

Philadelphia, January 28, 1939.

BUREAU OF WATER REPORT OF PROCEEDINGS FOR
THE YEAR 1938.

The volume of water furnished daily to the City averages 310 million gallons which reduced to a per capita consumption amounted to 151 gallons per day.

The character of the filtered delivery was in accord with the standards as set up by the U. S. Treasury Department. The low death rate of 0.8 per 100,000 inhabitants is an indication of the integrity of the supply throughout the City.

Investigation at the S. Davis Wilson Airport for a ground water supply resulted in the assurance that sub-surface source would contribute sufficient volume which would be rendered acceptable with a moderate treatment for domestic consumption.

The Northeast Sewage Disposal Works combined with the Frankford Grit Chamber and the Southwest Sewage Pumping Station functioned under Bureau of Water operation.

In addition to the personnel of the Bureau there was engaged throughout the works on Federal projects an average of 1400 men, the activities being of value to a substantial extent.

A visitation by members of Council to observe actual physical and structural conditions of the water works was made during the active season. The vital importance of repairs and additions was emphasized and requirements in funds for construction and labor were outlined and recognized.

RIVER PATROL

The boroughs on the Schuylkill River above the City have installed in some communities sewage disposal works while others are actively engaged in construction or definite planning to reduce the pollution of sewage contribution to the flow of river.

The industrial plants, insofar as their financial ability will provide, have made an effort to clear effluents from harmful wastes. The contact - which is routine between the technical men of the Bureau and representatives of the industry group, is harmonious and productive.

INTAKES

The silting of the Schuylkill River, which is a seasonal visitation, continues to obstruct the cross-section of water approach to the Belmont and Shawmont Pumping Stations.

At Shawmont there was, along the river front, continued construction on retaining wall to replace masonry which had disintegrated and presented an unsightly appearance.

PUMPING STATIONS

At Torresdale and Shawmont landscape activities have continued, the contribution of which, through Federal aid, has improved the appearance of grounds.

At Shawmont replacement of window sash with attendant painting was completed.

At Lardner's Point major repairs were continued on several of the large pumping units.

The Mingo Creek and Southwest Sewage Stations contributed respectively to the S. Davis Wilson Airport and adjacent lowland drainage and to sewer contribution of the Eastwick territory.

FILTERS

All plants have rendered service in sufficient volume and potability of water.

At Torresdale, through the valuable assistance of Federal contribution, the cleaning of sand has progressed and the slow sand units are in creditable condition. The group of preliminary beds offer a field for extensive and likewise expensive improvements and a rehabilitation of the whole area of beds is essential.

At Queen Lane waterproofing the masonry floors of the filters and the repairs to the supporting columns in the filtered water basin on which the load of the filter rests, has progressed towards a partial restoration of structure for operation values.

The filtering medium such as sand and five sizes of gravel were removed, washed, regraded and replaced. Also the terra cotta laterals were reset after a proper cleaning.

All this work was embraced in a Federal project, the activities continuing throughout a 24 hour day and under Bureau inspection with inconsequential effect upon normal plant operation and delivery.

At Belmont two slow sand filters were rehabilitated in structures and equipment while active work on a third unit was approaching completion. This structural repair involved concrete roof and walls of groined and barrel arch design, the disintegration of which had approached a dangerous condition.

The group representing City Council viewed the work on these two plants and saw the condition of the filters, the functioning of which guards the character of water served to the City.

This restoration work has been accomplished through the activities of the Federal agencies.

RESERVOIRS

At the Upper Roxborough plant extensive landscaping continues on outside slopes and grounds extending the improvement of the latter to limits of lot areas.

A serious slide of the lining on dividing wall spillway required a replacement of embankment below normal water levels. A substantial amount of work was required for restoration of embankment and daylight hours for a considerable period were employed until reservoir depth could be restored.

At Belmont West Basin a substantial yardage of sediment, accumulated through the year, was removed.

DISTRIBUTION

During an early period of high summer temperatures, the water system was stressed unduly by the unauthorized use of fire hydrants for neighborhood refreshment. Police efforts and the setting up of street showers established a means of control. The operation of fire hydrants by the unauthorized group left much of equipment in an unserviceable condition. Replacement of one thousand (1,000) fire hydrants was accomplished.

A number of locations where private water pipes furnished an inadequate supply, where dead ends interrupted the circulation and where operating builders were erecting houses, contributed substantial additions to water main footage.

To effect a more flexible supply to stabilize pressures there was placed in service for areas in the Eastwick section, thereby benefitting Fort Mifflin and other remote points, a 20 inch water main on Island Road. This pipe line is designed for extension to the shore line of the Delaware River at such time when ground elevation and financial problems are adjusted.

Negotiations between the City and The Overbrook Steam Heat Co. were completed whereby the water mains owned and operated by the Company would become the property of the City and monies on water accounts would be so credited as tax revenue.

To insure more stability of supply the construction of a 24 inch feeder main was planned.

A contract for installation was let and at the end of year the work was under active execution.

The laying of main contributes an alternate supply line from the Belmont High Service Pumping Station thereby offering a two way supply to areas dependent upon that specific source of service.

SERVICE SYSTEM

Mains in service	-	2,496 miles
Valves in service	-	50,329
Fire hydrants in service	-	20,341

HIGH PRESSURE SYSTEM

Mains in service	-	63.34 miles
Valves in service	-	1,872
Fire hydrants in service	-	1,070

Breaks on mains were respectively 257 on service and 17 on High Pressure System.

A survey and recording on plates and sheets of the distribution system of pipe, valves and fire hydrants is producing invaluable information in a definite form, all results of this work being accomplished through the employment of Federal appointments.

METERS

Total number of meters installed	-	210,823
Per cent. of metered services	-	46%

MAINTENANCE ACTIVITIES

Repaired in shop	-	17,576
Repaired on premises	-	3,887

The statement of complaints (jobs on hand) are

January 1st, 1938	19,099
December 31st, 1938	17,069
Received during year	19,781
Accomplished (repairs)	21,463

REVENUE

Water Rents - Flat Rates:

Current	-	\$2,378,114.61	
Delinquent	-	444,070.75	
			\$2,822,185.36

Meter Rates:

Current	-	\$3,297,992.73	
Delinquent	-	306,322.94	
			\$3,604,315.67

Water Pipe Searches	-	\$ 2,293.75	
" " Frontage	-	33,030.96	
Specials	-	4,706.50	
New Services	-	8,595.00	
Meter Repairs	-	64,195.51	
Miscellaneous	-	13,654.60	
			\$ 126,476.32
			\$6,552,977.35

FINANCIAL REPORT

<u>OPERATION</u>	<u>SALARY & WAGES</u>	<u>MATERIAL & EQUIPMENT CONSUMED</u>	<u>TOTAL</u>
Administration	\$ 76,361.54	\$ 4,200.59	\$ 80,562.13
Pumping	298,779.72	918,724.20	1,217,503.92
Filtration	190,435.83	203,826.72	394,262.55
Distribution	257,684.42	125,013.60	382,698.02
High Pressure Fire	60,645.48	8,042.42	68,687.90
Sewage Disposal Plants	74,536.80	30,812.54	105,349.34
Miscellaneous	901.32	7.63	908.95
Other Bureaus	1,982.32	851.14	2,833.46
	\$ 961,327.43	\$ 1,291,478.84	\$ 2,252,806.27