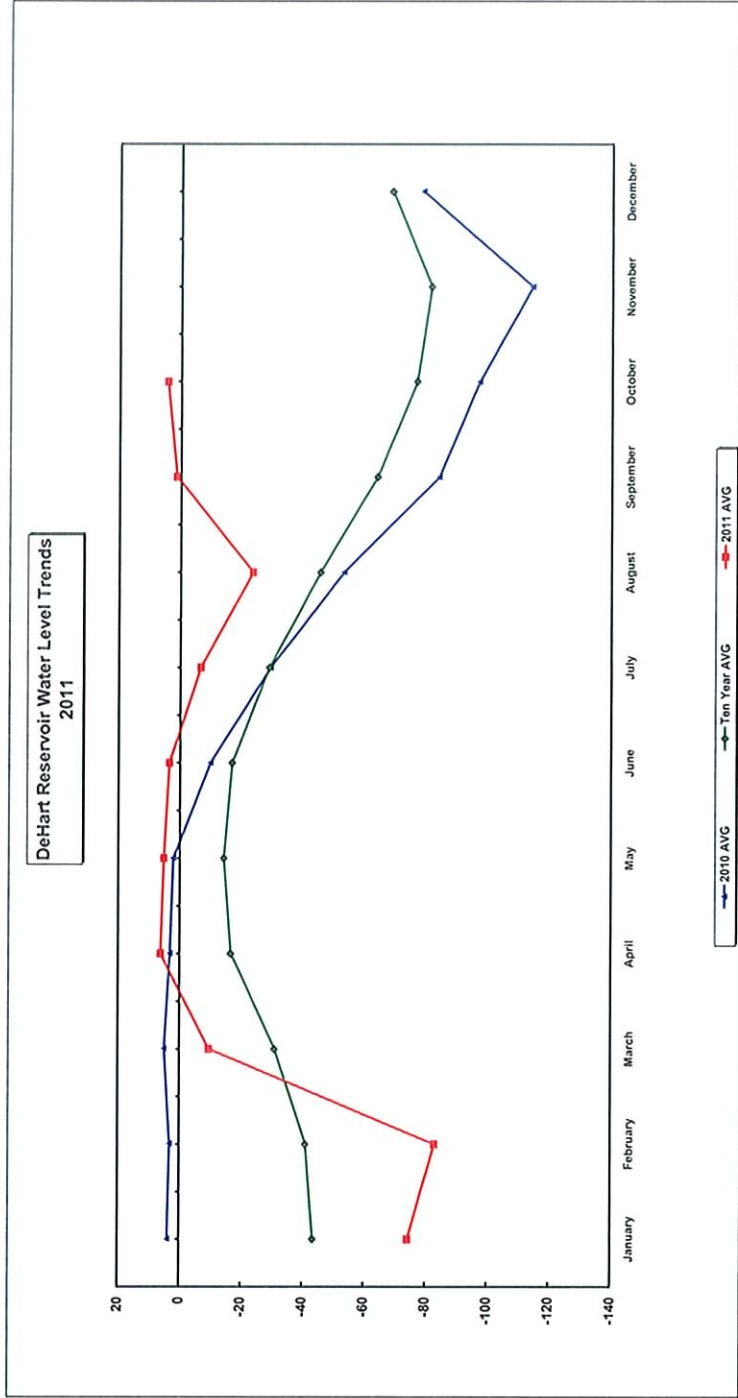


EXHIBIT E

Maintenance of Minimum Daily Conservation Release - 2011

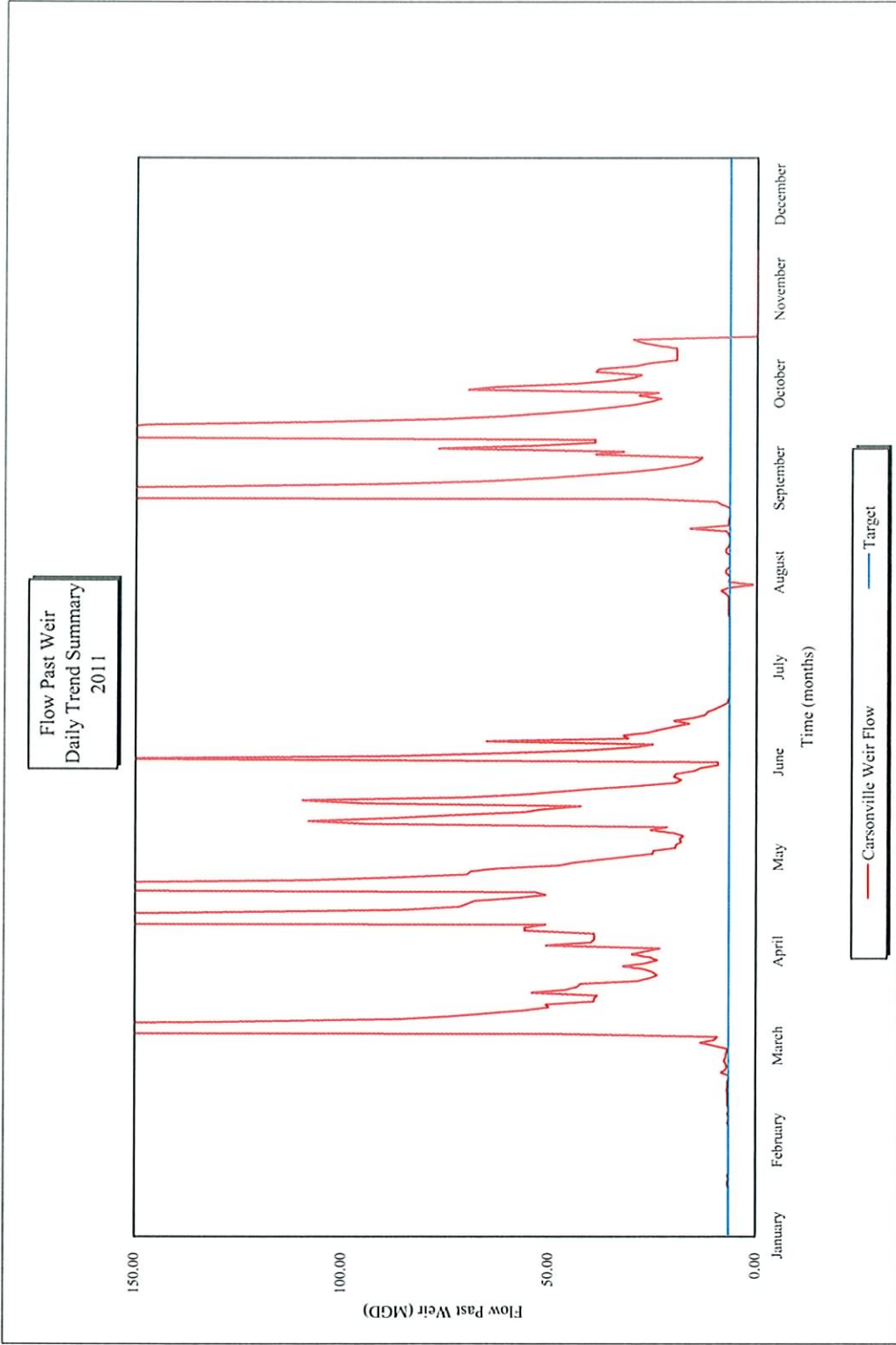


Exhibit G

Hydro-Turbine Generator Performance 2011

Month	Kilowatt-hour (KWH)	Anticipated Savings *
January	71,232	\$6,409
February	89,183	\$8,025
March	70,728	\$6,364
April	28,412	\$2,557
May	0	\$0
June	0	\$0
July	55,943	\$5,034
August	1,001	\$90
September	0	\$0
October	0	\$0
November		
December		
Average	31,650	\$2,848
Year to Date	316,499	\$28,479

* Anticipated savings calculated by multiplying the KWH by the average electrical rate of \$0.08998

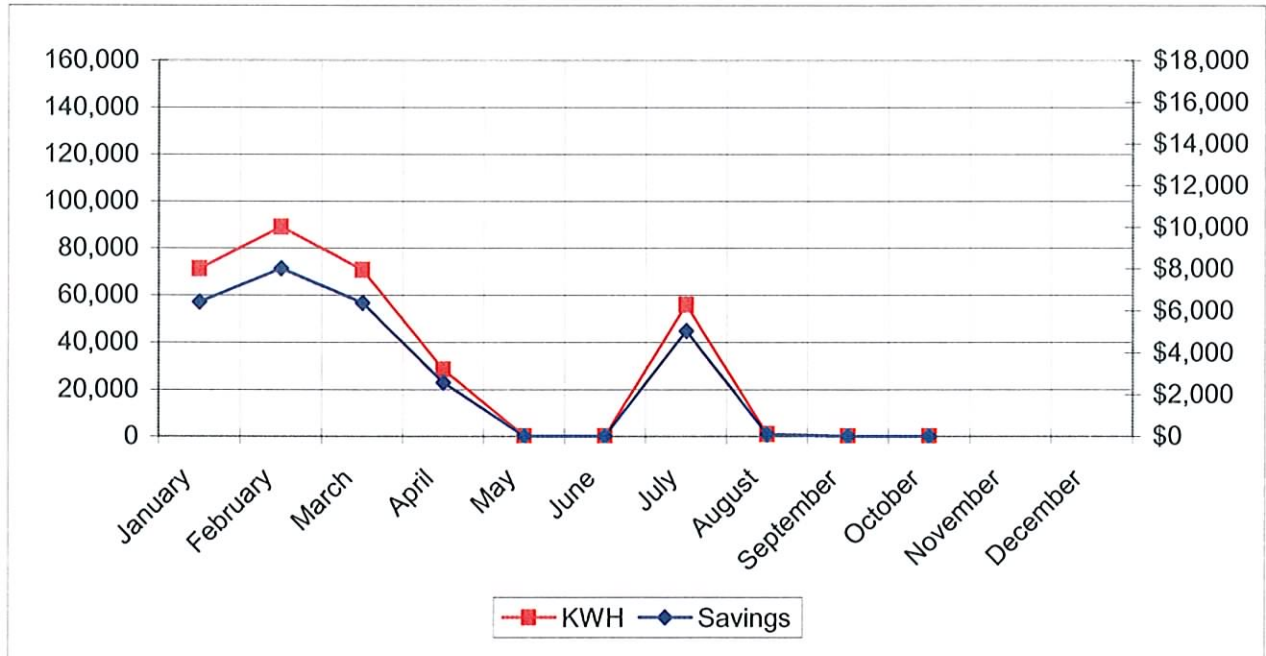


EXHIBIT H

Treatment Chemical Usage - 2011

Chemical	January	February	March	April	May	June	July	August	September	October	November	December	Average	Total
Chlorine														
Total, Lbs.	5,660	5,130	5,460	5,049	5,820	7,660	7,920	7,640	8,870	7,777	8,870	7,777	6,789	67,886
Average, Lbs./Day	183	183	176	198	188	255	255	246	296	251	296	251	223.2	
Dose, mg/l	2.6	2.6	2.7	2.8	2.6	3.4	3.4	3.2	4.2	3.7	4.2	3.7	3.1	
Cost, \$/Lbs.	\$0.33	\$0.33	\$0.33	\$0.33	\$0.33	\$0.33	\$0.33	\$0.33	\$0.33	\$0.33	\$0.33	\$0.33	\$0.33	
Total Cost, Dollars	\$1,839.50	\$1,667.25	\$1,774.50	\$1,933.43	\$1,891.50	\$2,489.50	\$2,574.00	\$2,483.00	\$2,882.75	\$2,527.53	\$2,882.75	\$2,527.53	\$2,206.30	\$22,062.95
Alum														
Total 50 wt.% Al ₂ SO ₄ *14.3 H ₂ O	5,314	4,715	5,423	6,649	6,917	6,891	6,741	6,483	10,290	11,967	10,290	11,967	7,139	71,390
Avg Alum, Gals./Day	171	168	175	222	223	230	217	209	343	386	343	386	234.5	
Alum, mg/l	13.1	12.7	14.1	16.6	16.9	16.3	15.5	14.7	26.4	30.2	26.4	30.2	17.7	
Alum Cost, \$/Gal.	\$0.64	\$0.64	\$0.64	\$0.64	\$0.64	\$0.64	\$0.64	\$0.64	\$0.64	\$0.64	\$0.64	\$0.64	\$0.64	
Alum Total Cost, Dollars	\$3,414.08	\$3,029.24	\$3,484.11	\$4,271.78	\$4,443.96	\$4,427.25	\$4,330.88	\$4,165.13	\$6,611.01	\$7,688.23	\$6,611.01	\$7,688.23	\$4,586.57	\$45,865.67
Lime														
Total Ca(OH) ₂ , Lbs.	10,230	9,077	10,440	12,800	13,316	13,266	12,977	12,480	19,808	23,036	19,808	23,036	13,743	137,430
Average Lime, Lbs./Day	330	324	337	427	430	442	419	403	660	743	660	743	451.4	
Lime Dose, mg/l	4.7	4.5	5.1	6.0	6.1	5.9	5.6	5.3	9.4	10.8	9.4	10.8	6.3	
Lime Cost, \$/Lbs.	\$0.08	\$0.08	\$0.08	\$0.08	\$0.08	\$0.08	\$0.08	\$0.08	\$0.08	\$0.08	\$0.08	\$0.08	\$0.08	
Lime Total Cost, Dollars	\$849.09	\$753.39	\$866.52	\$1,062.40	\$1,105.23	\$1,101.08	\$1,077.09	\$1,035.84	\$1,644.06	\$1,911.99	\$1,644.06	\$1,911.99	\$1,140.67	\$11,406.69
Soda Ash														
Total Na ₂ CO ₃ , Lbs.	15,500	16,000	17,700	14,480	15,900	16,200	6,300	15,300	15,600	16,800	15,600	16,800	14,978	149,780
Avg Soda Ash, Lbs./Day	500	571	571	483	513	540	203	494	520	542	520	542	493.7	
Soda Ash Dose, mg/l	7.1	8.0	8.6	6.7	7.2	7.1	2.7	6.5	7.4	7.9	7.4	7.9	6.9	
Soda Ash Cost, \$/Lbs.	\$0.23	\$0.23	\$0.23	\$0.23	\$0.23	\$0.23	\$0.23	\$0.23	\$0.23	\$0.23	\$0.23	\$0.23	\$0.23	
Soda Ash Total Cost, Dollars	\$3,548.73	\$3,663.20	\$4,052.42	\$3,315.20	\$3,640.31	\$3,708.99	\$1,442.39	\$3,502.94	\$3,571.62	\$3,846.36	\$3,571.62	\$3,846.36	\$3,429.21	\$34,292.13
Fluoride														
Total 59.8 wt. % Na ₂ SF ₆ Lbs	2,665	2,475	2,505	2,430	2,460	2,910	2,450	2,755	2,552	2,775	2,552	2,775	2,598	25,977
Average, Fluoride Lbs./Day	86	88	81	81	79	97	79	89	85	90	85	90	85.5	
Fluoride (F-) Dose, mg/l	0.7	0.7	0.7	0.7	0.7	0.8	0.6	0.7	0.7	0.8	0.7	0.8	0.7	
Fluoride Cost, \$/Lbs.	\$0.44	\$0.44	\$0.44	\$0.44	\$0.44	\$0.44	\$0.44	\$0.44	\$0.44	\$0.44	\$0.44	\$0.44	\$0.44	
Fluoride Total Cost, Dollars	\$1,177.56	\$1,093.61	\$1,106.87	\$1,073.73	\$1,086.98	\$1,285.82	\$1,082.56	\$1,217.33	\$1,127.63	\$1,226.17	\$1,127.63	\$1,226.17	\$1,147.83	\$11,478.26
Sodium Hydroxide														
Total 50 wt.% NaOH Gals	593	493	653	772	755	931	1,707	1,578	1,698	1,476	1,698	1,476	1,066	10,656
Avg NaOH, Gals./Day	19	18	21	26	24	31	55	51	57	48	57	48	34.9	
NaOH, mg/l	1.7	1.6	2.0	2.3	2.2	2.6	4.7	4.3	4.4	4.4	4.4	4.4	3.1	
NaOH 50 wt. % Cost, \$/Gal.	\$2.66	\$2.66	\$2.66	\$2.66	\$2.66	\$2.66	\$2.66	\$2.66	\$2.66	\$2.66	\$2.66	\$2.66	\$2.66	
NaOH Total Cost, Dollars	\$1,578.51	\$1,312.32	\$1,738.22	\$2,054.99	\$2,009.74	\$2,478.23	\$4,543.87	\$4,200.49	\$4,519.92	\$3,928.97	\$4,519.92	\$3,928.97	\$2,836.53	\$28,365.26
Zinc Orthophosphate														
Total Zn ₃ (PO ₄) ₂ , Lbs.	7,363	6,891	7,309	7,490	8,099	8,083	8,229	7,979	7,099	6,898	7,099	6,898	7,544	75,440
Avg Zn ₃ (PO ₄) ₂ , Lbs./Day	238	246	236	250	261	269	265	257	237	230	237	230	248.9	
Zn ₃ (PO ₄) ₂ Dose, mg/l	3.4	3.4	3.5	3.5	3.7	3.6	3.4	3.4	3.4	3.4	3.4	3.4	3.5	
Zn ₃ (PO ₄) ₂ Cost, \$/Lbs.	\$0.47	\$0.47	\$0.47	\$0.47	\$0.47	\$0.47	\$0.47	\$0.47	\$0.47	\$0.47	\$0.47	\$0.47	\$0.47	
Zn ₃ (PO ₄) ₂ Total Cost, Dollars	\$3,460.61	\$3,238.77	\$3,435.23	\$3,520.30	\$3,806.53	\$3,799.01	\$3,867.63	\$3,750.13	\$3,336.53	\$3,242.06	\$3,336.53	\$3,242.06	\$3,545.68	\$35,456.80
Potassium Permanganate														
Total KMnO ₄ , Lbs.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg KMnO ₄ , Lbs./Day	0	0	0	0	0	0	0	0	0	0	0	0	0	
KMnO ₄ Dose, mg/l	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
KMnO ₄ Cost, \$/Lbs.	\$2.10	\$2.10	\$2.10	\$2.10	\$2.10	\$2.10	\$2.10	\$2.10	\$2.10	\$2.10	\$2.10	\$2.10	\$2.10	
KMnO ₄ Total Cost, Dollars	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Expenditures YTD														
	\$15,868.08	\$14,757.78	\$16,457.86	\$17,231.81	\$17,984.24	\$19,289.89	\$18,918.43	\$20,354.85	\$23,693.52	\$24,371.31	\$0.00	\$0.00	\$18,892.78	\$188,927.77
Average Flow Withdrawn (MGD)	8.44	8.56	7.97	8.59	8.50	9.06	9.02	9.14	8.38	8.22	8.22	8.38	8.587	

EXHIBIT 1

DISTRIBUTION DIVISION ACTIVITIES 2011

Activity	January	February	March	April	May	June	July	August	September	October	November	December	Annual Total	Average
Water Shutoffs - vacant building leaking	17	22	20	15	8	12	8	12	23	4			141	14.1
Water Shutoffs - leaking services	17	22	20	10	9	11	7	5	8	4			113	11.3
Water Shutoffs - shut off program	39	163	258	133	141	238	177	140	97	261			1647	164.7
Water Shutoffs - vacant coded program	7	2	13	9	9	3	6	3	3	3			58	5.8
Water Restorations	32	76	130	80	94	122	92	99	83	140			948	94.8
Water tap - removed	0	0	0	0	0	3	1	3	0	2			9	0.9
Water tap - cleaned	0	1	2	0	1	1	0	3	0	2			10	1.0
Water tap - installed	1	0	0	0	2	0	0	3	1	4			11	1.1
Hydrant flow tests	0	3	2	1	4	1	5	4	0	23			43	4.3
Hydrants - replaced	0	0	4	0	0	1	0	0	0	0			5	0.5
Hydrants - repaired	5	7	6	10	2	2	4	0	6	9			51	5.1
Reported leak investigations	17	48	62	12	20	34	18	3	21	3			238	23.8
Leak notices served	3	1	2	2	2	3	1	2	2	3			21	2.1
Final leak notices served	3	1	2	2	2	3	1	2	2	3			21	2.1
Main breaks - repaired	3	0	0	1	0	0	1	1	1	0			7	0.7
Valve box repairs	2	0	0	0	0	6	0	0	2	1			11	1.1
Valves - replaced	0	0	0	0	0	0	0	0	0	0			0	0.0
Valves - repaired	0	0	0	0	0	0	0	0	0	0			0	0.0
Valves - exercised	6	0	0	0	2	6	3	4	6	6			33	3.3
Locates completed	572	607	617	635	818	895	736	754	868	927			7429	742.9
Water Complaint Calls	0	0	2	0	0	0	1	2	2	1			8	0.8

EXHIBIT J

Metering Activities 2011

Activity	January	February	March	April	May	June	July	August	September	October	November	December	Annual Total	Average
Ready-to-serve accounts	20924	20928	20928	20939	29928	20922	20919	20918	20910	20902			218218	21821.8
Water usage accounts	20715	20715	20714	20735	20714	20712	20710	20706	20704	20702			207127	20712.7
Non-compliant meters	448	443	442	478	440	437	435	430	428	426			4404	440.4
Meter readings - attempted	24256	24289	24399	24611	24710	24789	24800	24825	24865	20875			242419	24241.9
Meter readings - obtained	21117	21150	21160	21251	21318	21397	21431	21456	21496	20506			212282	21228.2
Meters - missing	4	1	9	8	9	10	11	15	8	12			87	8.7
Leaking meters - replaced	10	11	8	9	2	11	4	10	2	3			70	7.0
Non-registering meters - replaced	9	3	7	15	14	12	4	10	15	7			96	9.6
Remote meters - repaired	68	44	47	73	140	241	169	221	289	78			1370	137.0
Calibrated meters	0	0	0	0	0	3	2	0	0	0			5	0.5
New service meters - installs	0	0	0	1	0	0	0	0	1	6			8	0.8

EXHIBIT L

Revenue Report For The Year Ending December 31, 2011

<u>Account Description</u>	<u>Adjusted Budget</u>	<u>October Revenue</u>	<u>Year to Date Revenue</u>	<u>Budget Balance</u>
Interest - Savings Account	\$0.00	\$73.27	\$906.47	-\$906.47
Interest - Other	\$0.00	\$0.01	\$0.12	-\$0.12
Total Interest Income	\$0.00	\$73.28	\$906.59	-\$906.59
Metered/Unmetered Water Sales	\$0.00	\$13,949.50	\$75,044.44	-\$75,044.44
Ready to Serve	\$0.00	\$1,648.47	\$13,633.29	-\$13,633.29
Metered Water Sales	\$0.00	\$803,783.41	\$8,282,944.71	-\$8,282,944.71
Mtrd Wat Ready to Serve	\$0.00	\$339,965.58	\$3,547,036.57	-\$3,547,036.57
Meter Sales Revenue	\$0.00	\$0.00	\$14.00	-\$14.00
Sale of Water Parts	\$0.00	\$0.00	\$14.00	-\$14.00
Water Conservation Device Sales	\$0.00	\$0.00	\$0.00	\$0.00
Fire Line Charges	\$0.00	\$339.46	\$282,806.59	-\$282,806.59
Other Hbg. Water Operational Revenue	\$0.00	\$6,101.55	\$74,968.85	-\$74,968.85
Water Tapping Fees	\$0.00	\$3,800.00	\$8,150.00	-\$8,150.00
Water Service Initiation Fee	\$0.00	\$25.00	\$275.00	-\$275.00
Water Restoration	\$0.00	\$12,299.72	\$79,856.66	-\$79,856.66
Water Termination Fee	\$0.00	\$0.00	\$100.00	-\$100.00
Harrisburg Water Liens-Principal Revenue	\$0.00	\$4,621.21	\$45,697.34	-\$45,697.34
Hbg. Water Liens-Interest Revenue	\$0.00	\$115.31	\$7,384.23	-\$7,384.23
Total Hbg. Water Utility Fund	\$0.00	\$1,186,649.21	\$12,417,925.68	-\$12,417,925.68
Metered/Unmetered Susq. Water Sales	\$0.00	\$129,934.10	\$1,169,119.35	-\$1,169,119.35
Susquehanna Ready to Serve	\$0.00	\$41,396.48	\$401,693.51	-\$401,693.51
Total Susquehanna Water Revenue	\$0.00	\$171,330.58	\$1,570,812.86	-\$1,570,812.86
Reimbursement for Loss	\$0.00	\$15,075.90	\$31,919.40	-\$31,919.40
Refund of Expenditures	\$0.00	\$50.00	\$450.00	-\$450.00
Total Miscellaneous	\$0.00	\$15,125.90	\$32,369.40	-\$32,369.40

EXHIBIT M

Expenditure Report For The Year Ending December 31, 2011

Account Description	Adjusted Budget	October Expenditure	October Encumbrance	Year to Date Expenditure	Budget Balance
Administration Division					
Salaries & Wages	\$287,600.00	\$18,074.22	\$0.00	\$195,220.93	\$92,379.07
Fringe Benefits	\$154,789.00	\$13,326.62	\$655.91	\$85,980.84	\$68,152.25
Communications	\$25,000.00	\$1,212.16	\$0.00	\$22,417.26	\$2,582.74
Professional Fees	\$53,500.00	\$750.00	\$3,450.00	\$12,500.00	\$37,550.00
Insurance	\$116,072.00	\$18,785.31	\$0.00	\$97,996.52	\$18,075.48
Maintenance & Repairs	\$62,530.00	\$3,685.46	\$226.00	\$36,325.50	\$25,978.50
Contracted Services	\$319,584.92	\$26,214.07	\$2,509.98	\$291,593.01	\$25,481.93
Supplies & Expenses	\$80,900.08	\$8,619.60	\$5,729.75	\$42,645.05	\$32,525.28
Payments Other Transfers - THA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Capital Outlay	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Equipment - Lease/Purchase	\$72,533.00	\$0.00	\$0.00	\$68,869.28	\$3,663.72
Total Administration Division	\$1,172,509.00	\$90,667.44	\$12,571.64	\$853,548.39	\$306,388.97
Distribution/Metering Division					
Salaries & Wages	\$551,380.00	\$41,632.39	\$0.00	\$469,356.20	\$82,023.80
Fringe Benefits	\$209,519.00	\$26,095.00	\$0.00	\$139,051.76	\$70,467.24
Communications	\$2,550.00	\$0.00	\$0.00	\$292.70	\$2,257.30
Rentals	\$2,700.00	\$0.00	\$0.00	\$0.00	\$2,700.00
Maintenance & Repairs	\$17,000.00	\$1,811.05	\$3,693.42	\$5,166.58	\$8,140.00
Contracted Services	\$746,802.00	\$62,000.00	\$0.00	\$681,909.90	\$64,892.10
Supplies & Expenses	\$186,950.00	\$7,055.09	\$70,447.83	\$78,379.33	\$38,122.84
Equipment - Lease/Purchase	\$30,749.00	\$0.00	\$0.00	\$23,061.96	\$7,687.04
Capital Outlay	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Distribution/Metering Division	\$1,747,650.00	\$138,593.53	\$74,141.25	\$1,397,218.43	\$276,290.32
Operations:					
Salaries & Wages	\$917,517.00	\$64,019.72	\$0.00	\$709,291.03	\$208,225.97
Fringe Benefits	\$279,649.00	\$36,128.21	\$0.00	\$191,130.72	\$88,518.28
Communications	\$1,725.00	\$0.00	\$0.00	\$425.68	\$1,299.32
Professional Fees	\$4,000.00	\$0.00	\$0.00	\$1,457.50	\$2,542.50
Utilities & Service	\$672,000.00	\$51,240.97	\$7,167.85	\$526,772.77	\$138,059.38
Rentals	\$350.00	\$0.00	\$0.00	\$312.64	\$37.36
Maintenance & Repairs	\$51,350.00	\$1,042.89	\$5,177.67	\$40,689.93	\$5,482.40
Contracted Services	\$367,131.00	\$30,010.00	\$0.00	\$335,045.08	\$32,085.92
Supplies & Expenses	\$306,850.00	\$49,671.57	\$70,445.33	\$224,027.91	\$12,376.76
Equipment - Lease/Purchase	\$51,842.00	\$0.00	\$0.00	\$38,881.68	\$12,960.32
Capital Outlay	\$74,000.00	\$0.00	\$0.00	\$0.00	\$74,000.00
Total Operations/Maintenance Division	\$2,726,414.00	\$232,113.36	\$82,790.85	\$2,068,034.94	\$575,588.21
Total Expenditure	\$5,646,573.00	\$461,374.33	\$169,503.74	\$4,318,801.76	\$1,158,267.50

EXHIBIT K

Miscellaneous Water Usage (gals) 2011

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total	Average
Main Leaks	265,491	0	0	11,750,508	0	0	0	202,586	455,777	0			12,674,362	1,267,436
Service Leaks	1,812,384	264,600	310,032	88,704	399,168	88,704	793,800	1,360,800	2,608,200	455,712			8,182,104	818,210
Fires	9,895	4,650	5,609	3,250	3,600	2,657	7,500	11,500	235,000	8,000			291,661	29,166
Street Sweepers	4,240	7,180	12,580	10,260	13,580	10,960	9,660	16,240	5,760	10,280			100,740	10,074
AWTF unmetered	0	2,700	3,200	0	6,300	5,800	4,000	10,240	3,000	2,500			37,740	3,774
Special Events	0	0	0	0	8,000	0	5,000	0	9,000	2,000			24,000	2,400
Lab and Instr. taps	557,256	475,951	581,866	468,808	536,922	533,738	565,041	596,924		529,542			4,846,048	538,450
High Resyr Leakage	527,497	548,104	530,008	613,980	488,869	597,718	304,033	433,489		304,033			4,347,731	483,081
Bulk Water	12,060	20,869	67,268	253,200	949,811	2,445,101	625,253	294,445	239,062	235,549			5,142,638	514,264
Flushing	0	0	0	0	7,207,870	0	0	0	0	0			7,207,870	720,787
Flow Tests	0	1,500	1,000	500	1,000	500	2,500	1,500	3,000	4,500			16,000	1,600
Vacancies/service leaks	0	2,571,480	2,268,000	4,412,520	907,200	1,360,800	907,200	10,600	1,160,000	2,112			13,599,912	1,359,991
Hydrant connections	0	2,000	0	0	19,000	5,000	1,000	1,000	6,000	6,000			40,000	4,000
Total	3,188,843	3,899,034	3,779,563	17,601,730	10,541,320	5,050,978	3,224,987	2,939,324	4,724,799	1,560,228	0	0	56,510,806	442,556