

Philadelphia, February 4, 1938.

REPORT OF PROCEEDINGS FOR THE YEAR 1937

The volume of water furnished daily to the City averages 322 million gallons which reduced to a per capita consumption amounted to 158 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 1.4 per 100,000 inhabitants is an indication of the integrity of the supply throughout the City.

In addition to the personnel of the Bureau there was engaged throughout the works on Federal projects 2,047 men, the activities being of value to a substantial extent.

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

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, obstructed the cross-section of water approach to the Belmont and Shawmont Pumping Stations.

A removal of the sediment was accomplished at the former noted station through dredging by the Fairmount Park Equipment.

At the latter mentioned station a tractor shovel was employed through the Federal agencies which cleared the river bank at and adjacent to the intake.

In conjunction with this dredging at Shawmont, there was constructed on river front a stone wall to replace the old masonry which was unsightly and in need of repair.

PUMPING STATIONS

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

Replacement of window sash with attendant painting was begun at Shawmont and a new revolving screen on station suction was purchased to replace the old which had failed after many years of service.

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

The East Park Booster Station rendered service on two occasions: a period of high atmospheric temperature during the summer when the value of station was demonstrated by additional volume and higher pressure of water in the center city area, and during several days when a reduced delivery from the Belmont Station required a necessary boost of water for the West Philadelphia supply.

At West Torresdale the community power driven pump was discontinued due to introduction of city water furnished from the Torresdale Filters.

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.

At the Northeast Sewage Disposal Works a new roof was placed on the building housing electrical equipment and transformers.

FILTERS

All plants have rendered service in 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 should receive immediate attention.

At Queen Lane an impressive effort was begun to waterproofing the concrete floors of the filters and repair the supporting column in the filtered water basin on which the load of the filter rested.

The work required the de-watering of a section of filtered water basin and elaborate framing of foras on which to deposit the required new materials. All filter medium such as sand, five grades of gravel and the terra cotta laterals were removed and cleaned. Replacement after waterproofing was laid followed. All of this work was embraced in a Federal project, the activities continuing throughout a 24 hours day and under Bureau inspection with inconsequential effect on normal plant delivery and operation.

At Belmont one slow sand unit was under the course of repair, the vaulting being seriously cracked and a replacement of roof was advisable. In one of the mechanical units a new system of slat strainer system with attendant construction was completed. In a second bed there has been a complete removal

and replacement of sand and gravel. The interior of mechanical filter building has been painted lending a creditable appearance and cheerful atmosphere.

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

RESERVOIRS

At Lower Roxborough the removal of accumulated sediment was completed, the interior slopes were relaid with dry masonry and flushed with a cement lining and on the exterior of embankment the surface was improved by trimming.

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

At East Park a restoration of interior slopes was effected by filling of depressions and the placing of concrete linings. A substantial amount of work was done on the top and outside of embankment and much of the rank growth of weeds and trees removed.

The outside slopes of these reservoirs, in order to prevent erosion, were generously planted with honeysuckle.

At Belmont West Basin the accumulation of sediment through the past year was removed.

DISTRIBUTION

An extension of the pipe system provided a City water supply to the remote development of West Torresdale.

Also pipe was laid in the Holmesburg section for real estate development northerly from Rhawn street.

Also construction started to contribute a supply of City water to the S. Davis Wilson airport and insure better service in adjacent areas of South-west Philadelphia.

Also to stabilize the East Germantown areas a pipe line is under construction from Chew street to Stenton avenue.

Also a Federal Housing Project (Hill Creek) was furnished with City water covering an area in the Crescentville neighborhood.

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. To replace the damaged and removed hydrants there was purchased one thousand (1,000) with an additional number proposed for a future contract.

Service System

Mains in service	-	2,482 miles
Valves in service	-	50,071
Fire hydrants in service	-	20,306

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 293 on service and 12 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	-	206,629
Per cent. of metered services	-	45%

Maintenance Activities

Repaired in shop	-	4,452
Repaired on premises	-	18,382

The statement of complaints (jobs on hand) are

January 1st, 1937	22,996
December 31st, 1937	19,099
Received during year	19,585
Accomplished	23,484

REVENUE

Water Rents - Flat Rates:

Current	-	\$2,412,112.92	
Delinquent	-	<u>613,807.65</u>	
			\$3,025,920.57

Meter Rates:

Current	-	\$3,421,939.48	
Delinquent	-	<u>428,318.24</u>	
			\$3,850,257.72

-5-

Brought Forward			
Water pipe searches	-	\$2,407.25	\$6,876,178.29
" " frontage	-	23,112.41	
Specials	-	7,042.11	
New services	-	11,602.00	
Meter repairs	-	61,153.92	
Miscellaneous	-	<u>16,981.84</u>	
			<u>122,299.53</u>
			<u>\$6,998,477.82</u>

FINANCIAL REPORT

<u>OPERATION</u>	<u>SALARY & WAGES</u>	<u>MATERIAL & EQUIPMENT CONSUMED</u>	<u>TOTAL TOTAL</u>
Administration	\$88,219.35	\$5,879.88	\$89,099.23
Pumping	805,475.42	950,462.50	1,255,937.92
Filtration	202,320.19	277,715.39	430,035.58
Distribution	276,197.41	79,064.56	355,261.97
High Pressure Fire	55,391.83	6,658.52	62,050.35
Sewage Disposal Plants	82,311.45	28,960.47	111,271.92
Miscellaneous	3,392.02	140.60	3,532.62
Other Bureaus	<u>2,911.25</u>	<u>740.07</u>	<u>3,651.32</u>
	<u>\$1,011,218.92</u>	<u>\$1,299,621.99</u>	<u>\$2,310,840.91</u>
<u>CONSTRUCTION WORK IN PROGRESS</u>			
Distribution Mains	<u>1,213.10</u>	<u>36,486.99</u>	<u>37,700.09</u>
<u>ADDITIONS AND BETTERMENTS</u>			
Filter Plants	190.98	6,344.91	6,535.89
Distribution System	14,059.38	12,304.97	26,364.35
Sewage Disposal System	499.42	603.83	1,103.25
TOTAL ADDITIONS & BETTERMENTS	<u>\$14,749.78</u>	<u>\$19,253.71</u>	<u>\$34,003.49</u>
GRAND TOTAL	**\$1,027,181.80	*\$1,355,362.69	\$2,382,544.49

*Includes \$456,371.01, which covers electric current for power and light furnished by the Philadelphia Electric Company, and paid from Electrical Bureau appropriations.

**Includes \$47,225.57 of Bureau of Mechanical Equipment payroll.

ACTIVITIES OF THE WORKS PROGRESS ADMINISTRATION

Queen Lane:

Repairing Filter structure and waterproofing floors with restoration of ground and sand. The maximum number of men engaged - 1,296

Belmont:

Replacing roof on slow sand filter bed, removal and replacing filter medium in two units of Mechanical Plant; painting Mechanical Plant Interior: removal of sediment from Sedimentation Reservoir. The maximum number of men engaged - 126

Roxborough:

The cleaning of Lower Basin and development of reservoir for storage of filtered water.
The landscaping of the Upper Basin involving outside slopes and adjacent ground areas. The maximum number of men engaged - 130

Shawmont:

The dredging of Schuylkill River bank and construction of retaining wall in front of pumping station: the landscaping of grounds and drives: the replacing and painting of doors and windows of station. The maximum number of men engaged - 90

Torresdale:

The cleaning of sand in slow sand filters and the landscaping of grounds and river front adjacent to pumping station. The maximum number of men engaged - 153

WATER MAIN SURVEY

Throughout the City a collection of data to be transcribed as permanent records on plates and sheets. The maximum number of men engaged - 192

FIRE HYDRANTS

A drive on painting fire hydrants throughout the City was instituted. The maximum number of men engaged - 60

Grand Total

2,047

Such work as this force of men have done has rendered assistance to the Bureau, the greater part of the efforts being of essential value.

Respectfully submitted,

S. M. VAN LOAN
Chief, Bureau of Water.