

## **REPORT OF THE BUREAU OF SANITARY ENGINEERING**

### **PUBLIC WATER SUPPLIES AND SEWERAGES—GENERAL STATUS**

1925-1926

During the past four years the Island of Porto Rico has developed a splendid construction program of water supply and sewerage systems. Out of the seventy-six municipalities of the Island, twenty-four have constructed both waterworks and sewerage systems; fifty-two have only waterworks, one has only sewerage system and nineteen have neither waterworks nor sewerage systems.

The municipality of Bayamón has only the sewerage system completed but not yet in use, as the water-supply system of the municipality is an extension of the new San Juan waterworks which is now under construction.

#### **WATERWORKS**

According to the census of 1920, the population of the Island was 1,299,809 inhabitants; approximately 350,000 inhabitants can be considered as urban population. Of this urban population about 300,000 inhabitants take their water supply from waterworks; 132,103 are using waterworks with some sort of treatment and the rest with no treatment whatsoever. This leaves an urban population of about 50,000 inhabitants who are not supplied with water-supply systems.

During the present fiscal year no new waterworks have been constructed with the exception of an extension to the Fajardo waterworks and a small water-supply system for the schools of the municipality of Aguada.

The municipality of Toa Alta and Adjuntas have water-works under construction and the city of San Juan has a new water-supply system under construction which will also provide water for the towns of Bayamón and Guaynabo.

A purification plant consisting of mechanical sand filters and chlorination plant has already been constructed for the new water-supply system of the city of San Juan.

The cities of Mayagüez and Arecibo have already prepared plans for the construction of rapid sand filters and chlorination plants for the sterilization of the water. Ponce and other municipalities are taking the necessary steps to provide their systems with some sort of treatment.

## SEWERAGE SYSTEM

No new sewerage systems have been constructed this year with the exception of small extensions to the Arecibo and Fajardo systems. A small sewerage system with purification plant has also been constructed for the Leper Hospital.

The city of San Juan built different extensions to the Santurce systems last year but they have not been accepted yet by this Department, pending some changes that are to be made in order to obtain a proper discharge into the sea.

Of the urban population of 350,000 inhabitants, approximately 224,000 are served by sewers. This includes the towns of Bayamón, Cataño, Santa Isabel and Ponce, with a total population of 60,000 inhabitants with sewers constructed but not in use due to pending reforms and alterations.

## URBANIZATIONS

The urban development of the cities of San Juan and Río Piedras during this year is worthy of mention. Out of twenty-eight urbanization plans approved nine correspond to the district of San Juan and four, to Río Piedras.

Sanitary improvements are the chief characteristics of these new city extensions. Wide, paved streets, water supply and sewerage systems, sanitary drainages, well-ventilated dwellings etc., are the principal features to be noted.

## EXAMINING BOARD

The examining board held examinations for master and journeyman plumbers at San Juan on January 30, 1926. Out of eight candidates who reported for the master's license none qualified and three out of five qualified for the journeyman's license.

The work done so far in plumbing is not very encouraging showing the necessity for industrial schools, where candidates may be properly trained for this kind of work.

The plumbing material found in our local market, especially cast-iron and lead pipes, is inferior to the standard specified by the sanitary regulation; this being the direct cause of deficient plumbing installations.

**Work in Mosquito Extermination in the City of San Juan During Fiscal Year 1925-1926**

Number of inspections made:

Houses ----- 33, 148



Lots.....	664
Piers.....	129
Stables.....	17
Stores.....	629
Farms.....	31
Total.....	34,618
Breeding places petrolled:	
Culex.....	2,862
Stegomya.....	288
Anopheles.....	305
Total.....	3,455
Breeding places emptied:	
Culex.....	1,937
Stegomya.....	1,185
Anopheles.....	7
Total.....	3,129
Breeding places destroyed:	
Culex.....	368
Stegomya.....	111
Anopheles.....	00
Total.....	479
Possible breeding places emptied.....	5,695
Possible breeding places destroyed.....	871
Total.....	6,566
Number of notifications.....	438
Number of reinspections:	
Work done.....	807
Work in progress.....	275
Work not carried out.....	248
Total.....	1,330
Ditches opened (lineal meters).....	6,642
Ditches petrolled.....	2,820
Sewers petrolled.....	4,801
Latrines petrolled.....	9,183
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Moura's tanks petrolled.....	863
Swamp's tanks petrolled.....	5,275
Automatic oilers filled.....	115
Gallons of mosquito oil used.....	2,020

A new pumping station has just been built at Machuchal, Santurce, to drain a low section of this district which is densely populated. Part of the money spent in the installation of the pump and motor was donated by real estate men of that district.