

CITY DOCUMENT

ANNUAL REPORT

of the

WATER SUPPLY BOARD

of the

CITY OF PROVIDENCE

RHODE ISLAND

For the Year Ended June 30, 1970

ADMINISTRATIVE OFFICE
WATER SUPPLY BOARD
CITY OF PROVIDENCE
IN CITY COUNCIL

FEB 18 1971

READ:

WHEREUPON IT IS ORDERED THAT
THE SAME BE RECEIVED.

Vincent Vespa
CLERK

July 1, 1970

TO THE HONORABLE JOSEPH A. DOORLEY, JR., MAYOR
AND THE HONORABLE CITY COUNCIL:

In compliance with Chapter XX of the Charter of the City of Providence, enacted by the General Assembly of the State of Rhode Island at its January Session, A. D. 1940, and approved April 26, 1940, we have the honor to present the thirtieth annual report of the Water Supply Board for the year ended June 30, 1970.

On January 9, 1970, John A. Doherty was reappointed a member of the Board for the ensuing term ending on the first Monday in January, 1974.

At the reorganization meeting held on January 9, 1970, John A. Doherty was reelected Chairman and John J. Deary was reappointed Secretary.

The Board held regular biweekly meetings throughout the year at which careful consideration has been given to the many problems arising in connection with maintenance and operating activities, the Department's financial structure, matters relative to taxes levied on property owned in nearby communities, and other miscellaneous departmental duties which properly come before the Board. Special meetings were held as required throughout the year for consideration of particular problems.

The report of the Chief Engineer with many important tables and statistical data is appended hereto, to which we invite your attention for details and particular information regarding the finances of the Department and conduct of the work during the above period.

Respectfully submitted,

John A. Doherty

WATER SUPPLY BOARD
John A. Doherty, Chairman
Earl H. Ashley
Ugo Riccio
John J. Tierney
David R. McGovern, Ex-Officio

FEB 11 3 08 PM '71
DEPT. OF CITY CLERK
PROVIDENCE, R.I.

REPORT OF THE CHIEF ENGINEER

Providence, R. I.
July 1, 1970

WATER SUPPLY BOARD CITY OF PROVIDENCE

Gentlemen:

As you know, the fiscal year was changed from the October – September period to July – June. Many of the statistics in this report are for the 12-months July, 1969 – June, 1970; others, such as those applying to financial operations, extensions to the distribution system, installation of services, etc. are for the October, 1969 – June, 1970 "year".

In the Department's annual report for the year ended September 30, 1969, it was mentioned that this 1970 report would describe the multimillion-dollar improvements begun in 1966 and completed in 1970. This description, together with information relating to the system's operation, is presented as follows:

MAJOR CONSTRUCTION PROJECTS

TUNNEL AND AQUEDUCT—The 23,000 feet, 78-inch and the 27,200 feet, 102-inch prestressed reinforced concrete steel cylinder transmission aqueducts, together with tunnel connections from the Purification Plant to the 78-inch and from the 78 to the 102-inch, were completed and disinfected. The total cost amounted to \$14,528,440. (Subject to final audit).

Reinforcement to the Kent County Water Authority system, supplying West Warwick, Coventry and parts of Scituate, is provided by a 30-inch connection from the 78-inch aqueduct to the Authority's new pumping station on Clinton Avenue in Hope, R. I.

A 96-inch diameter connection was installed at portal No. 4 to receive an additional supply of 56 million gallons daily from the proposed Big and Wood River Reservoir development. A quantity of 44 million gallons daily from our plant and 56 million gallons daily from Big and Wood River, together with the capacity of 100 million

gallons daily through our existing tunnel and aqueduct, will mean an eventual capability of delivering 200 million gallons daily to the system. The 102-inch section of aqueduct from tunnel portal No. 4 to Budlong Road in Cranston is designed to carry 100 million gallons daily; 44 from the 78-inch aqueduct and 56 from Big and Wood River.

There are seven connections off the 102-inch aqueduct:—a 42-inch to increase the supply to the growing City of Warwick system, a 42-inch for the western area of the City of Cranston and the Town of Johnston, a 24-inch in the vicinity of Wilbur Avenue to provide reinforcement to our system in the Oaklawn Avenue area of Cranston, a 42-inch in Budlong Road, Cranston, for the City of East Providence, a 24-inch in the same general area for the Bristol County Water Company and two rider connections, one to our 66-inch steel aqueduct and one to the 42-inch cast iron main in Budlong Road.

ADDITIONS AND IMPROVEMENTS AT THE WATER PURIFICATION WORKS

ADDITIONAL FILTERS—The sand in five of the existing filters was replaced with a coarser size to conform with the material in the other nine units that were changed in 1954. Four additional beds were constructed, bringing the total to 18 units. This will permit processing of 144 million gallons daily at a filtration rate of 3.2 gallons per minute per square foot. This is the full potential that may be withdrawn from the Scituate system based on maximum daily demands.

CENTRALIZED CONTROL SYSTEM—The new centralized control system was completed at the end of the year with the exception of a few final calibrations and adjustments. It replaced the original control board installed in 1939 and monitors and controls the performance of the filter plant, pumping stations, distribution reservoirs, flow measuring stations and other related functions such as the emergency diesel-driven generator located in the new Raw Water Booster Pumping Station. All pumping stations, including the Raw Water Booster Pumping Station at the base of Gainer Memorial Dam in the Town of Scituate as well as the three pumping stations in the distribution system, are unattended and their operation is regulated by a single operator stationed at the control board. Phasing-out of the manned Neutaconkanut Pumping Station permitted us to remove four men from that payroll and transfer two of them to the Purification Plant operational staff which was much in need of qualified personnel to fill existing vacancies. The additions and improvements at the Purification Works amounted to \$2,048,900. (Subject to final audit).

RAW WATER BOOSTER PUMPING STATION—This new facility, built at a cost of \$1,210,481, provides the means necessary to deliver water from Scituate Reservoir to the Purification Works whenever the reservoir level recedes to a point where normal gravity flow will not furnish a sufficient quantity to meet system requirements. The first of these two situations would arise during times of extended drought and the

second would occur with a lowered reservoir during the dry summer months, combined with the demands of the maximum day.

The station has four pumps, two with a capacity of fifty million gallons daily each, driven by either 300 or 600 horsepower motors, and two with a rating of thirty million gallons daily each, driven by 150 or 400 horsepower motors. Based on variable head conditions, eight different rates of flow are possible, from thirty to one hundred and sixty million gallons daily, providing ample flexibility to satisfy varying conditions.

Operation of the switchgear and diesel-driven generator is remotely controlled from the new central control system at the Purification Works. There are 53 command and reportback signals for general start and stop operations, indication of generator fault, overheating of motor windings and bearings and the changeover from public power to our own. This station was placed in service in 1968 and has been inspected daily and test-operated on a weekly basis.

SOURCE OF SUPPLY

RAINFALL AND RUNOFF—The rainfall on the 92.8 square mile Scituate Watershed above Gainer Dam was measured as usual by rainfall gages at Rocky Hill, Hopkins Mills, North Scituate, Westcott District and Gainer Dam. A total of 53.98 inches was recorded, which was 5.75 inches more than the 54-year (July, 1916 — June, 1970) average of 48.23 inches and 85.4% of the maximum of 63.19 inches established during the year ended June 30, 1956. The runoff totaled 25.65 inches; this was 1.23 inches greater than the 54-year average of 24.42 inches and 15.32 inches less than the maximum of 40.97 inches which occurred during the July, 1955 — June, 1956 year.

STORAGE, DRAFT AND YIELD—On July 1, 1969 the combined storage on the watershed, including Regulating, Westconnaug, Barden, Moswansicut, Ponaganset and Scituate Reservoirs, amounted to 40,620,000,000 gallons, or 98.4% of combined total capacity. At the end of the year the combined storage was 40,890,000,000 gallons, or 99.1% of capacity.

The total draft from the Scituate Watershed for the year was 41,121,320,000 gallons, an average of 112,660,000 gallons daily. The draft for water supply purposes was 20,515,560,000 gallons and the discharge into the north branch of the Pawtuxet River totaled 20,605,760,000 gallons.

The yield from the watershed for the year totaled 41,391,320,000 gallons, an average of 113,400,000 gallons per day. This was 5,570,000 gallons per day more than

the 107,830,000 gallons average daily yield for the 54-year period July, 1916 — June, 1970.

FORESTRY OPERATIONS—Management of the Scituate Reservoir Watershed is practiced with the primary aim of insuring the highest quality of raw water from our storage reservoirs. The forest resource is a vital part of our water supply system. The natural filtration properties of the forests marginal to the Scituate and tributary reservoirs provide a continuous supply of pure water.

Protection of our water and forest resources is given priority managerial consideration in water pollution abatement, forest fire control and forest insect and disease problems. The encroachment of suburbia on the watershed has necessitated increased departmental efforts in the surveillance of potential sources of pollution and enforcement of its regulations. To reduce the possible development of major forest fires, provision has been made to equip patrolling inspectors with fire-fighting outfits capable of quickly suppressing small roadside fires. The fire tower on Tunk Hill was manned 34 high-hazard days during the July, 1969 — June, 1970 year.

In keeping with our concern in the field of forest insect and disease control, the department cooperated with the U. S. Forest Service in an extensive survey of Fomes annosus infestations in the many coniferous plantations on the watershed.

Forest-culture operations concentrated on improvement of existing stands of timber, thinning of plantations and aesthetic development of forestland at Gainer Memorial Dam, Barden Reservoir spillway and other roadside sites. Contractual woods operators harvested over one million board feet of timber products consisting of sawlogs, pulpwood and fuelwood. During the year, some form of forest management activity was conducted on an estimated 1500 acres of the City's watershed forests.

Turf management was intensively carried out at the dams, distribution reservoirs and Purification Works. Modern brush control techniques were applied to 32.9 miles of forest access roads, 4.5 miles of roadside fenceline, and other miscellaneous sites. An additional 3.8 miles of forest access roads were cleared or improved by gravelling and grading during the 21-month period October, 1968 — June, 1970. A system of forest access road classification was established and marked in the field. Other operations included the planting of 5000 tree seedlings, salvage of storm damaged trees, roadside slash disposal and maintenance of fencing, gates and other facilities.

LABORATORIES—The chemical and bacteriological laboratories that check the quality of the water supply from the raw water impoundments to the taps at the consumers' premises, conducted tests on more than 13,000 samples during the year. They were obtained from brooks, streams and raw water reservoirs, as well as daily samples collected throughout the distribution system. Tests made on these samples included chemical, sanitary chemical and mineral analyses, and bacteriologic and

microscopic examinations. The total number of tests made during the year (July, 1969 – June, 1970) amounted to 108,796. Based on a 35-hour week, the water was receiving one test or another every 60 seconds.

Chemists carried out frequent coagulation tests of the raw water with various amounts of chemicals, simulating all operations of the purification process for the purpose of determining the most desirable dosage to produce an excellent quality of water at a reasonable cost. Rigid laboratory control over the quality of the water exceeded the sampling requirements of the U. S. Public Health Service Drinking Water Standards. The actual number of bacteriological samples collected from our distribution system amounted to 3,098 or an average of 258 per month, a figure 35% greater than recommended by the Standards and about equal to the number required for a population of 600,000.

PURIFICATION—The water supplied to communities from the Providence system is processed at one of the most modern filtration plants in the country. Operation is all-electric from a central control board. Power loss is minimized and almost nil, due to the availability of three sources: public, hydro-generated and auxiliary diesel-generator.

All chemical feeding machines are automatically controlled in direct proportion to the volume of water being treated. They are installed in multiple units, providing standby machines that may be placed in service in case of mechanical failure. Chemicals are stored in large silos and are transferred pneumatically, by remote control, to hoppers located above each feeder.

The treatment process consists of influent aeration, mixing, coagulation, and finally filtration. Chemicals employed include ferric sulfate to coagulate microorganisms and particles that cause color and turbidity, lime to change the water from acid to alkaline to assist in the precipitation of iron and manganese and reduce corrosion in the distribution system, and chlorine to destroy harmful bacteria. Finally, fluoride is added to reduce the incidence of dental caries in children. The following quantities of chemicals were used during the year (July, 1969 – June, 1970):—1,807,200 pounds of ferric sulfate before influent aeration, 1,980,648 pounds of quicklime after influent aeration and before mixing, 85,091 pounds of chlorine prior to filtration and 240,664 pounds of sodium silicofluoride after filtration, a grand total of 4,113,603 pounds.

During the year, 19,853.48 million gallons were delivered into the distribution system, an average of 54.39 million gallons daily. The maximum hourly demand in the system was at the rate of 137.28 million gallons daily; consumption during the maximum day, July 17, 1969, amounted to 94.04 million gallons. The difference between plant production and system demands was provided from storage reservoirs in our distribution system.

DISTRIBUTION

At the end of the year our distribution system in Providence, Cranston, Johnston and North Providence contained 4,284,104 feet (811.39 miles) of water mains ranging from 6" to 66" in diameter. The network consists of iron, steel, asbestos-cement and reinforced concrete steel cylinder pipe. There were 64,867 services, 16,047 valves and 4,946 hydrants in use on June 30, 1970. The amount of pipe laid during the October, 1969 – June 30, 1970 period totaled 12,131 feet; 1,623 feet were removed, resulting in a net increase to the system of 10,508 feet. Services installed and removed were 404 and 354, respectively, a gain of 50. 58 valves were installed and 14 removed, an addition of 44. 83 hydrants installed and 69 removed resulted in a net increase of 14.

Total water distribution was 19,852.24 million gallons, or 54.39 million gallons per day. The low service area, a gravity supply, consumed 80.9%; the high service system, furnishing water to the higher elevations as well as the special high pressure fire service in the downtown business district of Providence, used 19.1%. Registration on customers' meters totaled 18,177.56 million gallons, accounting for 91.6% of the amount delivered into the system.

Leaks in the transmission and distribution mains totaled 95 during the October, 1969 – June, 1970 year, 20 occurring at joints and 75 as a result of ruptured mains. Leaks at joints averaged one for every 41 miles of pipe and total leaks averaged one for every 9 miles of main. Thirty-four of the 95 leaks were caused by various contractors excavating while performing unrelated work.

The number of meters on active services totaled 65,087. Small size meters in residential properties are brought into our shop every seven years for test and repairs; testing and servicing of larger meters are carried out more frequently.

ENGINEERING OFFICE

The engineering staff has been engaged in the preparation of various specifications and estimates, plans for extensions of the distribution system into numerous real estate developments, and the usual problems related to the operation and maintenance of water works structures and equipment. Other work included real estate surveys, inventories and appraisals, consumer demands with respect to service requirements and proper size meters, inspection of water pipe installations, observing and conducting flow tests at various points in the distribution system and compiling pertinent data and records. Other services included computations of quantities and the preparation of monthly estimates for periodic payments on all outstanding contracts.

During the year, our engineers continued to supervise the construction work which started in 1966. The Raw Water Booster Pumping Station was completed in 1968. The Supplemental Tunnel and Aqueduct, and the Additions, Alterations and Improvements to the Water Purification Works were completed during the past year. This program consisted of twelve separate contracts and represents a capital investment, including \$350,000 for land fees and easements, of \$18,137,821. (Subject to final audit).

The staff has cooperated with officials in East Providence, the Greenville Water District, Cranston and Warwick to expedite connections to our system. Both East Providence and Greenville will be receiving Providence water during the latter part of calendar 1970, East Providence from a 42-inch connection off the new 102-inch aqueduct in Budlong Road, Cranston and the Greenville Water District from a 12-inch connection off our 24-inch prestressed reinforced concrete steel cylinder main in George Waterman Road near Putnam Pike, Johnston. The City of Cranston has prepared plans and specifications for the construction of a pumping station in the vicinity of Aqueduct Reservoir and a 5-million gallon covered underground reservoir in the Lawton Hill area. They have installed several thousand feet of pipe in the western section of the city and upon completion of their pumping and storage facilities will receive Providence water from a 42-inch connection off our 102-inch aqueduct. Warwick is progressing with their transmission system which will be supplied through a 42-inch connection to the 102-inch aqueduct. In addition, plans submitted by the Bristol County Water Company have been reviewed by our engineers.

A contract will be let out for bids during the next fiscal year to remove the electrically-driven 2700 GPM pump from the Neutaconkanut High Service Pumping Station and furnish and install a 7000 GPM pump in its place. This station will then have three electrically-driven units, (two 7000 GPM and one 3800 GPM) and a 7000 GPM gasoline engine-driven pump. The contract also calls for removing the existing 0.5 MGD fire pump at the Purification Plant, and furnishing and installing a 1 MGD unit. In addition to the pump installations at both locations, the contract requires that all necessary appurtenances be furnished and installed.

Neutaconkanut Reservoir was removed from service November 18, 1968. After draining, structural repairs were made to the gate house and roof deck. It was then disinfected, flushed, refilled and returned to service on March 5, 1969.

Bids were received and a contract awarded for the rehabilitation of the superstructures at the Siphon Chamber off Scituate Avenue in Cranston and the Gate Houses at Neutaconkanut Reservoir in Johnston and Longview Reservoir in North Providence.

The work covered repointing, caulking, scrub coating and weather-proofing exterior masonry at the three structures. At the Siphon Chamber the window openings were bricked up, whereas the steel sash at the two gate houses were replaced with aluminum sash and screening. All louvers were replaced with stainless steel units and stainless steel

insect screens. Necessary carpentry work was completed and painting of wood, metal surfaces and pipes, both interior and exterior, together with the interior walls, ceilings and floors was accomplished. The total cost of this work amounted to \$16,000.

COMMERCIAL AND ACCOUNTING

At the end of the fiscal year the department had 64,867 services. To meet the various requirements of our customers, we operated as usual on a 24-hour schedule. This included switchboard operators around the clock and two-way radio communication with our crews in the field. Day to day operations of this division also were carried out during the year, such as reading of meters, notifying customers of excessive water use, preparation of water bills, collection of delinquent accounts, investigating complaints, furnishing information to title companies and banks, processing new applications and preparing payrolls and job cost data.

Conversions of the old style meters to a remote reading system has progressed satisfactorily. During the year (October, 1969 – June, 1970) 2,646 installations were made bringing the total to 10,217 since the program was initiated in May, 1968.

FINANCIAL

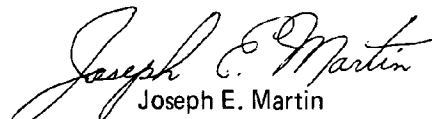
The gross income for the 9-month year (October, 1969 – June, 1970) totaled \$2,549,946.77. Revenue from the sale of water alone amounted to \$2,332,916.90. The remaining income of \$217,029.87 was received from other sources, including hydrant rentals, installation of services and fire supplies, miscellaneous items and the surplus in the Meter Revolving Fund. At the end of the fiscal year, unpaid water bills totaled \$359,125.35, or 12.8% of the total net billing.

Operating expenses continued to increase. The total for the 9-month period amounted to \$1,862,841.65. This item will become greater due to inflation, higher wages and the cost of money to float bond issues such as the one which will be necessary for the new Supplemental Tunnel and Aqueduct.

Principal payments on serial bonds outstanding amounted to \$80,000. Net bonded debt was \$2,650,000 at the close of the fiscal year; interest charges paid during the year came to \$87,425.

Financial accounts of the department, together with other statistical data for the year ended June 30, 1970, are appended to this report.

Respectfully submitted,


Joseph E. Martin
Chief Engineer

APPENDIX

LIST OF TABLES

Table

1. SCITUATE WATERSHED--Monthly Rainfall in Inches--Year Ended June 30, 1970.
2. SCITUATE WATERSHED--Monthly and Yearly Rainfall in Inches for 54 Years, 1916-1969. (Years Ended Sept. 30)
3. SCITUATE WATERSHED--Monthly and Yearly Rainfall in Inches for 54 Years, 1917-1970. (Years Ended June 30)
4. SCITUATE WATERSHED--Monthly and Yearly Runoff in Inches for 54 Years, 1916-1969. (Years Ended Sept. 30)
5. SCITUATE WATERSHED--Monthly and Yearly Runoff in Inches for 54 Years, 1917-1970. (Years Ended June 30)
6. SCITUATE WATERSHED--Monthly and Yearly Percent of Rainfall Collected for 54 Years, 1916-1969. (Years Ended Sept. 30)
7. SCITUATE WATERSHED--Monthly and Yearly Percent of Rainfall Collected for 54 Years, 1917-1970.
8. SCITUATE WATERSHED--Statistics of Storage--Year Ended June 30, 1970.
9. SCITUATE WATERSHED--Monthly Elevations for 42 Years, 1929-1970. (Scituate Reservoir)
10. SCITUATE WATERSHED--Statistics of Draft and Yield--Year Ended June 30, 1970.
11. SCITUATE WATERSHED--Reforestation, Number and Kinds of Trees Planted in Various Years.
12. GAINER DAM--Hydro-Electric Power Generation Statistics.
13. WATER PURIFICATION WORKS--Operating Statistics.
14. WATER PURIFICATION WORKS--Chemicals Used and Their Cost.
15. WATER PURIFICATION WORKS--Chemical and Physical Characteristics of Water in Process of Filtration.
16. WATER PURIFICATION WORKS--Chemical and Physical Characteristics of Water in Various Brooks and Reservoirs on Scituate Watershed.
17. WATER PURIFICATION WORKS--Chemical and Physical Characteristics of Water in the Distribution System.
18. WATER PURIFICATION WORKS--Bacteriologic Examination of Water in Process of Filtration--48 Hours on Agar at 20°C.
19. WATER PURIFICATION WORKS--Bacteriologic Examination of Water in Process of Filtration--24 Hours on Agar at 35°C.
20. WATER PURIFICATION WORKS--Bacteriologic Examination of Water in Process of Filtration--Coliform Bacteria.
21. WATER PURIFICATION WORKS--Bacteriologic Examination of Water in Various Brooks and Reservoirs on Scituate Watershed.
22. WATER PURIFICATION WORKS--Bacteriologic Examination of Water in the Distribution System.
23. WATER PURIFICATION WORKS--Mineral Analysis of Water.
24. WATER PURIFICATION WORKS--Sanitary Chemical Analysis.
25. WATER PURIFICATION WORKS--List of Laboratory Tests and Examinations.
26. WATER DISTRIBUTION SYSTEM--Neutaconkanut Pumping Station Operating Statistics.
27. WATER DISTRIBUTION SYSTEM--Bath Street Pumping Station Operating Statistics.
28. WATER DISTRIBUTION SYSTEM--Aqueduct Distribution Reservoir Statistics.
29. WATER DISTRIBUTION SYSTEM--Neutaconkanut Distribution Reservoir Statistics.
30. WATER DISTRIBUTION SYSTEM--Longview Distribution Reservoir Statistics.
31. WATER DISTRIBUTION SYSTEM--Water Mains Laid, Removed, etc.
32. WATER DISTRIBUTION SYSTEM--Public Water Mains in Use at End of Year.
33. WATER DISTRIBUTION SYSTEM--Gates in Use at End of Year.
34. WATER DISTRIBUTION SYSTEM--Services Installed and Removed.
35. WATER DISTRIBUTION SYSTEM--Services in Use on June 30, 1970.
36. WATER DISTRIBUTION SYSTEM--Fire Hydrants Installed, Removed and Number in System.
37. WATER METERS--Number, Make and Size of Meters in System.
38. CAPACITY AND CONSUMPTION--1941-1970.
39. WATER CONSUMPTION--Low Service, High Service and Total Consumption for Year.
40. WATER CONSUMPTION--Water Sold to State Institutions and City of Warwick.
41. WATER CONSUMPTION--Water Sold to East Smithfield Water Co., Smithfield Water Department, Kent County Water Authority and City of East Providence.
42. WATER CONSUMPTION--Average Daily Consumption for Years 1877-1969 (Years Ended Sept. 30)
43. WATER CONSUMPTION--Average Daily Consumption for Years 1877-1970 (Years Ended June 30)
44. FUEL OIL CONSUMPTION.
45. INCOME STATEMENT--Year Ended June 30, 1970.
46. OPERATING EXPENSES OF PROVIDENCE WATER WORKS--Year Ended June 30, 1970.
47. ANNUAL WATER WORKS REVENUES--Summary, 1930-1970.
48. STATEMENT OF REVENUE--Estimated and Actual - Year Ended June 30, 1970.
49. WATER WORKS DEPRECIATION AND EXTENSION FUND--Year Ended June 30, 1970.
50. STATEMENT--Serial Bonds Outstanding--Year Ended June 30, 1970.
51. PERSONAL PROPERTY INVENTORIES as of June 30, 1970.
52. STATEMENT OF METER REVOLVING FUND--Year Ended June 30, 1970.
53. STATEMENT OF WATER METER CONVERSION REVOLVING FUND--Year Ended June 30, 1970.
54. CONSTRUCTION OF MAJOR IMPROVEMENTS TO WATER SUPPLY SYSTEM--SUPPLEMENTAL TUNNEL AND AQUEDUCT.
55. CONSTRUCTION OF RAPID SAND FILTERS--PURIFICATION PLANT.
56. FEDERAL PROGRAMS--SUPPLEMENTAL TUNNEL AND AQUEDUCT (EDA 01-1-00087), RAPID SAND FILTERS--PURIFICATION PLANT (EDA 01-1-00088), RAW WATER BOOSTER PUMPING STATION (EDA 01-1-00089). SUMMARY FEDERAL PROGRAMS (87).
57. WATER WORKS PROPERTY -- Valuations and Taxes.
58. SUMMARY OF WATER WORKS STATISTICS--Year Ended June 30, 1970.

TABLE 1
MONTHLY RAINFALL IN INCHES ON SCITUATE WATERSHED
YEAR ENDED JUNE 30, 1970

1969-1970		STATIONS ON WATERSHED				
	Rocky Hill	Hopkins Mills	North Scituate	Westcott	Gainer Dam	Average
July	5.79	5.10	4.87	4.57	4.74	5.01
August	2.89	2.32	2.62	2.47	2.55	2.57
September	4.77	3.92	3.89	3.87	3.66	4.02
October	2.34	1.87	1.83	2.61	1.13	1.96
November	7.06	5.89	6.27	5.97	6.57	6.35
December	11.34	11.13	11.57	10.18	10.45	10.93
January	0.85	0.78	0.69	0.66	0.70	0.74
February	6.84	6.22	6.84	6.04	6.59	6.51
March	5.55	5.36	5.24	3.46	4.92	4.91
April	4.12	4.30	3.90	4.26	4.06	4.13
May	4.27	3.64	3.29	2.97	3.14	3.46
June	3.88	2.83	3.42	3.52	3.30	3.39
Total	59.70	53.36	54.43	50.58	51.81	*53.98
Monthly Average	4.98	4.45	4.54	4.22	4.32	4.50

*Total of Averages

TABLE 2
MONTHLY AND YEARLY RAINFALL IN INCHES ON SCITUATE WATERSHED

BASIS:-YEARS ENDED SEPTEMBER 30														Jan.	Dec.
Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total	Year	Total
1915-1916	2.75(e)	2.88	5.86	1.88	5.88	2.46	3.60	4.83	5.71	7.38	1.33	1.24	45.80	1916	42.56
1916-1917	2.61	2.34	3.30	3.96	2.18	4.91	2.70	4.15	4.54	1.51	6.13	2.66	40.99	1917	43.16
1917-1918	6.71	0.48	3.23	3.56	3.73	2.15	4.56	3.12	4.49	5.13	4.14	8.79	50.09	1918	47.09
1918-1919	1.07	2.60	3.75	4.89	3.42	6.05	4.31	5.99	3.65	5.47	6.65	6.07	53.92	1919	56.42
1919-1920	2.29	5.05	2.58	3.03	6.10	4.90	6.28	3.95	7.93	4.44	3.86	3.04	53.45	1920	55.81
1920-1921	1.34	5.85	5.09	3.46	3.06	3.72	5.45	3.73	4.30	6.80	2.97	2.53	48.30	1921	47.84
1921-1922	1.26	8.02	2.54	1.91	2.67	6.40	1.98	5.22	6.34	8.36	9.09	5.35	59.14	1922	54.76
1922-1923	2.92	1.41	3.11	6.78	1.82	3.73	5.92	1.48	4.93	2.78	2.35	2.15	39.38	1923	48.39
1923-1924	5.67	5.68	5.10	4.49	2.92	2.80	6.12	3.66	1.49	1.72	5.85	5.28	50.78	1924	39.15
1924-1925	0.21	2.23	2.38	4.41	2.22	4.76	2.85	2.72	2.36	6.14	1.70	2.96	34.94	1925	44.45
1925-1926	4.32	4.83	5.18	3.26	6.10	3.73	2.46	2.27	1.74	3.80	3.94	1.89	43.52	1926	43.33
1926-1927	5.04	5.55	3.55	2.98	3.31	1.59	2.56	3.41	3.36	3.99	8.55	2.61	46.50	1927	52.45
1927-1928	5.24	9.22	5.63	2.72	4.32	2.70	5.43	1.45	3.91	5.06	5.50	4.80	55.98	1928	45.59
1928-1929	3.99	2.50	3.21	5.20	4.89	3.92	7.56	3.47	2.27	2.06	2.93	1.35	43.35	1929	43.95
1929-1930	3.09	3.06	4.15	2.86	2.88	3.23	2.03	2.74	3.05	3.33	3.00	1.35	34.77	1930	35.58
1930-1931	3.36	4.65	3.10	3.55	2.57	6.37	3.36	4.19	6.31	3.74	5.96	1.97	49.13	1931	44.43
1931-1932	2.22	1.03	3.16	6.16	2.38	6.16	1.97	2.57	2.75	2.57	6.44	11.75	49.16	1932	58.60
1932-1933	6.63	7.13	2.09	2.02	3.81	6.55	6.18	3.76	4.04	2.00	3.60	7.56	55.37	1933	48.13
1933-1934	3.41	1.48	3.72	3.87	4.53	4.03	5.24	3.98	4.79	2.20	3.89	7.37	48.51	1934	51.14
1934-1935	3.25	4.44	3.55	7.24	3.09	1.93	4.76	2.27	5.12	4.10	1.42	3.59	44.76	1935	41.30
1935-1936	1.04	5.86	0.88	8.81	4.16	9.31	3.80	1.98	2.98	2.63	3.28	7.72	52.45	1936	57.75
1936-1937	2.00	1.25	9.83	5.02	2.45	4.09	5.42	3.05	3.40	1.58	6.47	4.19	48.75	1937	50.58
1937-1938	3.92	8.10	2.89	5.29	2.91	2.70	2.60	4.17	8.62	11.49	3.10	6.76	62.55	1938	57.83
1938-1939	2.64	3.91	3.64	3.08	5.06	5.86	4.53	0.94	2.95	1.20	6.52	3.47	43.80	1939	44.17
1939-1940	5.76	1.40	3.40	2.82	5.97	4.04	6.00	5.75	2.45	4.41	2.01	2.63	46.65	1940	47.18
1940-1941	2.00	6.81	2.28	3.12	3.37	2.97	1.36	3.16	4.92	5.90	4.00	0.20	40.09	1941	37.88
1941-1942	1.75	3.35	3.78	4.95	3.30	8.35	0.89	2.80	3.88	5.38	4.32	1.94	44.69	1942	51.98
1942-1943	4.26	5.52	6.39	3.56	1.95	3.68	3.90	3.87	1.99	3.41	2.15	1.30	41.98	1943	36.84
1943-1944	6.38	3.43	1.22	1.79	2.50	5.05	4.11	1.35	3.75	1.74	2.01	11.03	44.36	1944	48.82
1944-1945	2.71	8.45	4.33	3.45	5.79	2.13	3.36	4.89	5.17	2.74	3.06	2.84	48.92	1945	52.25
1945-1946	2.21	9.03	7.58	3.82	3.81	1.42	2.37	4.92	3.31	2.49	11.48	3.69	56.13	1946	43.01
1946-1947	0.48	1.32	3.90	2.98	2.60	3.85	5.40	3.37	4.10	4.86	2.91	4.02	39.79	1947	47.68
1947-1948	3.26	6.42	3.91	7.14	2.57	4.26	3.97	9.36	4.20	3.73	3.14	1.59	53.55	1948	55.70
1948-1949	4.86	7.43	3.45	4.38	3.62	2.47	4.65	4.03	0.10	1.24	6.07	3.49	45.79	1949	38.58
1949-1950	2.27	3.47	2.79	3.68	4.62	3.99	3.68	3.51	2.93	1.62	5.04	2.03	39.63	1950	45.11

(e Estimated

TABLE 2 (Continued)

MONTHLY AND YEARLY RAINFALL IN INCHES ON SCITUATE WATERSHED

BASIS:-YEARS ENDED SEPTEMBER 30

Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total	Jan.-Dec. Year	Total
1950-1951	2.23	7.21	4.57	4.95	4.48	5.91	3.97	5.20	2.71	3.36	3.08	2.41	50.08	1951	55.38
1951-1952	4.14	9.64	5.53	4.88	4.31	4.13	4.41	3.97	3.16	1.20	7.33	2.21	55.41	1952	45.26
1952-1953	1.94	3.02	4.20	7.38	4.64	9.33	7.54	3.24	1.67	4.27	2.94	2.74	52.91	1953	61.10
1953-1954	5.57	6.22	5.56	2.91	3.16	4.36	5.37	4.91	1.55	2.76	9.10	7.63	59.10	1954	57.44
1954-1955	3.13	5.65	6.91	1.00	4.96	4.17	4.16	1.78	4.53	2.43	12.75	4.53	56.00	1955	57.74
1955-1956	11.48	5.23	0.72	5.39	4.39	7.91	3.84	2.42	2.10	4.13	1.56	3.98	53.15	1956	49.06
1956-1957	2.96	4.92	5.46	2.90	2.46	3.33	5.01	1.55	0.72	0.96	1.58	1.58	33.43	1957	36.13
1957-1958	3.07	5.50	7.47	8.46	4.50	5.46	7.55	3.84	2.69	7.04	4.58	6.12	66.28	1958	58.88
1958-1959	3.83	3.03	1.78	2.56	4.12	7.13	4.41	1.15	5.55	6.74	2.27	0.57	43.14	1959	53.82
1959-1960	8.37	5.35	5.60	3.59	5.65	3.27	3.06	4.49	1.15	4.86	2.55	8.10	56.04	1960	47.42
1960-1961	3.58	2.86	4.26	3.24	3.48	4.27	5.92	5.65	2.25	3.01	4.02	9.43	51.97	1961	50.52
1961-1962	2.60	3.18	3.47	4.55	6.15	3.67	2.16	2.05	4.68	1.33	3.37	3.49	40.70	1962	47.58
1962-1963	8.95	4.20	2.98	3.23	3.41	3.71	2.03	3.06	3.36	3.59	1.65	4.41	44.58	1963	40.63
1963-1964	1.59	7.82	2.77	6.32	5.36	2.63	5.65	1.15	1.98	3.86	2.14	3.56	44.83	1964	45.58
1964-1965	2.84	3.81	6.28	4.13	4.51	2.13	2.54	2.03	2.71	2.61	2.58	1.96	38.13	1965	33.21
1965-1966	3.58	2.48	1.95	5.93	5.09	1.59	1.95	3.57	2.40	3.71	3.10	5.28	40.63	1966	45.45
1966-1967	3.65	5.41	3.77	2.10	4.00	6.15	4.81	8.33	3.12	6.71	4.50	3.86	56.41	1967	57.49
1967-1968	2.24	3.45	8.22	4.28	2.12	8.07	1.65	4.01	6.21	1.27	2.77	2.90	47.19	1968	50.30
1968-1969	2.46	7.00	7.56	1.73	6.88	3.65	5.82	4.22	1.37	5.01	2.57	4.02	52.29	1969	54.51
54 Years Average	3.54	4.67	4.14	4.10	3.90	4.39	4.13	3.57	3.55	3.81	4.25	4.07	*48.12	Avg.	*48.25
54 Years Maximum	11.48	9.64	9.83	8.81	6.88	9.33	7.56	9.36	8.62	11.49	12.75	11.75	66.28	Max.	61.10
54 Years Minimum	0.21	0.48	0.72	1.00	1.82	1.42	0.89	0.94	0.10	0.96	1.33	0.20	33.43	Min.	33.21

*Total of Monthly Averages.

Rainfall during February was the maximum of record for that month.

MONTHLY AND YEARLY RAINFALL IN INCHES ON SCITUATE WATERSHED

16

Year	1916-1917 to 1944-1945													Jan.-Dec.	
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total	Year	Total
1916-1917	7.38	1.33	1.24	2.61	2.34	3.30	3.96	2.18	4.91	2.70	4.15	4.54	40.64	1917	43.16
1917-1918	1.51	6.13	2.66	6.71	0.48	3.23	3.56	3.73	2.15	4.56	3.12	4.49	42.33	1918	47.09
1918-1919	5.13	4.14	8.79	1.07	2.60	3.75	4.89	3.42	5.05	4.31	5.99	3.65	53.79	1919	56.42
1919-1920	5.47	6.65	6.07	2.29	5.05	2.58	3.03	6.10	4.90	6.28	3.95	7.93	60.30	1920	55.81
1920-1921	4.44	3.86	3.04	1.34	5.85	5.09	3.46	3.06	3.72	5.45	3.73	4.30	47.34	1921	47.84
1921-1922	6.80	2.97	2.53	1.26	8.02	2.54	1.91	2.67	6.40	1.98	5.22	6.34	48.64	1922	54.76
1922-1923	8.36	9.09	5.35	2.92	1.41	3.11	6.78	1.82	3.73	5.92	1.48	4.93	54.90	1923	48.39
1923-1924	2.78	2.35	2.15	5.67	5.68	5.10	4.49	2.92	2.80	6.12	3.66	1.49	45.21	1924	39.15
1924-1925	1.72	5.85	5.28	0.21	2.23	2.38	4.41	2.22	4.76	2.85	2.72	2.36	36.99	1925	44.45
1925-1926	6.14	1.70	2.96	4.32	4.83	5.18	3.26	6.10	3.73	2.46	2.27	1.74	44.69	1926	43.33
1926-1927	3.80	3.94	1.89	5.04	5.55	3.55	2.98	3.31	1.59	2.56	3.41	3.36	40.98	1927	52.45
1927-1928	3.99	8.55	2.61	5.24	9.22	5.63	2.72	4.32	2.70	5.43	1.45	3.91	55.77	1928	45.59
1928-1929	5.06	5.50	4.80	3.99	2.50	3.21	5.20	4.89	3.92	7.56	3.47	2.27	52.37	1929	43.95
1929-1930	2.06	2.93	1.35	3.09	3.06	4.15	2.86	2.88	3.23	2.03	2.74	3.05	33.43	1930	35.58
1930-1931	3.33	3.00	1.35	3.36	4.65	3.10	3.55	2.57	6.37	3.36	4.19	6.31	45.14	1931	44.43
1931-1932	3.74	5.96	1.97	2.22	1.03	3.16	6.16	2.38	6.16	1.97	2.57	2.75	40.07	1932	58.60
1932-1933	2.57	6.44	11.75	6.63	7.13	2.09	2.02	3.81	6.55	6.18	3.76	4.04	62.97	1933	48.13
1933-1934	2.00	3.60	7.56	3.41	1.48	3.72	3.87	4.53	4.03	5.24	3.98	4.79	48.21	1934	51.14
1934-1935	2.20	3.89	7.37	3.25	4.44	3.55	7.24	3.09	1.93	4.76	2.27	5.12	49.11	1935	41.30
1935-1936	4.10	1.42	3.59	1.04	5.86	0.88	8.81	4.16	9.31	3.80	1.98	2.98	47.93	1936	57.75
1936-1937	2.63	3.28	7.72	2.00	1.25	9.83	5.02	2.45	4.09	5.42	3.05	3.40	50.14	1937	50.58
1937-1938	1.58	6.47	4.19	3.92	8.10	2.89	5.29	2.91	2.70	2.60	4.17	8.62	53.44	1938	57.83
1938-1939	11.49	3.10	6.76	2.64	3.91	3.64	3.08	5.06	5.86	4.53	0.94	2.95	53.96	1939	44.17
1939-1940	1.20	6.52	3.47	5.76	1.40	3.40	2.82	5.97	4.04	6.00	5.76	2.45	48.79	1940	47.18
1940-1941	4.41	2.01	2.63	2.00	6.81	2.28	3.12	3.37	2.97	1.36	3.16	4.92	39.04	1941	37.88
1941-1942	5.90	4.00	0.20	1.75	3.35	3.78	4.95	3.30	8.35	0.89	2.80	3.88	43.15	1942	51.98
1942-1943	5.38	4.32	1.94	4.26	5.52	6.39	3.56	1.95	3.68	3.90	3.87	1.99	46.76	1943	36.84
1943-1944	3.41	2.15	1.30	6.38	3.43	1.22	1.79	2.50	5.05	4.11	1.35	3.75	36.44	1944	48.82
1944-1945	1.74	2.01	11.03	2.71	8.45	4.33	3.45	5.79	2.13	3.36	4.89	5.17	55.06	1945	52.25
1945-1946	2.74	3.06	2.84	2.21	9.03	7.58	3.82	3.81	1.42	2.37	4.92	3.31	47.11	1946	43.01
1946-1947	2.49	11.48	3.69	0.48	1.32	3.90	2.98	2.60	3.85	5.40	3.37	4.10	45.66	1947	47.68
1947-1948	4.86	2.91	4.02	3.26	6.42	3.91	7.14	2.57	4.26	3.97	9.36	4.20	56.88	1948	55.70
1948-1949	3.73	3.14	1.59	4.86	7.43	3.45	4.38	3.62	2.47	4.65	4.03	0.10	43.45	1949	38.58
1949-1950	1.24	6.07	3.49	2.27	3.47	2.79	3.68	4.62	3.99	3.68	3.51	2.93	41.74	1950	45.11

TABLE 3 (Continued)

MONTHLY AND YEARLY RAINFALL IN INCHES ON SCITUATE WATERSHED

BASIS:- YEARS ENDED JUNE 30. (FISCAL YEAR CHANGED 1969-1970 FROM FORMER OCT.-SEPT. TO JULY-JUNE PERIOD.)

Year	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total	Jan.-Dec. Year	Total
1950-1951	1.62	5.04	2.03	2.23	7.21	4.57	4.95	4.48	5.91	3.97	5.20	2.71	49.92	1951	55.38
1951-1952	3.36	3.08	2.41	4.14	9.64	5.53	4.88	4.81	4.13	4.41	3.97	3.16	53.52	1952	45.26
1952-1953	1.20	7.33	2.21	1.94	3.02	4.20	7.38	4.64	9.33	7.54	3.24	1.67	53.70	1953	61.10
1953-1954	4.27	2.94	2.74	5.57	6.22	5.56	2.91	3.16	4.36	5.37	4.91	1.55	49.56	1954	57.44
1954-1955	2.76	9.10	7.63	3.13	5.65	6.91	1.00	4.96	4.17	4.16	1.78	4.53	55.78	1955	57.74
1955-1956	2.43	12.75	4.53	11.48	5.23	0.72	5.39	4.39	7.91	3.84	2.42	2.10	63.19	1956	49.06
1956-1957	4.13	1.56	3.98	2.96	4.92	5.46	2.90	2.46	3.33	5.01	1.55	0.72	38.98	1957	36.13
1957-1958	0.96	1.58	1.58	3.07	5.50	7.47	8.46	4.50	5.46	7.55	3.84	2.69	52.66	1958	58.88
1958-1959	7.04	4.58	6.12	3.83	3.03	1.78	2.56	4.12	7.13	4.41	1.15	5.55	51.30	1959	53.82
1959-1960	6.74	2.27	0.57	8.37	5.35	5.60	3.59	5.65	3.27	3.06	4.49	1.15	50.11	1960	47.42
1960-1961	4.86	2.55	8.10	3.58	2.86	4.26	3.24	3.48	4.27	5.92	5.65	2.25	51.02	1961	50.52
1961-1962	3.01	4.02	9.43	2.60	3.18	3.47	4.55	6.15	3.67	2.16	2.05	4.68	48.97	1962	47.58
1962-1963	1.33	3.37	3.49	8.95	4.20	2.98	3.23	3.41	3.71	2.03	3.06	3.36	43.12	1963	40.63
1963-1964	3.59	1.65	4.41	1.59	7.82	2.77	6.32	5.36	2.63	5.65	1.15	1.98	44.92	1964	45.58
1964-1965	3.86	2.14	3.56	2.84	3.81	6.28	4.13	4.51	2.13	2.54	2.03	2.71	40.54	1965	33.21
1965-1966	2.61	2.58	1.96	3.58	2.48	1.95	5.93	5.09	1.59	1.95	3.57	2.40	35.69	1966	45.45
1966-1967	3.71	3.10	5.28	3.65	5.41	3.77	2.10	4.00	6.15	4.81	8.33	3.12	53.43	1967	57.49
1967-1968	6.71	4.50	3.86	2.24	3.45	8.22	4.28	2.12	8.07	1.65	4.01	6.21	55.32	1968	50.30
1968-1969	1.27	2.77	2.90	2.46	7.00	7.56	1.73	6.88	3.65	5.82	4.22	1.37	47.63	1969	54.51
1969-1970	5.01	2.57	4.02	1.96	6.35	10.93	0.74	6.51	4.91	4.13	3.46	3.39	53.98	1970	-----
54 Years Average	3.81	4.25	4.07	3.52	4.73	4.23	4.08	3.91	4.44	4.14	3.54	3.51	*48.23	Avg.	*48.25
54 Years Maximum	11.49	12.75	11.75	11.48	9.64	10.93	8.81	6.88	9.33	7.56	9.36	8.62	63.19	Max.	61.10
54 Years Minimum	0.96	1.33	0.20	0.21	0.48	0.72	0.74	1.82	1.42	0.89	0.94	0.10	33.43	Min.	33.21

*Total of Monthly Averages.

Rainfall during December was the maximum of record for that month.

Rainfall during January was the minimum of record for that month.

NOTE: The 54-Year calendar year average is for the years 1916-1969.

BASIS:-YEARS ENDED SEPTEMBER 30															
Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total	Jan.-Dec. Year	Total
1915-1916	0.75(e	1.24(e	3.03(e	2.50	3.70	3.99	4.64	3.69	3.42	2.74	1.09	0.42	31.21	1916	28.25
1916-1917	0.51	0.58	0.97	1.91	1.30	4.29	3.05	2.79	2.18	0.79	0.71	0.63	19.71	1917	22.41
1917-1918	1.79	1.59	1.38	1.83	4.04	3.17	3.40	2.24	1.24	0.47	0.82	1.81	23.78	1918	23.75
1918-1919	1.02	1.34	2.37	3.81	2.27	5.01	4.43	3.86	1.27	1.35	0.91	3.33	30.97	1919	32.65
1919-1920	1.45	2.25	2.71	1.19	1.69	9.60	5.10	3.73	4.15	1.38	0.79	0.34	34.38	1920	33.29
1920-1921	0.37	1.73	3.22	2.79	1.69	4.19	3.68	2.85	0.95	2.56	0.93	0.31	25.27	1921	24.52
1921-1922	0.24	1.65	2.68	1.13	1.80	4.81	3.92	3.50	2.39	3.50	3.59	4.39	33.60	1922	33.32
1922-1923	1.66	1.26	1.37	4.16	2.46	6.10	4.06	2.68	1.15	0.64	0.40	0.25	26.19	1923	29.75
1923-1924	1.27	2.01	4.57	4.52	1.88	3.43	5.70	3.38	1.05	0.20	0.56	0.68	29.25	1924	23.31
1924-1925	0.49	0.45	0.97	0.91	3.65	3.41	2.46	1.46	0.52	0.58	0.39	0.32	15.61	1925	19.04
1925-1926	0.61	1.48	3.25	2.23	3.11	4.38	3.00	1.70	0.62	0.40	0.42	0.17	21.37	1926	21.03
1926-1927	0.76	2.15	2.09	3.34	2.64	3.05	1.71	2.03	1.44	0.32	1.59	0.64	21.76	1927	30.14
1927-1928	1.95	6.73	4.70	2.62	3.76	2.86	3.18	2.05	1.15	1.08	1.17	0.80	32.05	1928	23.03
1928-1929	1.21	1.16	1.99	4.02	3.65	5.56	6.09	3.56	0.48	0.06	0.07	-0.09	27.76	1929	25.18
1929-1930	0.07	0.53	1.18	1.96	2.38	2.74	1.84	0.88	0.42	0.09	0.04	-0.11	12.02	1930	11.82
1930-1931	0.12	0.63	0.83	1.56	2.11	5.95	3.21	3.10	2.97	0.69	0.85	0.10	22.12	1931	21.67
1931-1932	0.07	0.15	0.91	3.35	2.16	4.10	3.08	1.35	0.39	0.07	0.35	3.27	19.25	1932	30.15
1932-1933	3.48	6.29	2.26	2.24	2.70	6.28	6.88	1.93	1.57	0.17	0.25	1.52	35.57	1933	27.13
1933-1934	0.95	0.82	1.82	3.78	1.18	5.48	6.08	2.88	1.47	0.08	0.14	1.40	26.08	1934	28.94
1934-1935	1.33	1.91	3.21	4.78	2.83	4.22	4.05	1.71	1.78	0.62	-0.14	0.26	26.56	1935	21.82
1935-1936	-0.13	1.09	0.75	3.94	1.93	11.51	4.45	1.59	0.44	0.03	-0.02	0.82	26.40	1936	31.64
1936-1937	0.46	0.43	6.06	4.59	2.77	3.34	3.79	2.52	0.75	0.02	0.60	0.57	25.90	1937	27.16
1937-1938	0.79	4.17	3.25	4.15	2.99	2.99	2.29	1.84	2.85	6.93	1.32	1.66	35.23	1938	33.76
1938-1939	1.22	1.90	3.62	2.11	4.12	5.24	4.90	1.08	0.31	-0.24	0.22	0.09	24.57	1939	21.35
1939-1940	0.63	1.35	1.54	2.03	1.51	4.86	6.89	3.17	1.65	0.84	-0.14	-0.04	24.29	1940	23.98
1940-1941	-0.07	1.63	1.65	1.53	2.88	2.42	1.65	1.16	1.33	0.54	0.10	-0.41	14.41	1941	12.43
1941-1942	-0.15	0.52	0.86	1.87	2.54	7.14	1.75	1.06	0.59	0.86	0.26	-0.17	17.13	1942	22.77
1942-1943	0.45	1.86	4.56	2.45	3.46	4.40	2.68	3.01	0.36	0.02	-0.16	-0.22	22.87	1943	17.97
1943-1944	0.60	0.95	0.42	0.73	1.23	3.24	3.53	1.08	0.43	-0.26	-0.31	1.73	13.37	1944	18.61
1944-1945	0.50	3.16	3.55	2.91	2.58	5.61	2.15	3.10	1.26	0.15	-0.12	-0.15	24.70	1945	24.02
1945-1946	0.06	1.88	4.59	3.93	2.98	3.70	1.43	2.50	1.65	0	2.35	0.56	25.63	1946	21.08
1946-1947	0.49	0.30	1.19	2.16	1.52	4.01	3.31	2.86	1.09	0.53	0.12	0.31	17.89	1947	20.47
1947-1948	0.23	2.94	1.39	1.55	3.15	7.16	3.76	5.25	3.12	0.56	0.15	-0.21	29.05	1948	29.08
1948-1949	0.35	2.24	2.00	3.57	3.22	2.92	3.20	1.78	-0.02	-0.26	0.02	0.09	19.11	1949	16.40
1949-1950	0.05	0.57	1.26	2.03	2.42	4.16	3.01	2.20	1.00	-0.11	0.22	-0.02	16.79	1950	19.39

(e Estimated

TABLE 4 (Continued)

MONTHLY AND YEARLY RUNOFF IN INCHES ON SCITUATE WATERSHED (92.8 SQ. MI.)

BASIS:-YEARS ENDED SEPTEMBER 30

Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total	Jan.-Dec. Year	Total
1950-1951	0.04	1.85	2.59	3.24	4.95	4.35	4.30	2.70	1.21	0.14	0.07	-0.07	25.38	1951	30.16
1951-1952	0.34	4.62	4.30	4.24	3.30	5.02	2.97	2.46	0.98	-0.35	0.53	-0.20	28.21	1952	20.27
1952-1953	-0.20	0.37	1.15	4.61	4.35	7.24	6.36	3.20	0.20	0.07	-0.05	-0.13	27.17	1953	32.41
1953-1954	0.38	1.86	4.32	2.12	2.65	3.56	4.01	3.71	0.33	-0.01	0.93	3.95	27.83	1954	32.15
1954-1955	1.33	3.65	5.90	2.46	3.61	4.26	2.76	1.62	0.89	0.02	4.04	1.19	31.73	1955	35.13
1955-1956	7.22	5.56	1.50	3.27	4.09	4.57	6.57	1.98	0.96	0.37	-0.22	0.05	35.92	1956	25.87
1956-1957	0.23	1.10	2.90	2.41	2.10	2.78	4.54	0.58	-0.18	-0.41	-0.38	-0.22	15.45	1957	14.20
1957-1958	0.06	0.52	2.40	6.59	2.69	6.03	6.89	3.88	0.83	0.85	0.86	1.31	32.91	1958	35.66
1958-1959	2.05	1.85	1.83	1.65	2.58	5.86	4.52	1.45	1.23	2.09	0.07	-0.23	24.95	1959	26.97
1959-1960	1.17	2.18	4.40	3.29	5.09	3.15	4.01	2.19	0.35	0.38	0.00	1.54	27.75	1960	25.51
1960-1961	0.98	2.11	2.42	2.21	3.68	4.97	4.75	3.63	1.30	0.25	0.20	2.30	28.80	1961	27.93
1961-1962	1.28	1.53	1.83	4.32	1.66	5.24	3.61	1.53	0.98	-0.09	0.04	0.07	22.01	1962	24.34
1962-1963	1.89	2.97	2.12	1.81	1.88	4.47	1.69	1.88	0.54	0.10	-0.25	-0.02	19.08	1963	15.25
1963-1964	-0.11	1.59	1.67	4.68	2.82	3.47	4.61	0.87	0.01	0.03	-0.14	-0.11	19.39	1964	19.30
1964-1965	0.11	0.47	2.48	1.68	3.43	3.02	1.89	1.04	0.44	-0.10	-0.14	-0.06	14.26	1965	11.89
1965-1966	0.04	0.21	0.44	0.70	2.26	3.11	1.10	1.68	0.73	0.11	0.09	0.36	10.83	1966	13.88
1966-1967	0.50	1.87	1.37	2.25	1.60	4.52	4.92	4.94	1.61	1.67	1.58	0.61	27.44	1967	30.51
1967-1968	0.80	1.50	4.51	2.91	2.76	7.53	2.00	1.78	2.26	0.27	0.03	0.11	26.46	1968	24.79
1968-1969	0.00	1.61	3.53	1.72	1.40	5.38	5.72	2.74	0.70	0.41	0.22	0.23	23.66	1969	25.97
54 Years Average	0.81	1.82	2.48	2.78	2.73	4.70	3.81	2.40	1.16	0.61	0.50	0.66	*24.46	Avg.	*24.51
54 Years Maximum	7.22	6.73	6.06	6.59	5.09	11.51	6.89	5.25	4.15	6.93	4.04	4.39	35.92	Max.	35.66
54 Years Minimum	-0.20	0.15	0.42	0.70	1.18	2.42	1.10	0.58	-0.18	-0.41	-0.38	-0.41	10.83	Min.	11.82

*Total of Monthly Averages.

TABLE 5

MONTHLY AND YEARLY RUNOFF IN INCHES ON SCITUATE WATERSHED (92.8 SQ. MI.)

BASIS:- YEARS ENDED JUNE 30. (FISCAL YEAR CHANGED 1969-1970 FROM FORMER OCT.-SEPT. TO JULY-JUNE PERIOD.)

Year	Basis:— Years ended June 30. (Fiscal year changed 1955 from March 31 to July 1; see table on page 10.)												Jan.-Dec.		
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total	Year	Total
1916-1917	2.74	1.09	0.42	0.51	0.58	0.97	1.91	1.30	4.29	3.05	2.79	2.18	21.83	1917	22.41
1917-1918	0.79	0.71	0.63	1.79	1.59	1.38	1.83	4.04	3.17	3.40	2.24	1.24	22.81	1918	23.75
1918-1919	0.47	0.82	1.81	1.02	1.34	2.37	3.81	2.27	5.01	4.43	3.86	1.27	28.48	1919	32.65
1919-1920	1.35	0.91	3.33	1.45	2.25	2.71	1.19	1.69	9.60	5.10	3.73	4.15	37.46	1920	33.29
1920-1921	1.38	0.79	0.34	0.37	1.73	3.22	2.79	1.69	4.19	3.68	2.85	0.95	23.98	1921	24.52
1921-1922	2.56	0.93	0.31	0.24	1.65	2.68	1.13	1.80	4.81	3.92	3.50	2.39	25.92	1922	33.32
1922-1923	3.50	3.59	4.39	1.66	1.26	1.37	4.16	2.46	6.10	4.06	2.68	1.15	36.38	1923	29.75
1923-1924	0.64	0.40	0.25	1.27	2.01	4.57	4.52	1.88	3.43	5.70	3.38	1.05	29.10	1924	23.31
1924-1925	0.20	0.56	0.68	0.49	0.45	0.97	0.91	3.65	3.41	2.46	1.46	0.52	15.76	1925	19.04
1925-1926	0.58	0.39	0.32	0.61	1.48	3.25	2.23	3.11	4.38	3.00	1.70	0.62	21.67	1926	21.03
1926-1927	0.40	0.42	0.17	0.76	2.15	2.09	3.34	2.54	3.05	1.71	2.03	1.44	20.20	1927	30.14
1927-1928	0.32	1.59	0.64	1.95	6.73	4.70	2.62	3.76	2.86	3.18	2.05	1.15	31.55	1928	23.03
1928-1929	1.08	1.17	0.80	1.21	1.16	1.99	4.02	3.65	5.56	6.09	3.56	0.48	30.77	1929	25.18
1929-1930	0.06	0.07	-0.09	0.07	0.53	1.18	1.96	2.38	2.74	1.84	0.88	0.42	12.04	1930	11.82
1930-1931	0.09	0.04	-0.11	0.12	0.63	0.83	1.56	2.11	5.95	3.21	3.10	2.97	20.50	1931	21.67
1931-1932	0.69	0.85	0.10	0.07	0.15	0.91	3.35	2.16	4.10	3.08	1.35	0.39	17.20	1932	30.15
1932-1933	0.07	0.35	3.27	3.48	6.29	2.26	2.24	2.70	6.28	6.88	1.93	1.57	37.32	1933	27.13
1933-1934	0.17	0.25	1.52	0.95	0.82	1.82	3.78	1.18	5.48	6.08	2.88	1.47	26.40	1934	28.94
1934-1935	0.08	0.14	1.40	1.33	1.91	3.21	4.78	2.83	4.22	4.05	1.71	1.78	27.44	1935	21.82
1935-1936	0.62	-0.14	0.26	-0.13	1.09	0.75	3.94	1.93	11.51	4.45	1.59	0.44	26.31	1936	31.64
1936-1937	0.03	-0.02	0.82	0.46	0.43	6.06	4.59	2.77	3.34	3.79	2.52	0.75	25.54	1937	27.16
1937-1938	0.02	0.60	0.57	0.79	4.17	3.25	4.15	2.99	2.99	2.29	1.84	2.85	26.51	1938	33.76
1938-1939	6.93	1.32	1.66	1.22	1.90	3.62	2.11	4.12	5.24	4.90	1.08	0.31	34.41	1939	21.35
1939-1940	-0.24	0.22	0.09	0.63	1.35	1.54	2.03	1.51	4.86	6.89	3.17	1.65	23.70	1940	23.98
1940-1941	0.84	-0.14	-0.04	-0.07	1.63	1.65	1.53	2.88	2.42	1.65	1.16	1.33	14.84	1941	12.43
1941-1942	0.54	0.10	-0.41	-0.15	0.52	0.86	1.87	2.54	7.14	1.75	1.06	0.59	16.41	1942	22.77
1942-1943	0.86	0.26	-0.17	0.45	1.86	4.56	2.45	3.46	4.40	2.68	3.01	0.36	24.18	1943	17.97
1943-1944	0.02	-0.16	-0.22	0.60	0.95	0.42	0.73	1.23	3.24	3.53	1.08	0.43	11.85	1944	18.61
1944-1945	-0.26	-0.31	1.73	0.50	3.16	3.55	2.91	2.58	5.61	2.15	3.10	1.26	25.98	1945	24.02
1945-1946	0.15	-0.12	-0.15	0.06	1.88	4.59	3.93	2.98	3.70	1.43	2.50	1.65	22.60	1946	21.08
1946-1947	0.00	2.35	0.56	0.49	0.30	1.19	2.16	1.52	4.01	3.31	2.86	1.09	19.84	1947	20.47
1947-1948	0.53	0.12	0.31	0.23	2.94	1.39	1.55	3.15	7.16	3.76	5.25	3.12	29.51	1948	29.08
1948-1949	0.55	0.15	-0.21	0.35	2.24	2.00	3.57	3.22	2.92	3.20	1.78	-0.02	19.76	1949	16.40
1949-1950	-0.26	0.02	0.09	0.05	0.57	1.26	2.03	2.42	4.16	3.01	2.20	1.00	16.55	1950	19.39

TABLE 5 (Continued)

MONTHLY AND YEARLY RUNOFF IN INCHES ON SCITUATE WATERSHED (92.8 SQ.MI.)

BASIS:- YEARS ENDED JUNE 30. (FISCAL YEAR CHANGED 1969-1970 FROM FORMER OCT.-SEPT. TO JULY-JUNE PERIOD.)

Year	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total	Jan.-Dec.	
														Year	Total
1950-1951	-0.11	0.22	-0.02	0.04	1.85	2.59	3.24	4.95	4.36	4.30	2.70	1.21	25.33	1951	30.16
1951-1952	0.14	0.07	-0.07	0.34	4.62	4.30	4.24	3.30	5.02	2.97	2.46	0.98	28.37	1952	20.27
1952-1953	-0.35	0.53	-0.20	-0.20	0.37	1.15	4.61	4.35	7.24	6.36	3.20	0.20	27.26	1953	32.41
1953-1954	0.07	-0.05	-0.13	0.38	1.86	4.32	2.12	2.66	3.56	4.01	3.71	0.33	22.84	1954	32.15
1954-1955	-0.01	0.93	3.96	1.33	3.65	5.90	2.46	3.61	4.26	2.76	1.62	0.89	31.36	1955	35.13
1955-1956	0.02	4.04	1.19	7.22	5.56	1.50	3.27	4.09	4.57	6.57	1.98	0.96	40.97	1956	25.87
1956-1957	0.37	-0.22	0.05	0.23	1.10	2.90	2.41	2.10	2.78	4.54	0.58	-0.18	16.66	1957	14.20
1957-1958	-0.41	-0.38	-0.22	0.06	0.52	2.40	6.59	2.69	6.03	6.89	3.88	0.83	28.88	1958	35.66
1958-1959	0.85	0.86	1.31	2.05	1.85	1.83	1.65	2.58	5.86	4.52	1.45	1.23	26.04	1959	26.97
1959-1960	2.09	0.07	-0.23	1.17	2.18	4.40	3.29	5.09	3.15	4.01	2.19	0.35	27.76	1960	25.51
1960-1961	0.38	0.00	1.54	0.98	2.11	2.42	2.21	3.68	4.97	4.75	3.63	1.30	27.97	1961	27.93
1961-1962	0.25	0.20	2.30	1.28	1.53	1.83	4.32	1.66	5.24	3.61	1.53	0.98	24.73	1962	24.34
1962-1963	-0.09	0.04	0.07	1.89	2.97	2.12	1.81	1.88	4.47	1.69	1.88	0.54	19.27	1963	15.25
1963-1964	0.10	-0.25	-0.02	-0.11	1.59	1.67	4.68	2.82	3.47	4.61	0.87	0.01	19.44	1964	19.30
1964-1965	0.03	-0.14	-0.11	0.11	0.47	2.48	1.68	3.43	3.02	1.89	1.04	0.44	14.34	1965	11.89
1965-1966	-0.10	-0.14	-0.06	0.04	0.21	0.44	0.70	2.26	3.11	1.10	1.68	0.73	9.97	1966	13.88
1966-1967	0.11	0.09	0.36	0.50	1.87	1.37	2.25	1.60	4.52	4.92	4.94	1.61	24.14	1967	30.51
1967-1968	1.67	1.58	0.61	0.80	1.50	4.51	2.91	2.76	7.53	2.00	1.78	2.26	29.91	1968	24.79
1968-1969	0.27	0.03	0.11	0.00	1.61	3.53	1.72	1.40	5.38	5.72	2.74	0.70	23.21	1969	25.97
1969-1970	0.41	0.22	0.23	0.21	2.14	5.10	1.85	5.49	3.15	3.81	1.81	1.23	25.65	1970	----
54 Years Average	0.61	0.50	0.66	0.80	1.84	2.52	2.77	2.76	4.69	3.79	2.36	1.12	*24.42	Avg.	*24.51
54 Years Maximum	6.93	4.04	4.39	7.22	6.73	6.06	6.59	5.49	11.51	6.89	5.25	4.15	40.97	Max.	35.66
54 Years Minimum	-0.41	-0.38	-0.41	-0.20	0.15	0.42	0.70	1.18	2.42	1.10	0.58	-0.18	9.97	Min.	11.82

*Total of Monthly Averages.

Runoff during February was the maximum of record for that month.

NOTE: The 54-Year calendar year average is for the years 1916-1969.

TABLE 6

MONTHLY AND YEARLY PERCENT OF RAINFALL COLLECTED ON SCITUATE WATERSHED

BASIS:-YEARS ENDED SEPTEMBER 30

Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total	Year	Jan.-Dec. Total
1915-1916	27.3(e	43.0(e	51.7(e	133.0	62.9	162.2	128.9	76.4	59.9	37.1	82.0	33.9	68.1	1916	66.4
1916-1917	19.5	24.8	29.4	48.2	59.6	87.4	113.0	67.2	48.0	52.3	11.6	23.7	48.1	1917	51.9
1917-1918	26.7	331.2	42.7	51.4	108.3	147.4	74.6	71.8	27.6	9.2	19.8	20.6	47.5	1918	50.4
1918-1919	95.3	51.5	63.2	77.9	66.4	82.8	102.8	64.4	34.8	24.7	13.7	54.8	57.4	1919	57.9
1919-1920	63.3	44.6	105.0	39.3	27.7	195.9	81.2	94.4	52.3	31.1	20.5	11.2	64.3	1920	59.6
1920-1921	27.6	29.6	63.3	80.6	55.2	112.6	67.5	76.4	22.1	37.6	31.3	12.2	52.3	1921	51.2
1921-1922	19.0	20.6	105.5	59.2	67.4	75.2	198.0	67.0	37.7	41.9	39.5	82.0	56.8	1922	60.8
1922-1923	56.8	89.4	44.0	61.4	135.2	163.5	68.6	181.1	23.3	23.0	17.0	11.6	66.5	1923	61.5
1923-1924	22.4	35.4	89.6	100.7	64.4	122.5	93.1	92.3	70.5	11.6	9.6	12.9	57.6	1924	59.5
1924-1925	233.3	20.2	40.8	20.6	164.4	71.6	86.3	53.7	22.0	9.4	22.9	10.8	44.7	1925	42.8
1925-1926	14.1	30.6	62.7	68.4	51.0	117.4	122.0	74.9	35.6	10.5	10.6	9.0	49.1	1926	48.5
1926-1927	15.1	38.7	58.9	112.1	79.8	191.8	66.8	59.5	42.8	8.0	18.6	24.5	46.8	1927	57.5
1927-1928	37.2	73.0	83.5	96.3	87.0	105.9	58.6	141.4	29.4	21.3	21.3	16.7	57.2	1928	50.5
1928-1929	30.3	46.4	62.0	77.3	74.6	141.8	80.6	102.6	21.1	2.9	2.4	-6.7	64.0	1929	57.3
1929-1930	2.3	17.3	28.4	68.5	82.6	84.8	90.6	32.1	13.8	2.7	1.3	-8.1	34.6	1930	33.2
1930-1931	3.6	13.5	26.8	43.9	82.1	93.4	95.5	74.0	47.1	18.4	14.3	5.1	45.0	1931	48.8
1931-1932	3.2	14.6	28.8	54.4	90.8	66.6	156.3	52.5	14.2	2.7	5.4	27.8	39.2	1932	51.4
1932-1933	52.5	88.2	108.1	110.9	70.9	95.9	111.3	51.3	38.9	8.5	6.9	20.1	64.2	1933	56.4
1933-1934	27.9	55.4	48.9	97.7	26.0	136.0	116.0	72.4	30.7	3.6	3.6	19.0	53.8	1934	56.6
1934-1935	40.9	43.0	90.4	66.0	91.6	218.6	85.1	75.3	34.8	15.1	-9.8	7.2	59.3	1935	52.8
1935-1936	-12.5	18.6	85.2	44.7	46.4	123.6	117.1	80.3	14.8	1.1	-0.6	10.6	50.3	1936	54.8
1936-1937	23.0	34.4	61.6	91.4	113.1	81.7	69.9	82.6	22.0	1.3	9.3	13.6	53.1	1937	53.7
1937-1938	20.2	51.5	112.5	78.4	102.7	110.7	88.1	44.1	33.1	60.3	42.6	24.6	56.3	1938	58.4
1938-1939	46.2	48.6	99.4	68.5	81.4	89.4	108.2	114.9	10.5	-20.0	3.4	2.6	56.1	1939	48.3
1939-1940	10.9	96.4	45.3	72.0	25.3	120.3	114.8	55.0	67.3	19.0	-7.0	-1.5	52.1	1940	50.8
1940-1941	-3.5	23.9	72.4	49.0	87.4	81.5	121.3	36.7	27.0	9.2	2.5	-205.0	35.9	1941	32.8
1941-1942	-8.6	15.5	22.8	37.8	77.0	85.5	196.6	37.8	15.2	16.0	6.0	-8.8	38.3	1942	43.8
1942-1943	10.6	33.7	71.4	68.8	177.4	119.6	68.7	77.8	18.1	0.6	-7.4	-16.9	54.5	1943	48.8
1943-1944	9.4	27.7	34.4	40.8	49.2	64.2	85.9	80.0	11.5	-14.9	-15.4	15.7	30.1	1944	38.1
1944-1945	18.4	37.4	82.0	84.3	44.6	263.4	64.0	63.4	24.4	5.5	-3.9	-5.3	50.5	1945	46.0
1945-1946	2.7	20.8	60.6	102.9	78.2	260.6	60.3	50.8	49.8	0	20.5	15.2	45.7	1946	49.0
1946-1947	102.1	22.7	30.5	72.5	58.5	104.2	61.3	84.9	26.6	10.9	4.1	7.7	45.0	1947	42.9
1947-1948	7.0	45.8	35.5	21.7	122.6	168.1	94.7	56.1	74.3	15.0	4.8	-13.2	54.2	1948	52.2
1948-1949	7.2	30.1	58.0	81.5	89.0	118.2	68.8	44.2	-20.0	-21.0	0.3	2.6	41.7	1949	42.5
1949-1950	2.2	16.4	45.2	55.2	52.4	104.3	81.8	62.7	34.1	-6.8	4.4	-1.0	42.4	1950	43.3

(e Estimated

TABLE 6 (Continued)
MONTHLY AND YEARLY PERCENT OF RAINFALL COLLECTED ON SCITUATE WATERSHED
BASIS:-YEARS ENDED SEPTEMBER 30

Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total	Jan.-Dec. Year	Total
1950-1951	1.8	25.6	56.7	65.4	110.5	73.8	108.3	51.9	44.6	4.2	2.3	-2.9	50.7	1951	54.5
1951-1952	8.2	47.9	77.8	86.9	68.6	121.5	67.3	61.7	31.0	-29.2	7.2	-9.0	50.9	1952	44.8
1952-1953	-10.3	12.2	27.4	62.5	93.8	77.6	84.4	98.8	12.0	1.6	-1.7	-4.7	51.4	1953	53.0
1953-1954	6.8	29.9	77.7	72.8	84.2	81.6	74.7	75.6	21.3	-0.4	10.2	51.9	47.1	1954	56.0
1954-1955	42.5	64.6	85.4	246.0	72.8	102.2	66.3	91.0	19.6	0.8	32.7	26.3	56.7	1955	60.8
1955-1956	62.9	122.7	208.3	60.7	93.2	57.8	171.1	81.8	45.7	8.9	-14.1	1.2	67.6	1956	52.7
1956-1957	7.8	22.4	53.1	83.1	85.4	83.5	90.6	37.4	-25.0	-42.7	-24.1	-13.9	46.2	1957	39.3
1957-1958	2.0	9.5	32.1	77.9	59.8	110.4	91.3	101.0	30.9	12.1	18.8	21.4	49.7	1958	60.6
1958-1959	53.5	61.1	102.8	64.5	62.6	82.2	102.5	126.1	22.2	31.0	3.1	-40.4	57.8	1959	50.1
1959-1960	14.0	40.7	78.6	91.6	90.1	96.3	131.0	48.8	30.4	7.8	-0.1	19.0	49.6	1960	53.8
1960-1961	27.4	73.8	56.8	68.2	105.7	116.4	80.2	64.2	57.8	8.3	5.0	24.4	55.4	1961	55.3
1961-1962	49.2	48.1	52.7	94.9	27.0	142.8	167.1	74.6	20.9	-6.8	1.2	2.0	54.1	1962	51.1
1962-1963	21.1	70.7	71.1	56.0	55.1	120.5	83.3	61.4	16.1	2.8	-15.2	-0.5	42.8	1963	37.5
1963-1964	-6.8	20.3	60.3	74.1	52.6	131.9	81.6	75.7	0.5	0.8	-6.5	-3.1	43.3	1964	42.3
1964-1965	3.9	12.3	39.5	40.7	76.1	141.8	74.4	51.2	16.2	-3.8	-5.4	-3.1	37.4	1965	35.8
1965-1966	1.1	8.5	22.6	11.8	44.4	195.6	56.4	47.1	30.4	3.0	2.9	6.8	26.7	1966	30.5
1966-1967	1.4	34.6	36.3	107.1	40.0	73.5	102.3	59.3	51.6	2.5	3.5	1.6	48.6	1967	53.1
1967-1968	35.7	43.5	54.9	68.0	130.2	93.3	121.2	44.4	36.4	21.3	1.1	3.8	56.1	1968	49.3
1968-1969	0.0	23.0	46.7	99.4	20.3	147.4	98.3	64.9	51.1	8.2	8.6	5.7	45.2	1969	47.6
54 Years Average	22.9	39.0	59.9	67.8	70.0	107.1	92.3	67.2	32.7	16.0	11.8	16.2	50.8	Avg.	50.8
54 Years Maximum	233.3	331.2	208.3	246.0	177.4	263.4	198.0	181.1	74.3	60.3	82.0	82.0	68.1	Max.	66.4
54 Years Minimum	-12.5	8.5	22.6	11.8	20.3	57.8	56.4	32.1	-25.0	-42.7	-24.1	-205.0	26.7	Min.	30.5

TABLE 7

MONTHLY AND YEARLY PERCENT OF RAINFALL COLLECTED ON SCITUATE WATERSHED

BASIS:- YEARS ENDED JUNE 30. (FISCAL YEAR CHANGED 1969-1970 FROM FORMER OCT.-SEPT. TO JULY-JUNE PERIOD.)

Year	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total	Jan.-Dec. Year	Total
1916-1917	37.1	82.0	33.9	19.5	24.8	29.4	48.2	59.6	87.4	113.0	67.2	48.0	53.7	1917	51.9
1917-1918	52.3	11.6	23.7	26.7	331.2	42.7	51.4	108.3	147.4	74.6	71.8	27.6	53.9	1918	50.4
1918-1919	9.2	19.8	20.6	95.3	51.5	63.2	77.9	66.4	82.8	102.8	64.4	34.8	52.9	1919	57.9
1919-1920	24.7	13.7	54.8	63.3	44.6	105.0	39.3	27.7	195.9	81.2	94.4	52.3	62.1	1920	59.6
1920-1921	31.1	20.5	11.2	27.6	29.6	63.3	80.6	55.2	112.6	67.5	76.4	22.1	50.7	1921	51.2
1921-1922	37.6	31.3	12.2	19.0	20.6	105.5	59.2	67.4	75.2	198.0	67.0	37.7	53.3	1922	60.8
1922-1923	41.9	39.5	82.0	56.8	89.4	44.0	61.4	135.2	163.5	68.6	181.1	23.3	66.3	1923	61.5
1923-1924	23.0	17.0	11.6	22.4	35.4	89.6	100.7	64.4	122.5	93.1	92.3	70.5	64.4	1924	59.5
1924-1925	11.6	9.6	12.9	233.3	20.2	40.8	20.6	164.4	71.6	86.3	53.7	22.0	42.6	1925	42.8
1925-1926	9.4	22.9	10.8	14.1	30.6	62.7	68.4	51.0	117.4	122.0	74.9	35.6	48.5	1926	48.5
1926-1927	10.5	10.6	9.0	15.1	38.7	58.9	112.1	79.8	191.8	66.8	59.5	42.8	49.3	1927	57.5
1927-1928	8.0	18.6	24.5	37.2	73.0	83.5	96.3	87.0	105.9	58.6	141.4	29.4	56.6	1928	50.5
1928-1929	21.3	21.3	16.7	30.3	46.4	62.0	77.3	74.6	141.8	80.6	102.6	21.1	58.8	1929	57.3
1929-1930	2.9	2.4	-6.7	2.3	17.3	28.4	68.5	82.6	84.8	90.6	32.1	13.8	36.0	1930	33.2
1930-1931	2.7	1.3	-8.1	3.6	13.5	26.8	43.9	82.1	93.4	95.5	74.0	47.1	45.4	1931	48.8
1931-1932	18.4	14.3	5.1	3.2	14.6	28.8	54.4	90.8	66.6	156.3	52.5	14.2	42.9	1932	51.4
1932-1933	2.7	5.4	27.8	52.5	88.2	108.1	110.9	70.9	95.9	111.3	51.3	38.9	59.3	1933	56.4
1933-1934	8.5	6.9	20.1	27.9	55.4	48.9	97.7	26.0	136.0	116.0	72.4	30.7	54.8	1934	56.6
1934-1935	3.6	3.6	19.0	40.9	43.0	90.4	66.0	91.6	218.6	85.1	75.3	34.8	55.9	1935	52.8
1935-1936	15.1	-9.8	7.2	-12.5	18.6	85.2	44.7	46.4	123.6	117.1	80.3	14.8	54.9	1936	54.8
1936-1937	1.1	-0.6	10.6	23.0	34.4	61.6	91.4	113.1	81.7	69.9	82.6	22.0	50.9	1937	53.7
1937-1938	1.3	9.3	13.6	20.2	51.5	112.5	78.4	102.7	110.7	88.1	44.1	33.1	49.6	1938	58.4
1938-1939	60.3	42.6	24.6	46.2	48.6	99.4	68.5	81.4	89.4	108.2	114.9	10.5	63.8	1939	48.3
1939-1940	-20.0	3.4	2.6	10.9	96.4	45.3	72.0	25.3	120.3	114.8	55.0	67.3	48.6	1940	50.8
1940-1941	19.0	-7.0	-1.5	-3.5	23.9	72.4	49.0	87.4	81.5	121.3	36.7	27.0	38.0	1941	32.8
1941-1942	9.2	2.5	-205.0	-8.6	15.5	22.8	37.8	77.0	85.5	196.6	37.8	15.2	38.0	1942	43.8
1942-1943	16.0	6.0	-8.8	10.6	33.7	71.4	68.8	177.4	119.6	68.7	77.8	18.1	51.7	1943	48.8
1943-1944	0.6	-7.4	-16.9	9.4	27.7	34.4	40.8	49.2	64.2	85.9	80.0	11.5	32.5	1944	38.1
1944-1945	-14.9	-15.4	15.7	18.4	37.4	82.0	84.3	44.6	263.4	64.0	63.4	24.4	47.2	1945	46.0
1945-1946	5.5	-3.9	-5.3	2.7	20.8	60.6	102.9	78.2	260.6	60.3	50.8	49.8	48.0	1946	49.0
1946-1947	0.0	20.5	15.2	102.1	22.7	30.5	72.5	58.5	104.2	61.3	84.9	26.6	43.5	1947	42.9
1947-1948	10.9	4.1	7.7	7.0	45.8	35.5	21.7	122.6	168.1	94.7	56.1	74.3	51.9	1948	52.2
1948-1949	15.0	4.8	-13.2	7.2	30.1	58.0	81.5	89.0	118.2	68.8	44.2	-20.0	45.5	1949	42.5
1949-1950	-21.0	0.3	2.6	2.2	16.4	45.2	55.2	52.4	104.3	81.8	62.7	34.1	39.7	1950	43.0

TABLE 7 (Continued)

MONTHLY AND YEARLY PERCENT OF RAINFALL COLLECTED ON SCITUATE WATERSHED

BASIS:- YEARS ENDED JUNE 30. (FISCAL YEAR CHANGED 1969-1970 FROM FORMER OCT.-SEPT. TO JULY-JUNE PERIOD.)

Year	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total	Jan.-Dec. Year	Total
1950-1951	-6.8	4.4	-1.0	1.8	25.6	56.7	65.4	110.5	73.8	108.3	51.9	44.6	50.7	1951	54.5
1951-1952	4.2	2.3	-2.9	8.2	47.9	77.8	86.9	68.6	121.5	67.3	61.7	31.0	53.0	1952	44.8
1952-1953	-29.2	7.2	-9.0	-10.3	12.2	27.4	62.5	93.8	77.6	84.4	98.8	12.0	50.8	1953	53.0
1953-1954	1.6	-1.7	-4.7	6.8	29.9	77.7	72.8	84.2	81.6	74.7	75.6	21.3	46.1	1954	56.0
1954-1955	-0.4	10.2	51.9	42.5	64.6	85.4	246.0	72.8	102.2	66.3	91.0	19.6	56.2	1955	60.8
1955-1956	0.8	32.7	26.3	62.9	122.7	208.3	60.7	93.2	57.8	171.1	81.8	45.7	64.8	1956	52.7
1956-1957	8.9	-14.1	1.2	7.8	22.4	53.1	83.1	85.4	83.5	90.6	37.4	-25.0	42.7	1957	39.3
1957-1958	-42.7	-24.1	-13.9	2.0	9.5	32.1	77.9	59.8	110.4	91.3	101.0	30.9	54.8	1958	60.6
1958-1959	12.1	18.8	21.4	53.5	61.1	102.8	64.5	62.6	82.2	102.5	126.1	22.2	50.8	1959	50.1
1959-1960	31.0	3.1	-40.4	14.0	40.7	78.6	91.6	90.1	96.3	131.0	48.8	30.4	55.4	1960	53.8
1960-1961	7.8	-0.1	19.0	27.4	73.8	56.8	68.2	105.7	116.4	80.2	64.2	57.8	54.8	1961	55.3
1961-1962	8.3	5.0	24.4	49.2	48.1	52.7	94.9	27.0	142.8	167.1	74.6	20.9	50.5	1962	51.1
1962-1963	-6.8	1.2	2.0	21.1	70.7	71.1	56.0	55.1	120.5	83.3	61.4	16.1	44.7	1963	37.5
1963-1964	2.8	-15.2	-0.5	-6.8	20.3	60.3	74.1	52.6	131.9	81.6	75.7	0.5	43.3	1964	42.3
1964-1965	0.8	-6.5	-3.1	3.9	12.3	39.5	40.7	76.1	141.8	74.4	51.2	16.2	35.4	1965	35.8
1965-1966	-3.8	-5.4	-3.1	1.1	8.5	22.6	11.8	44.4	195.6	56.4	47.1	30.4	27.9	1966	30.5
1966-1967	3.0	2.9	6.8	1.4	34.6	36.3	107.1	40.0	73.5	102.3	59.3	51.6	45.2	1967	53.1
1967-1968	2.5	3.5	1.6	35.7	43.5	54.9	68.0	130.2	93.3	121.2	44.4	36.4	54.1	1968	49.3
1968-1969	21.3	1.1	3.8	0.0	23.0	46.7	99.4	20.3	147.4	98.3	64.9	51.1	48.7	1969	47.6
1969-1970	8.2	8.6	5.7	10.7	33.7	46.7	250.0	84.3	64.2	92.3	52.3	36.3	47.5	1970	----
54 Years Average	16.0	11.8	16.2	22.7	38.9	59.6	67.9	70.6	135.6	91.5	66.7	31.9	50.6	Avg.	50.8
54 Years Maximum	60.3	82.0	82.0	233.3	331.2	208.3	*250.0	177.4	263.4	198.0	181.1	74.3	68.1	Max.	66.4
54 Years Minimum	-42.7	-24.1	-205.0	-12.5	8.5	22.6	11.8	20.3	57.8	56.4	32.1	-25.0	26.7	Min.	30.5

*New maximum of record.

NOTE: The 54-Year calendar year average is for the years 1916-1969.

TABLE 8
SCITUATE WATERSHED
(92.8 Square Miles)

STATISTICS OF STORAGE - YEAR ENDED JUNE 30, 1970

1969-1970	1 Regulating Reservoir		2 Westconnaug Reservoir		3 Barden Reservoir		4 Moswansicut Reservoir		5 Ponaganset Reservoir		Total 1-5		6 Scituate Reservoir		Total 1-6	
	Avail. Storage		Avail. Storage		Avail. Storage		Avail. Storage		Avail. Storage		Avail. *Tot. Storage		Avail. Storage		Avail. *Tot. Storage	
	Elev.	M.G.	Elev.	M.G.	Elev.	M.G.	Elev.	M.G.	Elev.	M.G.	M.G.	Avail.	Elev.	M.G.	M.G.	Avail.
July	285.52	423	454.25	458	345.20	861	301.90	715	633.20	704	3,161	100.8	283.38	35,937	39,098	98.4
August	285.60	429	454.45	469	345.40	877	302.10	735	633.27	710	3,220	102.7	281.73	34,171	37,391	94.1
September	284.82	369	453.91	438	345.12	855	301.70	695	633.02	691	3,048	97.2	280.04	32,420	35,468	89.2
October	284.45	342	453.04	389	345.20	861	301.88	713	633.09	696	3,001	95.7	278.42	30,720	33,721	84.8
November	284.22	325	453.09	392	345.20	861	301.85	710	633.12	698	2,986	95.2	276.70	29,000	31,986	80.5
December	285.58	427	454.42	467	345.34	872	301.98	723	633.57	733	3,222	102.8	278.08	30,380	33,602	84.5
January	285.75	441	454.75	486	345.52	887	302.15	741	634.42	799	3,354	107.0	283.45	36,011	39,365	99.0
February	285.68	436	454.45	469	345.12	855	302.08	733	633.42	721	3,214	102.5	282.99	35,519	38,733	97.5
March	285.63	431	454.52	473	344.10	774	302.03	728	633.55	731	3,137	100.1	283.99	36,589	39,726	99.9
April	285.70	437	454.65	480	345.48	883	302.10	735	633.72	744	3,279	104.6	284.44	37,093	40,372	101.6
May	285.62	431	454.51	472	345.20	861	302.02	727	633.46	724	3,215	102.6	284.21	36,835	40,050	100.8
June	285.58	427	454.39	465	345.32	871	301.98	723	633.43	722	3,208	102.3	284.03	36,634	39,842	100.2
Maximum for Year	Apr. 4 286.00	462	Dec. 27 455.24	514	Dec. 27 346.25	946	Apr. 4 302.40	767	Jan. 1 & 3 634.42	799	Dec. 27 3,464	110.5	Apr. 4 285.45	38,215	Apr. 4 41,669	104.8
Minimum for Year	Nov. 1 & 2 284.22	325	Oct. 1 453.04	389	Mar. 1 344.10	774	Sept. 6 301.68	693	July 26 632.92	683	Nov. 2 2,985	95.2	Nov. 2 276.65	28,950	Nov. 2 31,935	80.3
1. Regulating Reservoir-Spillway	Elev. 285.50;	Total Storage		428 M.G.;	Dead Storage		7 M.G.;	Total Available Storage		421 M.G.						
2. Westconnaug	" " "	454.17;	" "	453 "	" "	" "	0 "	" " "	" " "	453 "						
3. Barden	" " "	345.10;	" "	853 "	" "	" "	0 "	" " "	" " "	853 "						
4. Moswansicut	" " "	301.90;	" "	1,781 "	" "	" "	1,066 "	" " "	" " "	715 "						
5. Ponaganset	" " "	633.05;	" "	742 "	" "	" "	49 "	" " "	" " "	693 "						
Total 1-5	" " "	284.01;	" "	4,257 M.G.;	Total Storage		1,122 M.G.;	Total Available Storage		*3,135 M.G.						
6. Scituate	" " "	" "	" "	37,011 "	" "	" "	400 "	" " "	" " "	36,611 "						
Total 1-6	" " "	" "	" "	41,268 M.G.;	Total Storage		1,522 M.G.;	Total Available Storage		**39,746 M.G.						

NOTE: Elevations shown are in feet above mean high water in Providence Harbor.
Statistics shown are for the first day (7 A.M.) of the month indicated.

SCITUATE RESERVOIR ELEVATIONS

1st of Month

Year	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1928-1929	284.43	283.63	283.08	282.87	282.65	282.11	282.34	284.00	284.32	284.28	284.53	284.10
1929-1930	282.77	280.87	278.95	276.88	274.83	273.09	272.60	273.57	275.38	277.54	278.29	277.51
1930-1931	276.23	274.28	272.18	269.80	267.58	266.14	264.86	265.82	267.39	275.51	278.84	281.37
1931-1932	283.32	281.56	280.11	278.25	276.34	274.45	273.35	276.56	277.96	281.85	283.83	283.17
1932-1933	281.06	278.86	277.16	279.75	282.50	284.60	283.61	282.80	282.86	284.23	284.16	283.09
1933-1934	282.68	280.42	278.39	278.26	277.64	276.86	277.58	280.96	280.38	285.04	284.14	284.09
1934-1935	283.14	280.72	278.62	278.55	278.20	278.73	281.17	283.23	281.23	281.20	284.37	283.14
1935-1936	283.50	281.93	279.32	277.32	275.01	274.30	273.13	277.33	278.48	285.48	283.95	282.22
1936-1937	280.91	279.07	277.06	275.97	274.43	273.12	280.27	280.85	279.18	281.83	284.30	285.19
1937-1938	284.06	282.09	281.43	279.80	278.13	280.96	279.49	279.19	279.73	280.86	282.48	283.04
1938-1939	284.87	285.14	280.58	281.12	279.83	278.23	280.01	279.17	281.31	282.72	283.74	282.57
1939-1940	280.86	278.48	276.67	274.62	272.85	273.10	273.18	274.28	274.70	280.08	284.55	285.11
1940-1941	283.53	282.87	280.63	278.35	275.88	276.19	276.21	276.22	278.63	279.70	280.39	280.01
1941-1942	280.07	278.99	277.15	274.75	272.38	270.88	270.02	270.95	273.39	282.29	281.65	281.25
1942-1943	280.34	279.81	278.31	276.16	274.55	275.40	280.05	279.69	280.00	280.98	281.53	283.91
1943-1944	282.46	280.43	278.21	275.93	274.41	273.57	271.84	270.65	270.52	273.95	277.75	277.50
1944-1945	276.20	273.86	271.20	271.68	270.27	273.47	277.37	279.19	279.43	283.76	283.73	283.88
1945-1946	283.76	282.03	279.81	277.63	275.45	275.88	280.85	281.92	282.59	283.71	283.56	284.67
1946-1947	283.41	281.23	282.51	281.16	279.95	278.30	277.97	279.17	279.62	283.18	283.87	284.50
1947-1948	283.91	282.73	280.97	279.29	277.37	279.63	279.66	277.97	280.01	285.22	284.61	285.56
1948-1949	284.69	282.83	281.01	278.73	277.01	278.12	279.00	281.61	281.56	282.64	284.16	284.66
1949-1950	282.50	280.17	278.10	276.05	273.94	272.40	272.07	273.29	275.58	280.13	282.78	284.07
1950-1951	283.58	281.33	279.64	277.64	275.63	275.99	277.74	279.77	282.17	283.41	284.46	285.08
1951-1952	284.19	282.41	280.57	278.54	276.71	281.24	283.40	282.84	281.44	283.39	284.31	285.10
1952-1953	283.92	281.34	280.02	277.76	275.37	273.52	272.74	278.12	282.29	285.13	284.68	284.49
1953-1954	282.38	280.50	278.36	276.08	274.38	274.86	279.60	280.19	281.50	283.75	284.92	284.48
1954-1955	283.05	281.11	280.22	282.61	281.65	282.94	284.57	281.49	282.33	282.66	284.05	284.33

1st of Month

Year	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1955-1956	283.65	281.04	282.47	279.97	285.21	284.60	281.10	282.20	282.41	282.18	285.06	283.80
1956-1957	282.87	281.39	278.96	276.87	274.79	274.14	276.52	278.15	279.67	282.10	284.36	283.34
1957-1958	281.00	278.38	275.91	273.47	271.19	269.42	270.66	279.27	280.98	284.82	285.62	284.67
1958-1959	283.80	282.10	280.42	279.27	279.43	279.32	278.74	278.12	279.12	282.98	284.30	283.82
1959-1960	283.61	283.91	281.28	279.01	278.35	279.54	282.60	282.15	284.19	283.12	284.27	284.62
1960-1961	282.55	280.89	278.84	279.00	278.37	279.44	280.03	278.86	281.01	282.99	284.92	285.35
1961-1962	283.23	281.41	279.11	279.99	279.76	279.36	278.81	280.96	279.87	283.34	284.04	284.15
1962-1963	283.45	281.29	279.08	277.14	277.54	280.09	280.12	278.98	279.05	283.61	283.64	284.54
1963-1964	283.55	282.41	280.07	278.08	275.77	274.90	275.36	280.15	280.37	282.17	284.68	283.53
1964-1965	281.43	279.43	277.21	274.98	272.78	271.28	273.08	273.83	277.38	280.27	281.38	281.06
1965-1966	279.60	277.26	274.89	272.71	270.70	269.01	267.69	266.76	268.84	272.57	272.61	273.71
1966-1967	275.84	274.08	272.00	270.63	269.64	271.24	271.94	274.09	275.21	280.45	283.59	285.27
1967-1968	285.05	284.30	282.48	280.59	279.74	279.97	281.26	279.15	279.05	285.30	284.18	284.21
1968-1969	284.41	281.48	279.26	277.25	275.21	275.47	279.28	280.30	280.89	284.78	285.12	284.77
1969-1970	283.38	281.73	280.04	278.43	276.70	278.08	283.45	282.99	283.99	284.44	284.21	284.03
42 Years Average	282.46	280.71	278.86	277.45	276.19	276.28	277.27	278.26	279.19	282.13	283.23	283.31
42 Years Maximum	285.05	285.14	283.08	282.87	285.21	284.60	284.57	284.00	284.32	285.48	285.62	285.56
42 Years Minimum	275.84	273.86	271.20	269.80	267.58	266.14	264.86	265.82	267.39	272.57	272.61	273.71

TABLE 10
SCITUATE WATERSHED
(92.8 Square Miles)

DRAFT AND YIELD - YEAR ENDED JUNE 30, 1970

1969-1970	DRAFT FROM SCITUATE RESERVOIR Million Gallons			WATERSHED YIELD Million Gallons					
	To River Over Spill- way	Below Gainer Dam Through Gate- house	Total	To Water Purification Works	Total For Month	Average per Day	For Month	Average per Day 1969-1970	54-Year Mean 1917-1970
July	0	362.44	362.44	2,011.21	2,373.65	76.57	666.65	21.50	31.73
August	0	338.67	338.67	1,942.79	2,281.46	73.60	358.46	11.56	26.01
September	0	355.45	355.45	1,769.95	2,125.40	70.85	378.40	12.61	35.48
October	0	371.20	371.20	1,696.69	2,067.89	66.71	332.89	10.74	41.62
November	0	226.98	226.98	1,612.35	1,839.33	61.31	3,455.33	115.18	98.92
December	0	941.46	941.46	1,526.39	2,467.85	79.61	8,230.85	265.51	131.10
January	0	2,037.79	2,037.79	1,572.41	3,610.20	116.46	2,978.20	96.07	144.11
February	1,158.44	5,252.51	6,410.95	1,453.27	7,864.22	280.87	8,857.22	316.33	157.56
March	9.41	2,804.71	2,814.12	1,621.45	4,435.57	143.08	5,081.57	163.92	243.99
April	345.07	4,534.44	4,879.51	1,585.33	6,464.84	215.49	6,142.84	204.76	203.74
May	10.56	1,319.75	1,330.31	1,799.16	3,129.47	100.95	2,921.47	94.24	122.78
June	51.56	**485.32	536.88	1,924.56	2,461.44	82.05	1,987.44	66.25	60.21
For Year	*1,575.04	19,030.72	20,605.76	20,515.56	41,121.32	112.66	41,391.32	113.40	107.83

*Includes Flashboard Leakage.

**Includes 31.25 MG on 6/24/70 and 18.75 MG on 6/25/70 discharged to the river through the 36" blow-off chamber while the generator was out of service for repairs.

TABLE 11

SCITUATE WATERSHED - REFORESTATION

NUMBER AND KINDS OF TREES PLANTED IN VARIOUS YEARS

Planted During Calendar Year	Fraser Fir	Balsam Fir	Red Pine	White Pine	Douglas Fir	Austrian Pine	Scotch Pine	Jack Pine	White Spruce	Norway Spruce	Hemlock	Larch	Total Number Planted Yearly
1926	0	0	160,000	40,000	0	0	0	0	0	0	0	0	200,000
1927	0	0	60,000	150,000	0	0	0	0	0	0	0	0	210,000
1928	0	0	10,000	10,000	0	0	0	0	0	0	0	0	20,000
1929	0	0	10,000	75,000	0	0	0	0	0	0	0	0	85,000
1930	0	0	40,000	40,000	0	0	0	0	0	0	0	0	80,000
1931	0	0	40,000	50,000	0	0	0	0	9,000	0	0	0	99,000
1932	0	0	40,000	40,000	0	0	0	0	20,000	0	0	0	100,000
1933	0	0	0	0	0	0	0	0	0	0	0	0	0
1934 & 1935	0	0	755,000	255,000	0	36,000	136,000	4,000	505,000	204,000	3,000	0	1,898,000
1936	0	0	453,700	111,000	0	14,400	0	0	20,000	15,000	26,000	0	640,100
1937	0	0	481,100	0	0	0	0	0	213,200	0	0	0	694,300
1938	0	0	229,000	21,693	0	0	0	0	0	0	0	0	250,693
1939	0	0	8,000	761,000	0	0	0	50,000	0	0	0	0	819,000
1940	0	0	267,387	618,828	0	45,916	0	67,750	0	0	0	0	999,881
1941	0	0	51,000	295,650	0	0	0	0	34,350	0	0	0	381,000
1942	0	0	0	308,120	0	0	0	0	0	0	0	0	308,120
1943	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 11 (Continued)

SCITUATE WATERSHED - REFORESTATION

NUMBER AND KINDS OF TREES PLANTED IN VARIOUS YEARS

Planted During Calendar Year	Fraser Fir	Balsam Fir	Red Pine	White Pine	Douglas Fir	Austrian Pine	Scotch Pine	Jack Pine	White Spruce	Norway Spruce	Hemlock	Larch	Total Number Planted Yearly
1951	0	0	0	1,500	12,000	0	0	0	0	0	0	0	13,500
1952	0	0	20,000	0	0	0	0	0	10,000	0	0	10,000	40,000
1953	0	0	10,000	0	0	0	0	0	6,000	0	0	0	16,000
1954	0	2,000	0	0	2,000	0	0	0	0	0	0	6,000	10,000
1955	0	0	0	5,000	0	0	0	0	0	0	0	5,000	10,000
1956	0	0	0	5,000	0	4,500	0	0	0	0	0	0	9,500
1957	0	0	0	6,000	0	0	0	0	0	0	0	0	6,000
1958	0	0	2,700	2,000	0	0	0	0	0	0	0	0	4,700
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	140	540	6,874	784	405	0	0	3,401	49	0	3,461	15,654
1961	0	0	0	2,300	144	0	0	0	0	0	2,000	0	4,444
1962	0	0	0	5,000	0	0	0	0	150	0	2,000	2,000	9,150
1963	0	0	0	5,000	0	0	0	0	170	0	5,000	5,000	15,170
1964	0	0	0	5,000	0	0	0	0	510	0	5,000	5,000	15,510
1965	1,000	2,000	0	5,000	0	0	0	0	0	0	10,000	5,000	23,000
1966	0	0	0	5,000	0	0	0	0	0	0	5,000	5,000	15,000
1967	0	0	0	1,000	0	0	0	0	0	0	3,000	1,000	5,000
1968	0	0	0	2,000	1,000	0	0	0	0	0	2,000	1,000	*6,200
1969	0	0	0	2,000	0	0	0	0	0	1,000	2,000	0	**5,100
1970	0	0	0	2,000	500	0	0	0	0	500	2,000	0	5,000
Totals	1,000	4,140	2,638,427	2,836,965	16,428	101,221	136,000	121,750	821,781	220,549	67,000	48,461	7,014,022

*Includes 200 Black Walnut.

**Includes 100 Chestnut.

TABLE 12

GAINER DAM HYDRO-ELECTRIC PLANT*

POWER STATISTICS ON THE BASIS OF THE "CONTRACT YEAR" WITH
THE NARRAGANSETT ELECTRIC COMPANY

Contract Year	KWH Generated at Gainer Dam	KWH Used at Gainer Dam and Water Purification Works	Net KWH Delivered to Narragansett Electric Co.	Payment Received
(Period June 20-30, 1930)	87,000	6,470	75,100	\$ 300.40
July 1930-June 1931	3,023,000	152,940	2,758,340	20,000.00
July 1931-June 1932	4,201,500	158,070	3,980,570	19,600.00
July 1932-June 1933	7,024,900	155,210	6,697,656	26,790.62
July 1933-June 1934	5,080,900	152,420	4,837,371	19,349.48
July 1934-June 1935	7,102,900	174,710	6,756,101	27,024.40
July 1935-June 1936	5,761,200	173,530	5,394,176	21,576.70
July 1936-June 1937	5,626,000	174,110	5,262,807	21,051.23
July 1937-June 1938	6,438,300	156,710	6,069,927	24,279.71
July 1938-June 1939	8,915,000	159,860	8,457,980	33,831.92
July 1939-June 1940	4,681,100	231,850	4,329,115	17,316.46
July 1940-June 1941	3,291,200	185,540	2,982,991	16,000.00
July 1941-June 1942	2,585,300	194,250	2,322,916	15,600.00
July 1942-June 1943	4,655,800	170,520	4,372,359	17,489.44
July 1943-June 1944	2,290,100	183,250	2,096,811	14,597.25
July 1944-June 1945	4,146,200	187,080	3,879,622	15,518.49
July 1945-June 1946	4,754,100	200,200	4,460,596	17,343.70
July 1946-June 1947	3,494,400	251,270	3,224,049	13,600.00
July 1947-June 1948	5,576,900	249,940	5,313,209	21,252.84
July 1948-June 1949	3,790,500	264,160	3,521,404	14,085.62
July 1949-June 1950	1,972,200	303,460	1,548,000	9,288.00
July 1950-June 1951	4,965,900	322,220	4,476,900	26,861.40
July 1951-June 1952	6,381,400	329,080	5,836,700	35,020.20
July 1952-June 1953	4,993,400	351,080	4,429,900	26,579.40
July 1953-June 1954	3,945,700	389,050	3,389,000	20,334.00
July 1954-June 1955	6,776,900	422,250	6,111,000	36,666.00
July 1955-June 1956	9,521,700	480,300	8,747,900	52,487.40
July 1956-June 1957	2,195,400	466,480	1,608,100	9,648.60
July 1957-June 1958	4,141,000	541,760	3,432,900	**20,597.40
July 1958-June 1959	4,987,600	504,310	4,297,300	25,783.80
July 1959-June 1960	5,754,000	515,280	5,078,000	30,468.00
July 1960-June 1961	4,912,500	583,050	4,159,400	24,956.40
July 1961-June 1962	3,998,900	614,800	3,267,600	19,605.60
July 1962-June 1963	2,116,200	679,400	1,334,800	8,008.80
July 1963-June 1964	2,550,450	735,790	1,716,800	10,418.40
July 1964-June 1965	184,800	759,140	0	0.00
July 1965-June 1966	303,700	746,340	0	0.00
July 1966-June 1967	1,195,100	748,410	283,500	4,857.60
July 1967-June 1968	5,370,900	795,380	4,232,000	23,916.08
July 1968-June 1969	3,120,600	642,610	2,273,600	13,498.88
July 1969-June 1970	3,383,700	941,370	2,556,800	14,350.10

*1675 KVA 3 Phase, 60 Cycle, 2300 Volts, 80 Ft. Head Turbo-Generator

**Involves net exchange for portion of previous year.

TABLE 13

WATER PURIFICATION WORKS
OPERATING STATISTICS - YEAR ENDED JUNE 30, 1970

	Influent Aerator	Plant Influent Mil. Gals.		Water Filtered Mil. Gals.			Wash Water Mil. Gals.		Plant Effluent Mil. Gals.		Plant Effluent Flow	Number of Filters in Operation		
1969- 1970	Hours Operated	Total	Average per Day	Total	Average per Day	Total	Average per Day	% of Water Filt.	Total	Average per Day	Hours	Max.	Min.	Avg.
July	744.0	2,011.211	64.878	1,992.031	64.259	14.490	0.467	0.7	1,977.541	63.792	744.0	13.0	3.0	8.7
August	743.0	1,942.796	62.671	1,939.162	62.554	13.528	0.436	0.7	1,925.634	62.117	744.0	12.5	4.0	8.5
September	718.5	1,769.948	58.998	1,783.152	59.438	10.388	0.346	0.6	1,772.764	59.092	720.0	13.0	3.5	8.0
October	745.0	1,696.691	54.732	1,665.379	53.722	18.266	0.589	1.1	1,647.113	53.133	745.0	14.0	4.0	9.0
November	720.0	1,612.351	53.745	1,512.065	50.402	21.272	0.709	1.4	1,490.793	49.693	720.0	14.0	5.0	10.2
December	744.0	1,526.386	49.238	1,512.440	48.788	15.716	0.507	1.0	1,496.724	48.281	744.0	14.0	5.0	9.9
January	744.0	1,572.413	50.723	1,549.008	49.968	13.292	0.429	0.9	1,535.716	49.539	737.5	14.0	4.5	10.1
February	672.0	1,453.270	51.903	1,408.578	50.306	11.185	0.399	0.8	1,397.393	49.907	672.0	13.0	5.5	10.2
March	744.0	1,621.449	52.305	1,544.586	49.825	11.621	0.375	0.8	1,532.965	49.450	735.2	14.0	6.0	10.1
April	719.0	1,585.331	52.844	1,521.715	50.724	11.391	0.380	0.7	1,510.324	50.344	713.1	13.0	5.5	10.3
May	744.0	1,799.162	58.037	1,724.501	55.629	15.758	0.508	0.9	1,708.743	55.121	744.0	14.0	5.0	10.0
June	720.0	1,924.555	64.152	1,872.917	62.431	15.144	0.505	0.8	1,857.773	61.926	720.0	15.5	5.0	10.4
Totals	8,757.5	20,515.563		20,025.534		172.051			19,853.483		8,738.8			
Average	729.8		56.207		54.864		0.471	0.9		54.393	728.2			9.6

Raw water treated with Ferri-Floc before Influent Aeration.
 Quicklime added to Ferri-Floc treated water in conduit to tangential mixer.
 Chlorine added to water before filtration.
 Sodium Silicofluoride added to water after filtration.
 Raw water drawn from lower intake at Gainer Memorial Dam all year.

TABLE 13 (Continued)

WATER PURIFICATION WORKS

OPERATING STATISTICS - YEAR ENDED JUNE 30, 1970

34

1969- 1970	Number of Filters Washed				Ferri-Floc Used			Quicklime Used			Chlorine Used			Sodium Silicofluoride Used		
	Average Rate of Filtration per Filter		Average Filter Run		Lbs.	Avg. per Day	Gr. per Gal.	Lbs.	Avg. per Day	Gr. per Gal.	Lbs.	Avg. Parts per Day	Parts per Mil.	Lbs.	Avg. Parts per Day	Parts per Mil.*
	M.G.D.	Total	Day	Hours												
July	7.39	96	3.1	69.11	158,488	5,113	0.55	200,331	6,462	0.70	9,838	317	0.59	24,054	776	0.87
August	7.37	92	3.0	74.36	154,755	4,992	0.56	201,543	6,501	0.73	9,523	307	0.59	23,221	749	0.86
September	7.39	68	2.3	86.88	141,394	4,713	0.56	192,963	6,432	0.77	6,917	231	0.47	21,256	709	0.86
October	5.97	118	3.8	59.00	141,529	4,565	0.58	173,111	5,584	0.71	4,794	155	0.35	19,954	644	0.86
November	4.93	137	4.6	50.77	150,747	5,025	0.66	140,393	4,680	0.61	4,943	165	0.39	18,198	607	0.87
December	4.93	104	3.4	82.85	111,012	3,581	0.51	124,581	4,019	0.57	5,163	167	0.41	18,172	586	0.86
January	4.93	102	3.3	75.69	151,510	4,887	0.68	143,301	4,623	0.64	6,098	197	0.47	18,656	602	0.86
February	4.93	87	3.1	85.11	123,871	4,424	0.60	130,519	4,661	0.63	5,913	211	0.51	16,982	607	0.87
March	4.93	90	2.9	87.75	129,280	4,170	0.56	154,098	4,971	0.67	6,667	215	0.52	18,592	600	0.86
April	4.93	88	2.9	128.27	159,915	5,331	0.71	161,937	5,398	0.72	7,646	255	0.60	18,312	610	0.86
May	5.57	103	3.3	86.50	186,616	6,020	0.73	172,341	5,559	0.67	8,233	266	0.57	20,868	673	0.87
June	5.98	98	3.3	78.01	198,083	6,603	0.72	185,530	6,184	0.67	9,356	312	0.60	22,399	747	0.86
Totals		1,183			1,807,200			1,980,648			85,091			240,664		
Average	5.70		3.2	76.77		4,951	0.62		5,426	0.68		233	0.51		659	0.86

Total filter hours for year, 84,258.19; average per day, 230.84.

Average quantity of water filtered per filter per run, 18.23 m.g.

*Dosage expressed as p.p.m. of Fluoride ion.

TABLE 14
WATER PURIFICATION WORKS
CHEMICALS USED - YEAR ENDED JUNE 30, 1970

	Pounds of Chemicals Used		Total	Cost of Chemicals	Pounds of Chemicals Used per 1,000,000 Gals. of Water Treated (Average)	Cost of Chemicals per 1,000,000 Gals. of Water Treated
	Total	Lbs. per Day (Average)	Gallons of Water Treated			
Ferri-Floc	1,807,200	4,951	20,510,004,000	\$ 53,630.68	88.11	\$2.61
Quicklime	1,980,648	5,426	20,504,879,000	22,108.40	96.59	1.08
Chlorine	85,091	233	20,004,882,000	5,913.82	4.25	0.30
Sodium Silicofluoride	240,664	659	19,845,290,000	23,209.20	12.13	1.17
Totals	4,113,603			\$104,862.10		\$5.16

Price of Ferri-Floc--From July 1, 1969 to Dec. 2, 1969--\$58.65 per ton;
from Dec. 3, 1969 to June 30, 1970--\$60.05 per ton.

Price of Quicklime---From July 1, 1969 to July 21, 1969--\$21.00 per ton;
from July 22, 1969 to June 30, 1970--\$22.50 per ton.

Price of Chlorine----From July 1, 1969 to June 30, 1970--\$139.00 per ton.

Price of Sodium Silicofluoride--From July 1, 1969 to Oct. 29, 1969--\$189.70
per ton; from Oct. 30, 1969 to June 30, 1970--
\$196.60 per ton.

TABLE 15

WATER PURIFICATION WORKS

*CHEMICAL AND PHYSICAL CHARACTERISTICS OF WATER IN PROCESS OF FILTRATION

YEAR ENDED JUNE 30, 1970

	Monthly Averages												Avg. for Year
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	
pH													
Raw	5.8	5.7	5.8	6.1	6.4	6.3	6.0	5.9	5.9	6.0	5.9	5.8	6.0
Aerated Influent	4.4	4.4	4.4	4.4	4.3	4.4	4.3	4.3	4.3	4.1	4.2	4.1	4.3
Treated	10.2	10.1	10.1	10.2	10.3	10.4	10.3	10.3	10.3	10.3	10.2	10.2	10.2
Settled	10.1	10.0	10.0	10.1	10.2	10.3	10.3	10.2	10.3	10.3	10.1	10.0	10.2
Filtered	10.1	9.9	10.0	10.1	10.2	10.3	10.2	10.2	10.2	10.2	10.1	10.0	10.1
**Effluent	10.1	10.0	10.0	10.1	10.2	10.3	10.3	10.2	10.2	10.2	10.1	10.0	10.1
Tap	10.0	9.9	9.9	10.0	10.1	10.3	10.3	10.2	10.2	10.1	10.1	9.9	10.1
Acidity													
Raw	5.0	6.5	7.6	5.2	1.3	1.3	2.3	3.0	3.4	2.0	2.4	3.2	3.6
Aerated Influent	7.2	7.8	8.1	7.3	6.1	5.1	7.7	7.4	7.0	7.6	8.3	8.7	7.4
Phenolphthalein Alkalinity													
Treated	10.9	11.1	11.6	11.0	9.1	9.6	8.8	9.3	10.2	10.7	9.2	9.3	10.1
Settled	9.8	9.9	10.6	10.4	8.3	8.8	8.2	8.4	9.2	9.6	7.8	7.7	9.1
Filtered	9.3	9.3	9.8	9.8	7.7	8.1	7.4	7.6	8.4	8.8	7.6	7.5	8.4
**Effluent	9.3	9.3	9.8	9.8	7.8	8.1	7.4	7.6	8.5	8.8	7.6	7.6	8.5
Tap	7.3	7.6	7.9	8.3	6.1	6.6	5.7	5.9	6.6	7.0	6.0	6.0	6.8
Methyl Orange Alkalinity													
Raw	3.5	3.5	4.0	4.3	3.8	3.6	3.3	3.2	3.5	3.3	3.1	3.3	3.5
Treated	17.3	18.0	19.3	17.8	13.8	14.4	14.4	15.2	16.1	16.0	14.5	15.0	16.0
Settled	16.3	17.3	18.2	17.5	13.3	13.8	13.4	14.2	15.4	15.2	13.6	13.6	15.2
Filtered	15.6	16.6	17.5	16.9	12.7	13.3	12.7	13.4	14.7	14.4	13.3	13.3	14.5
**Effluent	15.7	16.6	17.5	16.9	12.6	13.3	12.7	13.4	14.6	14.5	13.3	13.4	14.5
Tap	14.3	15.2	16.0	16.0	11.3	12.1	11.5	12.0	13.2	13.1	12.1	12.1	13.2
Color													
Raw	8	8	12	14	7	6	11	12	12	12	10	8	10
Settled	11	10	11	11	15	7	14	14	14	11	10	10	12
**Effluent	3	3	3	3	2	2	3	4	4	4	3	3	3
Tap	3	3	3	3	3	2	4	5	5	5	4	3	4
Turbidity													
Raw	0.1	0.1	0.4	0.7	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2
Settled	.2	.1	.2	.2	.3	.2	.3	.3	.2	.2	.1	.1	.2
**Effluent	.0	.0	.0	.0	.1	.1	.1	.0	.0	.0	.0	.0	.0
Hardness													
Raw	11	12	12	12	12	12	12	12	12	12	11	12	12
**Effluent	29	30	31	31	28	27	28	29	30	31	30	30	30
Tap	30	30	31	31	28	27	28	29	30	31	30	30	30
Iron													
Raw	0.04	0.06	0.17	0.37	0.09	0.07	0.09	0.09	0.08	0.07	0.05	0.06	0.10
Settled	.34	.26	.23	.33	.73	.28	.53	.54	.51	.37	.37	.37	.41
**Effluent	.00	.00	.00	.00	.00	.00	.01	.01	.01	.00	.00	.00	.00
Tap	.01	.01	.01	.02	.02	.02	.04	.04	.04	.02	.03	.01	.02
Manganese													
Raw	0.03	0.08	0.21	0.24	0.06	0.04	0.03	0.03	0.04	0.03	0.03	0.03	0.07
Settled	.01	.01	.04	.06	.03	.01	.01	.01	.01	.01	.01	.01	.02
**Effluent	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Tap	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Fluoride													
Raw	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
**Effluent	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15
Tap	1.00	1.00	.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Chlorine Residual													
Filtered	0.14	0.15	0.17	0.13	0.12	0.12	0.12	0.14	0.12	0.15	0.15	0.19	0.14
**Effluent	.13	.14	.16	.12	.12	.11	.11	.12	.12	.14	.12	.17	.13
28 Phenix Ave. (C)	.08	.11	.13	.10	.08	.07	.07	.06	.06	.05	.05	.07	.08
Neut. Reservoir	.04	.04	.05	.03	.01	.03	.03	.03	.03	.02	.02	.03	.03
Tap	.05	.09	.12	.08	.05	.04	.04	.04	.03	.02	.02	.03	.05

*Parts per million, except pH.

**Before treatment with sodium silicofluoride.

TABLE 16

WATER PURIFICATION WORKS

*CHEMICAL AND PHYSICAL CHARACTERISTICS OF WATER IN VARIOUS BROOKS AND RESERVOIRS
ON SCITUATE WATERSHED

YEAR ENDED JUNE 30, 1970

Monthly Analyses	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Avg. for Year
Color													
Ponaganset Reservoir	10	6	14	20	13	8	13	14	10	4	3	12	11
Coventry Brook	12	12	12	22	28	13	13	13	27	28	27	27	20
Wilbur Brook	60	115	84	85	56	33	27	23	25	70	65	65	59
Westconnaug Reservoir	8	9	12	12	13	14	14	13	17	15	13	15	13
Barden Reservoir	38	54	37	22	14	24	22	17	14	16	27	27	26
Cork Brook	13	8	8	17	29	14	10	11	17	13	12	12	14
Rush Brook	22	26	18	33	30	18	17	13	17	27	32	29	24
Huntinghouse Brook	12	16	12	28	18	18	12	12	16	26	26	17	18
Harrisdale Brook	17	14	11	12	23	46	13	11	10	23	23	18	18
Blanchard Brook	65	330	128	140	90	18	38	33	34	105	135	145	105
Moswansicut Pond	8	13	8	9	12	13	17	13	12	12	13	13	12
Regulating Reservoir	12	21	12	12	23	19	17	13	11	10	15	12	15
Quonopaug Brook	165	280	40	82	60	45	33	28	38	95	135	140	95
Hemlock Brook	22	28	28	24	40	36	27	22	23	28	23	18	27
Betty Pond Stream	33	23	23	27	22	17	17	9	9	19	12	16	19
Spruce Brook	60	27	22	33	37	28	18	18	28	28	37	37	31
Brandy Brook	32	28	23	28	60	48	32	27	28	33	17	9	30
Moswansicut-South	115	90	56	74	28	13	30	7	28	27	38	33	45
Windsor Brook	23	13	12	22	29	21	12	12	13	23	27	23	19
Paine Pond	58	42	28	75	70	30	27	27	13	19	45	62	41
Unnamed Brook-A	**	**	**	**	60	40	27	17	28	37	62	62	42
Unnamed Brook-B	60	56	22	29	23	22	16	16	16	17	17	23	26
Turbidity													
Ponaganset Reservoir	0.1	0.2	1.1	1.0	1.1	0.7	0.6	0.5	0.4	0.1	0.1	0.2	0.5
Coventry Brook	0.1	0.1	0.2	0.3	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Wilbur Brook	0.5	0.5	0.5	0.4	0.2	0.3	0.2	0.1	0.1	0.2	0.4	0.5	0.3
Westconnaug Reservoir	0.1	0.1	0.2	0.1	0.2	0.3	0.1	0.1	0.1	0.2	0.3	0.1	0.2
Barden Reservoir	0.5	1.1	0.5	0.2	0.4	0.2	0.1	0.2	0.1	0.2	0.3	0.3	0.3
Cork Brook	0.1	0.1	0.5	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.3	0.1	0.2
Rush Brook	0.1	0.3	0.3	0.3	0.4	0.2	0.1	0.2	0.2	0.3	0.3	0.4	0.3
Huntinghouse Brook	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1
Harrisdale Brook	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.6	0.2	0.2	0.2
Blanchard Brook	0.3	1.6	0.2	0.2	0.2	0.2	0.0	0.1	0.2	0.3	0.2	0.2	0.3
Moswansicut Pond	0.1	0.3	0.2	0.2	0.3	0.3	0.3	0.1	0.2	0.3	0.5	0.4	0.3
Regulating Reservoir	0.1	0.4	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.2
Quonopaug Brook	0.7	1.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.7	0.4
Hemlock Brook	0.2	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.2	0.3	0.2	0.3	0.2
Betty Pond Stream	0.2	0.2	0.3	0.3	0.3	2.2	0.3	0.2	0.3	0.4	0.2	0.3	0.4
Spruce Brook	0.2	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.2	0.1	0.1	0.2	0.1
Brandy Brook	0.2	0.2	0.2	0.2	0.2	0.7	0.1	0.3	0.6	0.9	0.1	0.3	0.3
Moswansicut-South	8.0	5.4	1.3	2.0	1.1	0.4	0.5	0.3	0.5	2.1	1.4	2.2	2.1
Windsor Brook	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.2	0.1	0.2	0.1
Paine Pond	0.8	1.5	0.7	9.9	1.1	0.6	0.5	0.1	0.3	0.3	0.2	0.5	1.4
Unnamed Brook-A	**	**	**	**	0.4	0.3	0.4	0.2	0.5	0.5	0.9	0.8	0.5
Unnamed Brook-B	0.3	0.3	0.2	0.2	0.5	0.3	0.3	0.2	0.2	0.1	0.1	0.3	0.3

*Parts per million.

**No sample obtained--Dry.

NOTE: Unnamed Brook A is just north of Scituate Town Dump. Unnamed Brook B is southwest of the former Foster Nike Site.

TABLE 16 (Continued)
WATER PURIFICATION WORKS

*CHEMICAL AND PHYSICAL CHARACTERISTICS OF WATER IN VARIOUS BROOKS AND RESERVOIRS
ON SCITUATE WATERSHED

YEAR ENDED JUNE 30, 1970

Monthly Analyses	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Avg. for Year
Iron													
Ponaganset Reservoir	0.30	0.18	0.58	0.47	0.34	0.24	0.23	0.23	0.16	0.11	0.13	0.16	0.26
Coventry Brook	.06	.05	.22	.04	.07	.03	.03	.02	.04	.07	.08	.14	.07
Wilbur Brook	.90	.00	.24	.20	.15	.11	.14	.07	.08	.18	.55	.65	.27
Westconnaug Reservoir	.16	.06	.18	.07	.12	.10	.14	.07	.07	.15	.23	.28	.14
Barden Reservoir	2.50	2.15	1.00	.18	.24	.11	.14	.08	.07	.11	.23	.40	.60
Cork Brook	.06	.05	.02	.02	.02	.05	.03	.02	.04	.02	.07	.25	.06
Rush Brook	.98	.48	.24	.15	.18	.14	.22	.09	.09	.21	.36	.49	.30
Huntinghouse Brook	.23	.22	.06	.04	.05	.04	.03	.02	.02	.11	.16	.15	.09
Harrisdale Brook	.38	.23	.10	.06	.09	.18	.14	.02	.03	.15	.23	.30	.16
Blanchard Brook	1.85	3.00	.70	.65	.40	.07	.22	.09	.08	.40	.80	.85	.76
Moswansicut Pond	.08	.08	.03	.04	.05	.04	.11	.06	.06	.02	.07	.07	.06
Regulating Reservoir	.05	.07	.14	.08	.14	.05	.07	.04	.05	.10	.18	.10	.09
Quonopaug Brook	1.65	.90	.14	.08	.25	.12	.13	.07	.07	.40	.60	.70	.43
Hemlock Brook	.28	.24	.32	.38	.20	.46	.36	.07	.08	.12	.24	.25	.25
Betty Pond Stream	.26	.05	.10	.04	.05	.07	.28	.03	.03	.21	.11	.11	.11
Spruce Brook	.36	.14	.10	.12	.14	.05	.05	.04	.07	.08	.07	.13	.11
Brandy Brook	.37	.18	.13	.14	.20	.12	.16	.09	.10	.24	.05	.06	.15
Moswansicut-South	3.50	.45	.68	2.80	1.00	.14	.64	.01	.17	.08	1.56	1.25	1.02
Windsor Brook	.04	.08	.02	.03	.05	.08	.03	.14	.01	.09	.40	.07	.09
Paine Pond	.60	.22	.28	.25	.08	.13	.32	.08	.09	.08	.42	.48	.25
Unnamed Brook-A	**	**	**	**	.08	.22	.20	.17	.14	.27	1.04	1.06	.40
Unnamed Brook-B	.52	.08	.24	.23	.21	.18	.13	.10	.09	.84	.15	.24	.25
Manganese													
Ponaganset Reservoir	0.10	0.10	0.08	0.09	0.10	0.09	0.15	0.09	0.08	0.07	0.08	0.08	0.09
Coventry Brook	.00	.00	.02	.01	.01	.01	.00	.01	.00	.01	.00	.00	.01
Wilbur Brook	.01	.01	.01	.03	.02	.02	.02	.03	.02	.02	.02	.01	.02
Westconnaug Reservoir	.01	.00	.01	.01	.07	.06	.03	.03	.02	.02	.03	.04	.03
Barden Reservoir	.01	.07	.08	.01	.00	.08	.07	.08	.04	.01	.08	.02	.05
Cork Brook	.04	.01	.01	.01	.02	.08	.01	.03	.03	.02	.02	.01	.02
Rush Brook	.00	.08	.02	.01	.05	.13	.15	.14	.14	.02	.02	.05	.07
Huntinghouse Brook	.04	.03	.00	.01	.02	.04	.01	.01	.02	.01	.01	.01	.02
Harrisdale Brook	.00	.02	.00	.00	.02	.04	.02	.01	.00	.03	.04	.00	.02
Blanchard Brook	.03	.02	.01	.06	.05	.01	.04	.04	.03	.03	.03	.02	.03
Moswansicut Pond	.04	.04	.02	.00	.02	.00	.08	.02	.02	.02	.02	.02	.03
Regulating Reservoir	.01	.01	.02	.00	.02	.07	.03	.04	.01	.00	.02	.01	.02
Quonopaug Brook	.04	.01	.02	.02	.02	.02	.02	.02	.01	.01	.01	.01	.02
Hemlock Brook	.01	.00	.01	.00	.06	.14	.04	.05	.04	.06	.03	.01	.04
Betty Pond Stream	.00	.00	.00	.00	.01	.03	.04	.02	.00	.01	.01	.01	.01
Spruce Brook	.00	.00	.00	.00	.01	.00	.01	.01	.02	.00	.01	.01	.01
Brandy Brook	.02	.01	.00	.00	.04	.01	.02	.02	.01	.01	.01	.02	.01
Moswansicut-South	.00	.17	.04	.02	.02	.02	.00	.04	.02	.02	.00	.08	.04
Windsor Brook	.00	.01	.00	.00	.02	.04	.01	.02	.01	.01	.01	.00	.01
Paine Pond	.03	.02	.06	.02	.06	.04	.03	.06	.04	.02	.03	.02	.04
Unnamed Brook-A	**	**	**	**	.03	.08	.03	.04	.02	.02	.04	.05	.03
Unnamed Brook-B	.02	.05	.09	.10	.07	.07	.13	.06	.06	.06	.07	.06	.07

*Parts per million.

**No sample obtained--Dry.

NOTE: Unnamed Brook A is just north of Scituate Town Dump. Unnamed Brook B is southwest of the former Foster Nike Site.

TABLE 16 (Continued)

WATER PURIFICATION WORKS

*CHEMICAL AND PHYSICAL CHARACTERISTICS OF WATER IN VARIOUS BROOKS AND RESERVOIRS
ON SCITUATE WATERSHED

YEAR ENDED JUNE 30, 1970

Monthly Analyses	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Avg. for Year
pH													
Ponaganset Reservoir	5.1	5.2	4.8	4.8	4.8	4.7	4.7	4.8	4.7	4.7	4.6	4.8	4.8
Coventry Brook	7.3	6.3	6.8	6.4	6.8	5.9	6.3	6.1	5.9	6.7	6.2	6.3	6.4
Wilbur Brook	7.1	6.4	6.4	6.2	6.0	5.5	5.7	5.6	5.6	6.2	6.1	6.2	6.1
Westconnaug Reservoir	7.0	6.8	6.7	6.5	6.3	5.8	6.1	6.0	6.0	6.5	6.2	6.5	6.4
Barden Reservoir	6.9	6.2	6.5	6.5	5.6	5.1	5.4	5.2	5.5	5.7	5.9	6.2	5.9
Cork Brook	6.3	6.5	6.4	6.2	5.7	5.4	5.7	5.5	5.5	6.2	5.9	6.3	6.0
Rush Brook	6.3	6.2	6.2	6.4	6.1	5.5	6.3	6.0	5.8	6.3	6.3	6.5	6.2
Huntinghouse Brook	6.5	6.5	6.7	6.5	6.1	5.3	6.1	6.0	5.9	6.4	6.4	6.5	6.2
Harrisdale Brook	6.7	6.8	6.7	6.9	6.2	5.8	6.2	6.1	6.2	6.6	6.5	6.7	6.5
Blanchard Brook	5.7	5.6	5.3	5.4	5.1	5.0	5.3	5.3	5.4	5.8	5.5	5.7	5.4
Moswansicut Pond	6.3	6.5	6.3	6.2	6.3	6.2	6.0	6.1	6.1	6.5	6.6	6.6	6.3
Regulating Reservoir	6.8	6.8	6.6	6.4	6.3	5.6	6.1	5.9	6.1	6.6	6.3	6.4	6.3
Quonopaug Brook	6.2	6.2	5.8	5.7	5.5	4.9	5.4	5.3	5.6	5.9	5.9	6.3	5.7
Hemlock Brook	6.4	6.0	6.1	6.1	5.1	4.8	5.6	5.2	5.3	5.6	5.7	6.1	5.7
Betty Pond Stream	6.2	6.0	5.8	6.4	5.9	5.3	5.7	5.6	5.8	5.9	5.8	5.8	5.9
Spruce Brook	6.4	6.6	6.5	6.5	5.5	5.2	5.5	5.2	5.3	6.0	5.6	5.9	5.9
Brandy Brook	6.6	6.5	6.7	6.7	6.2	6.1	6.4	6.4	6.4	6.6	6.2	6.4	6.4
Moswansicut-South	6.5	6.4	6.3	6.2	6.3	6.2	6.1	6.3	6.4	6.5	6.4	6.6	6.4
Windsor Brook	6.6	6.4	6.5	6.3	5.9	5.6	5.9	5.9	5.4	6.6	6.2	6.6	6.2
Paine Pond	6.3	5.8	5.5	5.7	5.6	5.3	5.4	5.3	5.5	5.7	5.8	6.0	5.7
Unnamed Brook-A	**	**	**	**	6.1	5.9	5.8	6.1	6.0	6.3	6.4	6.6	6.2
Unnamed Brook-B	6.0	5.3	5.2	6.7	4.6	4.6	4.8	4.7	4.8	5.1	4.7	4.9	5.1
Acidity													
Ponaganset Reservoir	3.0	2.0	2.5	2.5	3.0	5.5	1.5	11.0	8.0	4.0	3.5	3.5	4.2
Coventry Brook	4.0	4.0	3.0	5.0	3.0	5.5	3.5	4.5	4.5	3.5	4.0	5.0	4.1
Wilbur Brook	5.0	6.0	7.5	8.0	6.0	7.5	11.0	6.5	4.5	7.5	7.5	6.0	6.9
Westconnaug Reservoir	2.0	2.0	2.0	2.0	2.0	3.5	3.5	3.5	3.0	2.0	2.5	2.5	2.5
Barden Reservoir	3.5	3.5	2.5	2.0	3.0	5.0	5.5	4.5	3.0	3.0	2.5	2.5	3.4
Cork Brook	4.5	4.0	2.5	4.5	2.5	4.5	4.5	3.5	4.0	2.5	2.5	2.5	3.5
Rush Brook	9.0	7.5	6.0	6.5	3.5	5.5	4.0	3.5	3.5	3.5	3.5	5.0	5.1
Huntinghouse Brook	3.5	7.5	2.5	3.0	2.0	5.0	3.5	4.5	3.5	3.5	3.5	4.0	3.8
Harrisdale Brook	4.5	3.0	3.0	2.0	3.0	6.0	6.5	4.5	2.5	2.5	4.0	2.5	3.7
Blanchard Brook	8.0	18.0	10.5	10.0	7.0	11.5	11.5	9.0	5.5	7.0	10.0	9.5	9.8
Moswansicut Pond	3.0	3.0	3.5	5.0	1.5	3.0	3.0	3.5	3.0	1.5	1.5	3.0	2.9
Regulating Reservoir	4.5	1.5	2.5	2.0	3.0	5.5	6.5	5.0	3.0	2.5	1.5	1.5	3.3
Quonopaug Brook	4.0	19.0	11.0	13.0	7.5	14.0	13.0	9.0	6.5	7.0	11.5	11.0	10.5
Hemlock Brook	4.0	2.5	2.5	2.0	5.0	7.5	6.5	4.5	4.0	2.5	3.5	2.5	3.9
Betty Pond Stream	3.5	5.0	3.5	3.5	3.0	11.0	19.5	6.0	2.5	3.0	4.0	4.0	5.7
Spruce Brook	3.5	3.5	2.5	3.5	4.0	6.5	5.5	4.5	5.0	2.0	4.0	4.0	4.0
Brandy Brook	3.0	2.0	2.5	2.0	3.5	3.5	2.5	3.0	2.5	2.0	2.0	1.5	2.5
Moswansicut-South	11.0	11.0	9.5	8.0	4.0	8.5	9.5	3.5	4.0	2.0	7.0	5.5	7.0
Windsor Brook	4.0	4.0	2.5	2.5	2.5	5.0	5.0	3.5	3.0	2.0	3.0	2.5	3.3
Paine Pond	2.5	4.5	6.0	11.0	6.0	10.0	19.5	12.0	10.0	4.0	7.5	8.0	8.4
Unnamed Brook-A	**	**	**	**	8.5	10.5	15.0	7.0	5.0	5.5	6.5	7.5	8.2
Unnamed Brook-B	4.5	4.5	3.5	4.5	4.5	8.0	7.0	6.0	6.0	2.5	4.0	3.5	4.9

*Parts per million, except pH.

**No sample obtained--Dry.

NOTE: Unnamed Brook-A is just north of Scituate Town Dump. Unnamed Brook-B is southwest of the former Foster Nike Site.

TABLE 16 (Continued)

WATER PURIFICATION WORKS

*CHEMICAL AND PHYSICAL CHARACTERISTICS OF WATER IN VARIOUS BROOKS AND RESERVOIRS
ON SCITUATE WATERSHED

YEAR ENDED JUNE 30, 1970

Monthly Analyses	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Avg. for Year
Alkalinity													
Ponaganset Reservoir	2.0	1.5	1.5	1.5	2.0	1.0	1.0	1.5	1.5	1.0	1.0	1.5	1.4
Coventry Brook	7.0	7.0	6.0	6.0	5.0	4.5	5.5	4.0	5.0	5.0	4.0	5.0	5.3
Wilbur Brook	9.0	8.5	6.5	6.0	3.5	3.5	4.0	3.0	3.0	5.0	4.5	6.5	5.3
Westconnaug Reservoir	8.5	7.5	5.0	8.0	4.5	3.5	4.0	3.0	3.5	5.0	4.0	5.0	5.1
Barden Reservoir	3.5	5.0	4.0	4.0	3.0	2.5	2.5	2.0	3.0	2.5	3.0	3.5	3.2
Cork Brook	5.5	5.5	4.0	5.0	5.0	2.5	3.5	2.5	3.0	4.0	3.0	4.0	4.0
Rush Brook	7.5	7.5	8.5	9.0	4.0	2.5	6.5	4.5	3.0	5.5	6.0	9.0	6.1
Huntinghouse Brook	12.0	12.0	11.0	8.5	5.5	2.0	5.0	3.5	3.5	5.0	5.5	8.5	6.8
Harrisdale Brook	13.5	11.0	10.5	11.0	5.5	3.5	7.0	5.0	5.0	8.0	7.5	9.5	8.1
Blanchard Brook	5.0	5.0	3.5	4.0	2.5	1.5	2.5	2.5	3.0	4.5	3.0	4.0	3.4
Moswansicut Pond	6.5	7.0	6.5	6.5	6.0	5.5	5.5	4.0	5.0	5.0	5.5	7.0	5.8
Regulating Reservoir	7.0	7.5	6.0	6.0	6.0	3.5	5.5	2.5	5.0	4.0	5.5	6.5	5.4
Quonopaug Brook	10.5	13.0	6.5	6.0	3.5	2.0	3.0	2.0	3.5	2.5	6.0	6.5	5.4
Hemlock Brook	4.0	3.5	4.0	4.0	2.0	2.0	3.0	3.0	3.0	4.0	3.0	3.5	3.3
Betty Pond Stream	4.0	3.5	3.0	3.5	5.0	3.0	6.5	3.0	3.0	4.0	3.5	3.5	3.8
Spruce Brook	6.0	6.5	6.5	6.0	3.0	2.5	2.5	1.5	2.5	3.0	3.0	3.5	3.9
Brandy Brook	9.5	10.0	10.0	9.0	6.5	5.5	9.0	6.5	5.5	8.5	4.0	4.5	7.4
Moswansicut-South	11.5	17.0	15.5	16.0	14.0	9.0	7.5	6.5	9.0	10.0	12.0	14.0	11.8
Windsor Brook	8.0	7.5	5.0	6.0	3.0	2.5	3.5	3.0	3.5	4.5	3.5	4.5	4.5
Paine Pond	4.0	3.5	3.0	4.5	3.5	3.0	4.5	3.5	4.0	4.0	4.5	5.0	3.9
Unnamed Brook-A	**	**	**	**	8.5	8.0	7.5	6.0	5.5	9.5	11.5	15.5	9.0
Unnamed Brook-B	2.5	2.0	2.0	2.5	1.0	1.0	1.5	1.0	2.0	2.0	1.5	2.0	1.8

*Parts per million.

**No sample obtained--Dry.

NOTE: Unnamed Brook A is just north of Scituate Town Dump. Unnamed Brook B is southwest of the former Foster Nike Site.

TABLE 17

WATER PURIFICATION WORKS

CHEMICAL AND PHYSICAL CHARACTERISTICS OF WATER
IN VARIOUS PARTS OF THE DISTRIBUTION SYSTEM

YEAR ENDED JUNE 30, 1970

	Monthly Averages													Avg. for
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Year	
pH														
Neutaconkanut Reservoir	10.0	9.9	9.9	10.0	10.1	10.3	10.3	10.2	10.1	10.1	10.1	10.0	10.1	
28 Phenix Ave., Cranston	10.0	9.9	9.9	10.0	10.1	10.3	10.3	10.2	10.2	10.1	10.1	10.0	10.1	
Westminster St., Olneyville	10.0	9.9	9.9	10.0	10.1	10.3	10.3	10.2	10.2	10.1	10.1	10.0	10.1	
1275 Reservoir Ave.,Cranston	10.0	9.9	9.9	10.0	10.1	10.3	10.3	10.2	10.2	10.1	10.1	10.0	10.1	
750 Reservoir Ave.,Cranston	10.0	9.9	9.9	10.0	10.1	10.3	10.3	10.2	10.2	10.1	10.1	10.0	10.1	
Biltmore Hotel	10.0	9.9	9.9	10.0	10.1	10.3	10.3	10.2	10.2	10.1	10.1	9.9	10.1	
Dexter Manor	10.0	9.9	10.0	10.0	10.1	10.3	10.3	10.2	10.2	10.1	10.1	10.0	10.1	
State Office Building	10.0	9.9	9.9	10.0	10.1	10.3	10.3	10.2	10.2	10.1	10.1	10.0	10.1	
*Longview Reservoir	10.0	9.9	9.9	10.0	10.1	10.3	10.3	10.2	10.1	10.1	10.1	10.0	10.1	
208 Weybosset Street	10.0	9.9	9.9	10.0	10.1	10.3	10.3	10.2	10.2	10.1	10.1	10.0	10.1	
Phenolphthalein Alkalinity														
Neutaconkanut Reservoir	7.0	7.2	7.7	8.0	6.4	6.4	5.6	5.9	6.2	6.7	6.0	5.9	6.6	
28 Phenix Ave., Cranston	7.2	7.5	8.0	8.1	6.1	6.5	5.7	5.8	6.5	6.9	6.0	5.9	6.7	
Westminster St., Olneyville	7.2	7.6	8.0	8.1	6.2	6.7	5.8	6.0	6.5	7.0	6.0	6.0	6.8	
1275 Reservoir Ave.,Cranston	7.4	7.6	8.0	8.2	6.3	6.8	5.8	5.0	6.6	7.0	6.0	6.0	6.8	
750 Reservoir Ave.,Cranston	7.4	7.6	8.0	8.2	6.2	6.8	5.9	6.0	6.6	7.1	6.0	6.0	6.8	
Biltmore Hotel	7.5	7.6	8.0	8.3	6.1	6.8	5.8	6.1	6.8	7.0	5.9	5.9	6.8	
Dexter Manor	7.4	7.7	8.1	8.4	6.2	6.9	5.9	6.1	6.7	7.1	6.0	6.0	6.9	
State Office Building	7.4	7.6	8.0	8.3	6.1	6.8	5.8	5.0	6.7	7.0	6.0	6.0	6.8	
*Longview Reservoir	7.5	7.7	8.1	8.5	6.8	7.1	6.1	6.1	6.7	7.1	6.4	6.1	7.0	
208 Weybosset Street	7.3	7.5	8.0	8.3	6.2	6.8	5.9	6.0	6.7	7.1	6.1	6.0	6.8	
Methyl Orange Alkalinity														
Neutaconkanut Reservoir	13.9	14.9	15.8	16.3	12.2	12.0	11.4	11.9	12.6	13.0	12.1	12.0	13.2	
28 Phenix Ave., Cranston	14.2	15.2	16.1	15.8	11.4	12.1	11.4	11.8	13.1	13.0	11.9	12.0	13.2	
Westminster St.,Olneyville	14.2	15.2	16.1	16.0	11.3	12.2	11.4	12.1	13.0	13.0	11.9	12.1	13.2	
1275 Reservoir Ave.,Cranston	14.3	15.2	16.1	15.7	11.5	12.3	11.6	12.0	13.1	13.1	11.9	12.0	13.2	
750 Reservoir Ave.,Cranston	14.3	15.1	16.0	15.6	11.3	12.2	11.6	12.0	13.1	13.1	12.0	12.0	13.2	
Biltmore Hotel	14.4	15.3	16.0	15.7	11.4	12.2	11.5	12.1	13.3	13.2	12.0	12.2	13.3	
Dexter Manor	14.5	15.4	16.1	15.8	11.4	12.3	11.5	12.0	13.1	13.1	12.1	12.2	13.3	
State Office Building	14.4	15.3	16.1	15.9	11.4	12.2	11.6	12.0	13.2	13.2	12.0	12.2	13.3	
*Longview Reservoir	14.5	15.5	16.4	16.8	12.9	12.9	12.1	12.4	13.3	13.6	12.8	12.6	13.8	
208 Weybosset Street	14.3	15.2	16.0	15.7	11.3	12.3	11.5	12.1	13.2	13.1	12.0	12.1	13.2	
Color														
Neutaconkanut Reservoir	3	3	3	3	2	2	3	3	4	4	3	3	3	
28 Phenix Ave., Cranston	3	3	3	3	2	2	3	3	4	4	3	3	3	
Westminster St.,Olneyville	3	3	3	3	2	2	3	3	4	4	3	3	3	
1275 Reservoir Ave.,Cranston	3	3	3	3	2	2	3	3	4	4	3	3	3	
750 Reservoir Ave.,Cranston	3	3	3	3	2	2	3	4	4	4	3	3	3	
Biltmore Hotel	3	3	3	3	2	2	3	4	4	4	3	3	3	
Dexter Manor	3	3	3	3	2	2	3	4	4	4	3	3	3	
State Office Building	3	3	3	3	2	2	3	4	4	4	3	3	3	
*Longview Reservoir	5	5	5	4	4	3	5	5	6	6	5	5	5	
208 Weybosset Street	3	3	3	2	2	2	3	4	4	4	3	3	3	
Iron														
Neutaconkanut Reservoir	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	
28 Phenix Ave., Cranston	.01	.01	.01	.01	.01	.01	.02	.02	.02	.01	.01	.01	.01	
Westminster St.,Olneyville	.01	.00	.00	.01	.01	.00	.02	.01	.02	.01	.01	.00	.01	
1275 Reservoir Ave.,Cranston	.00	.00	.00	.01	.01	.00	.02	.02	.02	.01	.01	.00	.01	
750 Reservoir Ave.,Cranston	.01	.01	.01	.01	.01	.01	.02	.02	.02	.01	.01	.00	.01	
Biltmore Hotel	.01	.01	.01	.01	.02	.01	.03	.02	.03	.02	.02	.02	.02	
Dexter Manor	.01	.01	.01	.02	.01	.01	.02	.02	.02	.02	.02	.02	.02	
State Office Building	.01	.01	.01	.01	.01	.01	.02	.02	.02	.02	.01	.01	.01	
*Longview Reservoir	.05	.04	.04	.05	.05	.04	.06	.06	.06	.06	.05	.05	.05	
208 Weybosset Street	.01	.01	.01	.02	.02	.02	.03	.02	.02	.02	.02	.02	.02	

*Sample obtained at Our Lady of Fatima Hospital, North Providence.

TABLE 17 (Continued)

WATER PURIFICATION WORKS

CHEMICAL AND PHYSICAL CHARACTERISTICS OF WATER
IN VARIOUS PARTS OF THE DISTRIBUTION SYSTEM

YEAR ENDED JUNE 30, 1970

Monthly Averages

	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Avg. for Year
Chlorides													
Neutaconkanut Reservoir	11.0	11.0	11.9	11.3	12.0	12.0	11.7	11.5	11.8	12.0	12.0	12.2	11.7
28 Phenix Ave., Cranston	11.0	11.0	11.0	11.3	11.9	12.0	11.5	11.4	11.8	11.9	12.0	12.1	11.6
Westminster St., Olneyville	11.0	11.0	11.0	11.4	12.0	12.0	11.5	11.4	11.8	11.9	12.0	12.1	11.6
1275 Reservoir Ave., Cranston	11.0	11.0	11.0	11.3	12.0	12.0	11.5	11.3	11.8	11.9	12.0	12.1	11.6
750 Reservoir Ave., Cranston	11.0	11.0	11.0	11.3	12.0	12.0	11.4	11.4	11.8	11.9	12.0	12.1	11.6
Biltmore Hotel	11.0	11.0	11.0	11.3	12.0	12.0	11.5	11.3	11.8	11.9	12.0	12.1	11.6
Dexter Manor	11.0	11.0	11.0	11.3	12.0	12.0	11.5	11.3	11.8	11.9	12.0	12.0	11.6
State Office Building	11.0	11.0	11.1	11.3	12.0	12.0	11.4	11.3	11.8	11.9	12.0	12.0	11.6
*Longview Reservoir	11.0	11.0	11.1	11.3	12.0	12.0	11.5	11.4	11.8	11.9	12.0	12.1	11.6
208 Weybosset Street	11.0	11.0	11.0	11.3	12.0	12.0	11.5	11.4	11.8	11.9	12.0	12.0	11.6
Nitrites													
Neutaconkanut Reservoir	0.001	0.001	0.001	0.005	0.006	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.002
28 Phenix Ave., Cranston	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
Westminster St., Olneyville	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
1275 Reservoir Ave., Cranston	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
750 Reservoir Ave., Cranston	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
Biltmore Hotel	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
Dexter Manor	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
State Office Building	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
*Longview Reservoir	.001	.001	.001	.002	.002	.001	.001	.001	.001	.001	.001	.001	.001
208 Weybosset Street	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
Taste													
Neutaconkanut Reservoir	0	0	0	0	0	0	0	0	0	0	0	0	0
28 Phenix Ave., Cranston	0	0	0	0	0	0	0	0	0	0	0	0	0
Westminster St., Olneyville	0	0	0	0	0	0	0	0	0	0	0	0	0
1275 Reservoir Ave., Cranston	0	0	0	0	0	0	0	0	0	0	0	0	0
750 Reservoir Ave., Cranston	0	0	0	0	0	0	0	0	0	0	0	0	0
Biltmore Hotel	0	0	0	0	0	0	0	0	0	0	0	0	0
Dexter Manor	0	0	0	0	0	0	0	0	0	0	0	0	0
State Office Building	0	0	0	0	0	0	0	0	0	0	0	0	0
*Longview Reservoir	0	0	0	0	0	0	0	0	0	0	0	0	0
208 Weybosset Street	0	0	0	0	0	0	0	0	0	0	0	0	0
Odor													
Neutaconkanut Reservoir	0	0	0	0	0	0	0	0	0	0	0	0	0
28 Phenix Ave., Cranston	0	0	0	0	0	0	0	0	0	0	0	0	0
Westminster St., Olneyville	0	0	0	0	0	0	0	0	0	0	0	0	0
1275 Reservoir Ave., Cranston	0	0	0	0	0	0	0	0	0	0	0	0	0
750 Reservoir Ave., Cranston	0	0	0	0	0	0	0	0	0	0	0	0	0
Biltmore Hotel	0	0	0	0	0	0	0	0	0	0	0	0	0
Dexter Manor	0	0	0	0	0	0	0	0	0	0	0	0	0
State Office Building	0	0	0	0	0	0	0	0	0	0	0	0	0
*Longview Reservoir	0	0	0	0	0	0	0	0	0	0	0	0	0
208 Weybosset Street	0	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride													
Neutaconkanut Reservoir	1.00	1.00	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
28 Phenix Ave., Cranston	1.00	1.00	1.00	1.00	0.98	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00
Westminster St., Olneyville	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00
1275 Reservoir Ave., Cranston	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00
750 Reservoir Ave., Cranston	0.99	1.00	1.00	1.00	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Biltmore Hotel	1.00	1.00	0.99	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Dexter Manor	1.00	1.00	0.99	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
State Office Building	1.00	1.00	0.97	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
*Longview Reservoir	1.00	0.99	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
208 Weybosset Street	1.00	1.00	0.99	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

*Sample obtained at Our Lady of Fatima Hospital, North Providence.

TABLE 18
WATER PURIFICATION WORKS
BACTERIOLOGICAL EXAMINATION OF WATER IN PROCESS OF FILTRATION
YEAR ENDED JUNE 30, 1970

Bacteria per Ml. (48 Hours on Agar at 20°C.)																	
1969-1970	Raw-A.M.			Raw-P.M.			Settled			Effluent-A.M.			Effluent-P.M.			Tap	
	Max.	Min.	Avg.	Max.	Min.	Avg.	Max.	Min.	Avg.	Max.	Min.	Avg.	Max.	Min.	Avg.	Max.	Min.
July	60	9	23	32	0	13	110	1	21	130	0	7	6	0	1	3	0
August	150	12	54	120	11	37	43	4	14	3	0	0	50	0	3	5	0
September	130	12	48	180	7	50	200	4	38	1	0	0	3	0	0	1	0
October	330	12	81	320	17	79	2400	10	289	8	0	1	80	0	7	1	0
November	150	50	86	130	7	63	2500	60	579	1000	0	69	90	0	22	2	0
December	370	20	92	110	3	52	1200	15	203	6	0	2	60	0	10	10	0
January	360	33	94	250	9	72	3000	70	1035	15	0	3	1920	0	107	15	0
February	350	15	79	240	12	65	4700	12	1327	70	0	7	17	0	3	4	0
March	120	25	61	85	20	43	1500	200	693	130	0	15	320	0	25	12	0
April	160	25	73	110	30	59	1500	0	505	160	0	21	130	1	25	11	0
May	1200	1	152	80	8	46	270	0	31	320	0	30	60	0	12	15	0
June	80	3	44	70	6	31	10	0	2	60	0	4	20	0	2	6	0
For Year	1200	1	74	320	0	51	4700	0	395	1000	0	13	1920	0	18	15	0

A.M. refers to samples obtained in the morning; P.M. to samples obtained in the afternoon.

TABLE 20
WATER PURIFICATION WORKS
BACTERIOLOGICAL EXAMINATION OF WATER IN PROCESS OF FILTRATION
YEAR ENDED JUNE 30, 1970

Coliform Bacteria

	Raw-A.M.			Raw-P.M.			Settled			Effluent-A.M.			Effluent-P.M.			Tap		
	No. of 10 ml. Por- tions Tested	No. of Tests Con- firmed	Index per ml.	No. of 10 ml. Por- tions Tested	No. of Tests Con- firmed	Index per ml.	No. of 10 ml. Por- tions Tested	No. of Tests Con- firmed	Index per ml.	No. of 10 ml. Por- tions Tested	No. of Tests Con- firmed	Index per ml.	No. of 10 ml. Por- tions Tested	No. of Tests Con- firmed	Index per ml.	No. of 10 ml. Por- tions Tested	No. of Tests Con- firmed	Index per ml.
1969- 1970																		
July	78	6	0.008	42	5	0.012	52	4	0.008	52	0	0.000	42	0	0.000	130	0	0.000
August	75	15	.020	40	9	.023	50	3	.006	50	0	.000	40	0	.000	125	0	.000
September	75	46	.061	42	30	.071	50	3	.006	50	0	.000	42	0	.000	125	0	.000
October	78	56	.072	44	31	.070	52	2	.004	52	0	.000	44	0	.000	130	0	.000
November	69	69	.100	36	36	.100	46	7	.015	46	0	.000	36	0	.000	115	0	.000
December	78	78	.100	40	40	.100	52	3	.006	52	0	.000	40	0	.000	130	0	.000
January	78	58	.074	42	32	.076	52	2	.004	52	0	.000	40	0	.000	130	0	.000
February	69	24	.035	38	16	.042	46	0	.000	46	0	.000	38	0	.000	115	0	.000
March	78	17	.022	42	7	.017	52	0	.000	52	0	.000	40	0	.000	130	0	.000
April	78	20	.026	44	8	.018	52	1	.002	52	0	.000	42	0	.000	130	0	.000
May	69	18	.026	38	5	.013	46	0	.000	46	0	.000	38	0	.000	120	0	.000
June	78	29	.037	44	14	.032	52	0	.000	52	0	.000	44	0	.000	130	0	.000
For Year	903	436	0.048	492	233	0.047	602	25	0.004	602	0	0.000	486	0	0.000	1,510	0	0.000

A.M. refers to samples obtained in the morning; P.M. refers to samples obtained in the afternoon.

TABLE 21

WATER PURIFICATION WORKS

BACTERIOLOGICAL EXAMINATION OF WATER IN VARIOUS BROOKS AND RESERVOIRS
ON SCITUATE WATERSHED

YEAR ENDED JUNE 30, 1970

	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Avg. for Year
Bacteria per Ml. 48 Hours on Agar at 20°C.													
Ponaganset Reservoir	660	720	2,000	500	130	50	70	35	50	110	100	400	402
Coventry Brook	5,400	3,000	700	800	720	150	200	60	700	640	800	960	1,178
Wilbur Brook	4,800	1,600	900	8,000	900	900	90	160	680	3,600	1,700	1,500	2,069
Westconnaug Reservoir	1,300	1,500	350	1,800	800	360	140	360	720	1,400	1,400	400	878
Barden Reservoir	3,000	3,000	400	500	140	1,500	100	550	480	520	360	440	916
Cork Brook	7,800	3,600	360	2,100	600	420	400	130	680	720	780	1,100	1,558
Rush Brook	2,400	2,400	900	2,000	800	680	250	360	3,500	2,400	3,200	3,600	1,874
Huntinghouse Brook	4,500	1,800	1,200	3,500	960	920	300	300	3,300	3,500	3,300	800	2,032
Harrisdale Brook	850	2,000	600	480	1,200	4,800	275	500	700	1,100	450	900	1,155
Blanchard Brook	9,000	7,200	1,800	780	500	1,300	190	110	900	2,700	3,900	1,500	2,490
Moswansicut Pond	4,000	3,000	250	3,600	320	520	200	210	100	440	960	1,600	1,267
Regulating Reservoir	680	540	1,100	500	2,000	3,600	160	280	80	150	400	120	801
Quonopaug Brook	9,000	3,200	4,200	4,000	480	900	500	80	960	1,200	1,200	4,200	2,493
Hemlock Brook	900	420	130	800	500	1,500	250	350	850	270	440	350	563
Betty Pond Stream	3,000	4,800	1,000	900	400	5,000	1,400	2,700	1,700	480	1,500	1,200	2,007
Spruce Brook	10,000	3,000	480	4,000	720	560	400	90	600	1,300	1,400	700	1,938
Brandy Brook	1,100	720	320	720	540	7,800	400	3,200	4,000	1,300	2,300	1,100	1,958
Moswansicut-South	18,000	5,400	3,000	4,200	4,800	4,200	3,800	480	6,000	1,200	11,000	3,900	5,498
Windsor Brook	11,000	2,400	330	180	540	650	240	95	1,100	2,800	1,200	840	1,781
Paine Pond	5,400	660	950	8,400	1,800	3,600	240	420	120	180	1,200	840	1,984
Unnamed Brook--A	*	*	*	*	1,100	6,000	360	1,200	1,100	5,400	4,800	960	2,615
Unnamed Brook--B	3,200	600	140	840	400	160	600	110	320	1,200	700	1,100	781
Bacteria per Ml. 24 Hours on Agar at 35°C.													
Ponaganset Reservoir	900	840	1,100	120	14	7	3	5	6	6	45	300	279
Coventry Brook	3,200	780	280	350	44	16	10	5	15	15	100	280	425
Wilbur Brook	600	1,500	480	600	43	45	35	16	40	600	750	300	417
Westconnaug Reservoir	900	720	240	100	190	35	9	15	30	200	200	130	236
Barden Reservoir	1,600	4,800	300	60	16	55	14	23	9	25	120	650	639
Cork Brook	2,400	750	250	150	32	45	31	18	60	40	240	960	415
Rush Brook	6,800	1,000	600	280	49	40	21	17	210	210	560	850	886
Huntinghouse Brook	1,800	640	500	90	190	20	14	8	60	140	210	360	336
Harrisdale Brook	420	900	440	40	35	80	45	12	25	70	90	1,400	296
Blanchard Brook	4,500	1,500	1,300	900	200	70	70	40	50	3,000	1,500	960	1,174
Moswansicut Pond	1,800	2,000	140	400	13	30	19	18	19	40	400	400	440
Regulating Reservoir	400	320	600	200	150	210	100	25	5	18	50	110	182
Quonopaug Brook	7,000	4,000	1,000	200	75	85	18	11	36	270	450	1,500	1,220
Hemlock Brook	720	210	110	1,200	42	80	12	10	35	40	110	80	221
Betty Pond Stream	2,400	2,400	600	500	31	60	14	14	40	160	750	750	643
Spruce Brook	2,500	900	70	160	80	15	7	20	18	70	240	400	373
Brandy Brook	480	400	90	250	200	1,200	25	80	300	480	360	280	345
Moswansicut-South	9,000	6,000	1,200	500	450	300	75	70	3,000	200	6,000	3,600	2,533
Windsor Brook	4,000	900	120	19	35	45	11	10	40	90	210	250	478
Paine Pond	1,700	480	400	3,600	180	120	37	11	40	50	600	480	642
Unnamed Brook--A	*	*	*	*	800	90	34	30	80	2,500	3,600	840	997
Unnamed Brook--B	1,500	420	300	250	36	40	7	12	25	110	280	850	319

*No Sample Obtained--Dry.

NOTE: Unnamed Brook A is just north of Scituate Town Dump. Unnamed Brook B is southwest of the former Foster Nike Site.

TABLE 21 (Continued)

WATER PURIFICATION WORKS

BACTERIOLOGICAL EXAMINATION OF WATER IN VARIOUS BROOKS AND RESERVOIRS
ON SCITUATE WATERSHED

YEAR ENDED JUNE 30, 1970

	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
Coliform Bacteria Index per 100 Ml.												
Ponaganset Reservoir	1100+	13	60	5	25	6	250	25	-5	6	-5	700
Coventry Brook	1100+	2500	2500	700	130	250	60	13	250	20	60	60
Wilbur Brook	700	250	700	60	25	25	60	25	60	130	700	200
Westconnaug Reservoir	250	250	250	60	250	60	25	60	700	60	130	25
Barden Reservoir	1100+	5	130	25	6	25	13	6	25	60	25	25
Cork Brook	1100+	2500	250	60	25	60	250	60	2500	60	60	60
Rush Brook	700	60	1100+	250	25	60	60	60	50	50	60	250
Huntinghouse Brook	7000	700	250	60	700	60	25	25	60	700	50	200
Harrisdale Brook	250	130	60	13	60	700	25	25	60	6	25	30
Blanchard Brook	2500	2500	700	700	60	25	250	25	60	60	700	700
Moswansicut Pond	1100+	60	250	25	13	50	9	9	9	15	43	93
Regulating Reservoir	60	25	700	6	60	60	6	25	25	25	60	25
Quonopaug Brook	7000	2500	700	250	60	25	6	50	60	60	250	500
Hemlock Brook	130	60	50	6	60	25	200	6	60	60	130	60
Betty Pond Stream	700	250	50	6	6	50	0	12	5	-5	700	50
Spruce Brook	1100+	250	60	700	13	25	6	25	50	25	6	700
Brandy Brook	1100+	700	250	25	2500	250	60	25	25	60	500	25
Moswansicut-South	11000	700	250	2500	2500	700	11000+	250	2500	700	2500	2500
Windsor Brook	1100+	2500	60	25	60	50	13	6	130	6	25	700
Paine Pond	1500	460	1100	240	460	93	240	23	150	150	2400	4600
Unnamed Brook-A	*	*	*	*	2400	460	75	460	150	4600	460	4600
Unnamed Brook-B	1100+	25	250	50	50	60	20	25	25	25	12	700

*No sample obtained--Dry.

-5 indicates less than 5.

NOTE: Unnamed Brook A is just north of Scituate Town Dump. Unnamed Brook B is southwest of the former Foster Nike Site.

TABLE 22

WATER PURIFICATION WORKS

BACTERIOLOGICAL EXAMINATION OF WATER IN VARIOUS PARTS
OF THE DISTRIBUTION SYSTEM

YEAR ENDED JUNE 30, 1970

Monthly Averages	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Avg. for Year
Bacteria per Ml. 48 Hours on Agar at 20°C.													
Neutaconkanut Reservoir	0	0	1	0	0	0	0	0	1	1	2	0	0
28 Phenix Ave., Cranston	0	0	0	0	5	2	1	1	3	8	12	4	3
Westminster St., Olneyville	0	0	0	0	0	6	4	1	3	3	6	0	2
1275 Reservoir Ave., Cranston	0	0	0	1	2	1	2	0	5	6	26	0	4
750 Reservoir Ave., Cranston	0	0	0	0	4	3	2	1	2	8	5	0	2
Biltmore Hotel	0	0	0	0	0	1	40	0	1	3	4	1	4
Dexter Manor	0	0	0	0	0	0	0	0	4	9	5	0	2
State Office Building	0	0	0	0	0	5	0	0	1	4	4	0	1
*Longview Reservoir	1	0	0	0	0	1	0	1	2	3	2	0	1
208 Weybosset Street	0	0	0	0	1	0	0	0	1	4	4	0	1
Bacteria per Ml. 24 Hours on Agar at 35°C.													
Neutaconkanut Reservoir	0	0	0	0	1	1	1	1	1	0	0	0	0
28 Phenix Ave., Cranston	0	0	0	0	0	1	0	0	1	0	2	3	1
Westminster St., Olneyville	0	1	1	0	0	2	2	0	0	0	2	0	1
1275 Reservoir Ave., Cranston	0	0	1	0	0	1	0	0	0	1	1	0	0
750 Reservoir Ave., Cranston	0	0	0	0	0	0	1	0	0	0	2	1	0
Biltmore Hotel	0	0	0	1	0	0	8	0	0	0	3	1	1
Dexter Manor	0	0	0	0	0	1	1	0	0	0	1	1	0
State Office Building	0	0	1	0	0	3	1	0	1	0	1	0	1
*Longview Reservoir	0	0	0	0	0	1	0	0	0	0	1	0	0
208 Weybosset Street	0	0	0	0	0	0	0	0	0	0	2	0	0
Coliform Bacteria Index per Ml.													
Neutaconkanut Reservoir	0.008	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
28 Phenix Ave., Cranston	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.000	.000
Westminster St., Olneyville	.000	.000	.000	.000	.001	.000	.000	.000	.000	.000	.000	.000	.000
1275 Reservoir Ave., Cranston	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
750 Reservoir Ave., Cranston	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Biltmore Hotel	.000	.000	.000	.000	.000	.000	.000	.000	.000	.001	.000	.001	.000
Dexter Manor	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
State Office Building	.000	.003	.000	.000	.000	.002	.000	.000	.000	.000	.000	.000	.000
*Longview Reservoir	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
208 Weybosset Street	.001	.000	.001	.000	.000	.004	.000	.000	.000	.000	.000	.000	.000

*Sample obtained at Our Lady of Fatima Hospital, North Providence, R.I.

TABLE 23

WATER PURIFICATION WORKS

MINERAL ANALYSIS OF WATER - YEAR ENDED JUNE 30, 1970

Parts per Million	Raw Water*					Tap Water				
	1969 July- Sept.	Oct.- Dec.	1970 Jan.- Mar.	Apr.- June	Avg.	1969 July- Sept.	Oct.- Dec.	1970 Jan.- Mar.	Apr.- June	Avg.
Aluminum	0.03	0.00	0.02	0.02	0.02	0.03	0.00	0.04	0.01	0.02
Arsenic	0.00		0.00		0.00	0.00		0.00		0.00
Calcium	4.0	4.2	4.1	4.1	4.1	10.8	11.1	10.9	11.0	11.0
Chloride	10.3	11.3	11.0	11.4	11.0	11.0	11.8	11.6	12.0	11.6
Copper	0.03	0.01	0.03	0.02	0.02	0.00	0.00	0.00	0.00	0.00
Fluoride	0.15	0.15	0.15	0.15	0.15	0.99	1.00	1.00	1.00	1.00
Hardness	12	12	12	12	12	30	29	29	30	30
Iron	0.09	0.18	0.09	0.09	0.11	0.01	0.02	0.04	0.02	0.02
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnesium	0.49	0.36	0.43	0.43	0.43	0.73	0.29	0.43	0.62	0.52
Manganese	0.11	0.11	0.03	0.03	0.07	0.00	0.00	0.00	0.00	0.00
Phenolic Compounds	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000
Selenium	0.00		0.00		0.00	0.00		0.00		0.00
Silica	3.7	3.0	5.0	5.4	4.3	3.7	3.0	4.5	5.9	4.3
Sulphate	8.2	8.0	7.8	8.1	8.0	11.4	15.4	13.9	13.5	13.6
Total Solids	43	44	46	51	46	67	58	67	71	66
Loss on Ignition	20	19	19	33	23	26	20	23	29	25
Total Alkalinity	3.7	3.9	3.3	2.2	3.3	15.2	13.1	12.2	12.6	13.3
Phenolphthalein Alkalinity	0.0	0.0	0.0	0.0	0.0	7.6	8.0	6.1	6.3	7.0
Zinc	0.0		0.0		0.0	0.0		0.0		0.0

*Water from bottom of Scituate Reservoir as received at Purification Works.

TABLE 24
WATER PURIFICATION WORKS
SANITARY CHEMICAL ANALYSIS (P.P.M.) - YEAR ENDED JUNE 30, 1970

	Ammonia		Raw Water*					Dissolved Oxygen		Loss on Igni- tion	Ammonia		Tap Water					Dissolved Oxygen		Loss on Igni- tion
	Free	Alb.	Ni- trites	Ni- trates	Chlo- rides	P.P.M.	%	Total Solids	Free		Alb.	Ni- trites	Ni- trates	Chlo- rides	P.P.M.	%	Total Solids			
1969																				
1970																				
July	0.031	0.048	0.000	0.07	10.2	6.9	83.9	47	24	0.022	0.027	0.001	0.07	11.0	---	--	72	27		
August	.036	.047	.000	.05	10.2	4.8	44.4	45	24	.027	.034	.001	.07	11.0	---	--	69	30		
September	.048	.041	.000	.08	10.4	3.9	37.5	36	13	.042	.021	.001	.03	11.0	---	--	60	21		
October	.038	.054	.000	.04	10.9	9.3	88.6	45	23	.016	.031	.001	.03	11.3	---	--	64	20		
November	.031	.063	.000	.03	11.5	10.5	94.6	45	19	.029	.046	.001	.02	12.0	---	--	68	21		
December	.026	.055	.000	.07	11.6	11.4	83.4	42	16	.022	.040	.001	.06	12.0	---	--	42	20		
January	.030	.057	.000	.07	11.0	12.3	93.9	46	21	.038	.030	.001	.03	11.5	---	--	68	30		
February	.029	.050	.000	.07	10.9	12.0	88.8	45	18	.054	.036	.001	.03	11.4	---	--	68	18		
March	.029	.055	.000	.07	11.1	12.9	95.5	46	19	.031	.038	.001	.04	11.8	---	--	64	20		
April	.023	.082	.000	.07	11.5	12.4	98.0	46	20	.032	.072	.001	.04	12.0	---	--	72	25		
May	.025	.053	.000	.07	11.4	10.6	93.8	47	17	.022	.016	.001	.04	12.0	---	--	63	22		
June	.026	.044	.000	.07	11.4	9.7	87.4	59	29	.025	.025	.001	.05	12.1	---	--	76	31		
Averages	0.031	0.054	0.000	0.06	11.0	9.7	81.7	46	20	0.030	0.035	0.001	0.04	11.6	---	--	66	24		

*Water from bottom of Scituate Reservoir as received at Purification Works.

TABLE 25

WATER PURIFICATION WORKS

LABORATORY EXAMINATIONS MADE DURING THE FISCAL YEAR ENDED JUNE 30, 1970

Source of Water Tested	Frequency of Test or Examination	Number of Tests or Analyses Made During the Fiscal Year						Total
		Chemical	Bacteri- ological	Micro- scopical	Sanitary Chemical	Mineral	Miscel- laneous	
I Brooks and Streams on Watershed Fourteen Brooks, Two Streams and One Pond	Monthly	1,428	2,648		88			4,164
II Smaller Storage Reservoirs on Watershed								
Regulating Reservoir	Monthly	84	132					216
Westconnaug Reservoir	Monthly	84	143					227
Barden Reservoir	Monthly	84	125					209
Moswansicut Pond	Monthly	84	154					238
Ponaganset Reservoir	Monthly	84	125					209
III Scituate Reservoir								
Surface Water	Bi-Weekly	208	345	26	156			735
Subsurface Water (See Purif. Wks.--Raw Water)								
IV Pawtuxet River--Below Gainer Dam								
Gainer Dam Meter Chamber	Bi-Weekly	182			156			338
Fiskeville, R. I.	Bi-Weekly	182			156			338
Twelve Other Locations on Pawtuxet River	Bi-Weekly	2,340	1,698		2,184			6,222
V Water Purification Works								
Raw Water (from Bottom of Scituate Reservoir)	Daily	2,986	4,530		1,436		359	9,311
Raw Water (from Bottom of Scituate Reservoir)	Bi-Weekly			26				26
Raw Water (from Bottom of Scituate Reservoir)	Monthly				72			72
*Raw Water (from Bottom of Scituate Reservoir)	Every 13 weeks					36		36
Aerated Influent	Daily	718						718
Mixer	Daily	1,857						1,857
Settled	Daily	2,456	1,257		301		359	4,373
Settled	Bi-Weekly			26				26
Settled	Monthly				36			36
Filtered	Daily	1,077	1,210		301			2,588
Filtered	Monthly				36			36
Effluent	Daily	3,166	1,208		1,762			6,136
Effluent	Bi-Weekly			26				26
Effluent	Monthly				24			24
Raw Water (from Bottom of Scituate Reservoir)	Daily at 3:00 P.M.	984	1,344		984			3,312
Effluent	Daily at 3:00 P.M.	972	972		972			2,916

*Composite of 13 Weekly Samples.

TABLE 26

WATER DISTRIBUTION SYSTEM

NEUTAGONKANUT HIGH SERVICE PUMPING STATION

OPERATING STATISTICS - YEAR ENDED JUNE 30, 1970

1969-1970	No. 1 10" Pump 2700 GPM. TDH 90'		Electrically-Driven Pumps No. 2 12" Pump 3800 GPM. TDH 104'		No. 3 16" Pump 7000 GPM. TDH 96'		Power Used*		Gasoline Engine-Driven Pump No. 4 16" Pump 7000 GPM. TDH 96'			
	Operated Hours and Days	Minutes	Operated Hours and Days	Minutes	Operated Hours and Days	Minutes	KWH	Cost	**Operated Hours and Days	Minutes	Gas. Used Gals.	Oil Used Qts.
July	0	0	29	506-45	15	226-30	98,500	\$ 1,405.72	5	5-00	96	0
August	0	0	31	643-00	14	97-00	86,500	1,276.78	4	4-00	100	0
September	0	0	30	658-30	7	57-00	84,500	1,263.40	4	4-00	80	0
October	0	0	31	737-45	0	0	79,500	1,198.06	5	5-00	120	0
November	0	0	30	716-00	0	0	85,500	1,182.22	4	4-00	114	0
December	0	0	31	739-00	0	0	80,500	1,127.93	5	5-00	126	0
January	2	6-00	31	734-00	0	0	80,500	1,117.06	4	4-00	114	0
February	0	0	28	668-00	0	0	86,500	1,168.63	4	4-00	74	0
March	2	18-00	31	720-00	0	0	76,500	1,080.28	4	4-00	144	98
April	0	0	30	715-00	0	0	80,500	1,121.08	5	5-00	86	0
May	0	0	31	711-00	4	25-00	86,500	1,258.80	4	4-00	92	0
June	0	0	30	546-15	15	164-15	86,750	1,301.18	5	4-45	100	0
Totals	4	24-00	363	8,095-15	55	569-45	1,012,250	\$14,501.14	53	52-45	1,246	98

*Narragansett Electric Co. Power Rate G.

**Engine Test Run.

TABLE 26 (Continued)

WATER DISTRIBUTION SYSTEM

NEUTACONKANUT HIGH SERVICE PUMPING STATION

OPERATING STATISTICS -- YEAR ENDED JUNE 30, 1970

	Electrically-Driven Pumps			Gasoline Engine-Driven Pump		Avg. per Day
	No. 1 10" Pump 2700 GPM. TDH 90'	No. 2 12" Pump 3800 GPM. TDH 104'	No. 3 16" Pump 7000 GPM. TDH 96'	No. 4 16" Pump 7000 GPM. TDH 96'	Total Water Pumped Mil. Gals.	
1969-1970	Water Pumped Mil. Gals.	Water Pumped Mil. Gals.	Water Pumped Mil. Gals.	Water Pumped Mil. Gals.	For Month	
July	0	145.234	98.281	2.190	245.705	7.926
August	0	182.151	41.759	1.735	225.645	7.279
September	0	187.945	24.660	1.860	214.465	7.149
October	0	211.175	0	2.215	213.390	6.884
November	0	206.455	0	1.710	208.165	6.939
December	0	217.420	0	2.185	219.605	7.084
January	2.059	210.431	0	1.740	214.230	6.911
February	0	192.190	1.735	0	193.925	6.926
March	3.408	206.406	0	1.731	211.545	6.824
April	0	204.555	0	2.213	206.768	6.892
May	0	200.278	11.080	1.703	213.061	6.873
June	0	153.460	69.828	2.100	225.388	7.513
Totals	5.467	2,317.700	247.343	21.382	2,591.892	7.101

TABLE 27
WATER DISTRIBUTION SYSTEM
BATH STREET HIGH SERVICE PUMPING STATION
OPERATING STATISTICS -- YEAR ENDED JUNE 30, 1970

1969-1970	Electrically-Driven Pumps					Gasoline Engine-Driven Pump				
	Pump No. 1 2500 GPM. TDH 100'		Pump No. 2 2500 GPM. TDH 100'		Power Used*	Pump No. 3 5000 GPM. TDH 100'; 150 HP Climax Engine				
	Operated		Operated			**Operated		Gas. Used Gals.		
	Days	Hours and Minutes	Days	Hours and Minutes	KWH	Cost	Days		Hours and Minutes	
July	30	460-30	30	523-45	60,900	\$ 870.66	4	4-00	93	
August	30	445-30	30	448-45	51,520	782.23	0	0	17	
September	29	393-45	30	395-00	47,320	743.65	3	3-00	42	
October	31	381-00	30	354-00	42,560	715.01	3	3-00	61	
November	29	304-30	27	301-00	39,760	674.18	4	4-00	81	
December	30	315-00	28	303-45	36,540	644.20	5	5-00	89	
January	29	326-00	31	349-30	35,840	630.48	3	3-00	65	
February	28	294-45	28	294-15	39,760	663.90	4	4-00	52	
March	30	302-30	30	326-00	37,100	641.48	5	5-00	69	
April	30	361-00	28	285-00	34,440	618.39	4	4-00	94	
May	30	409-30	31	419-00	50,820	763.39	4	4-00	64	
June	29	435-30	29	424-30	48,720	743.33	5	7-00	90	
Totals	355	4,429-30	352	4,424-30	525,280	\$8,490.90	44	46-00	817	

*Narragansett Electric Co. Power Rate G.
**Engine Test Run.

TABLE 27 (Continued)

WATER DISTRIBUTION SYSTEM

BATH STREET HIGH SERVICE PUMPING STATION

OPERATING STATISTICS - YEAR ENDED JUNE 30, 1970

	Electrically-Driven Pumps		Gasoline Engine-Driven Pump		Total Water Pumped Mil. Gals.
	Pump No. 1 2500 GPM. TDH 100'	Pump No. 2 2500 GPM. TDH 100'	Pump No. 3 5000 GPM. TDH 100' 150 HP Climax Engine		
1969-1970	Water Pumped Mil. Gals.	Water Pumped Mil. Gals.	Water Pumped Mil. Gals.	For Month	Avg. per Day
July	61.001	69.889	1.120	132.010	4.258
August	61.299	59.721	0	121.020	3.904
September	52.424	52.811	0.875	106.110	3.537
October	50.259	48.061	0.870	99.190	3.200
November	41.831	40.744	1.190	83.765	2.792
December	43.264	40.251	1.495	85.010	2.742
January	44.063	47.607	0.885	92.555	2.986
February	39.215	39.290	1.145	79.650	2.845
March	41.028	44.375	1.422	86.825	2.801
April	49.504	38.150	1.130	88.784	2.959
May	55.782	57.536	1.172	114.490	3.693
June	58.048	55.178	1.528	114.754	3.825
Totals	597.718	593.613	12.832	1,204.163	3.299

TABLE 28
 WATER DISTRIBUTION SYSTEM
 *AQUEDUCT DISTRIBUTION RESERVOIR
 OPERATING STATISTICS - YEAR ENDED JUNE 30, 1970

1969 1970	7 A.M. Statistics on First Day of Month		Water Level			Storage-Mil.Gals.			Daily Water Level Fluctuation-Ft.			Daily Storage Fluctuation-M.G.		
	Water Level	Storage Mil.Gals.	Max.	Min.	**Avg.	Max.	Min.	**Avg.	Max.	Min.	Avg.	Max.	Min.	Avg.
July	230.00	41.74	230.35	225.96	229.65	42.32	34.82	41.14	3.94	1.21	2.21	6.75	2.07	3.78
August	229.70	41.23	230.20	225.53	229.62	42.07	34.08	41.09	4.06	0.89	2.35	6.96	1.52	4.02
September	229.00	40.03	230.26	226.53	229.49	42.17	35.79	40.87	3.73	0.82	2.02	6.38	1.27	3.42
October	229.22	40.41	230.13	224.62	229.12	41.96	32.52	40.24	4.51	1.02	2.45	7.73	1.75	4.20
November	227.67	37.75	230.10	225.58	229.21	41.91	34.16	40.39	3.06	1.11	2.21	5.81	1.90	3.79
December	228.95	39.95	230.35	225.79	229.47	42.32	34.52	40.84	3.85	1.16	2.26	6.58	2.00	3.86
January	229.41	40.73	230.31	222.80	229.33	42.25	29.39	40.60	7.51	1.35	2.34	12.86	2.32	4.01
February	229.80	41.40	230.27	226.52	229.61	42.19	35.78	41.08	3.01	1.59	2.23	5.15	2.72	3.81
March	229.45	40.80	230.11	221.09	229.16	41.92	26.46	40.31	9.02	1.36	2.40	15.46	2.34	4.08
April	229.02	40.07	230.01	221.80	228.95	41.76	27.68	39.95	7.60	1.19	2.34	13.04	2.04	4.02
May	229.30	40.55	230.44	225.41	229.52	42.47	33.87	40.92	3.83	1.00	2.37	6.57	1.11	4.02
June	230.00	41.74	230.47	226.04	229.79	42.52	34.95	41.38	4.01	1.26	2.38	6.87	2.17	4.07
For Year			230.47	221.09	229.41	42.52	26.46	40.73	9.02	0.82	2.30	15.46	1.11	3.92

*Storage capacity at overflow elevation of 231.00=43,400,000 gallons. **Average of 7 A.M. statistics.
 NOTE: Water levels are elevations in feet above mean high water in Providence harbor.

TABLE 29

WATER DISTRIBUTION SYSTEM

*NEUTACONKANUT DISTRIBUTION RESERVOIR

OPERATING STATISTICS - YEAR ENDED JUNE 30, 1970

1969 1970	7 A.M. Statistics on First Day of Month		Water Level			Operating Characteristics During Month								
	Water Level	Storage Mil. Gals.	Max.	Min.	**Avg.	Storage-Mil. Gals.			Daily Water Level Fluctuation-Ft.			Daily Storage Fluctuation-M.G.		
						Max.	Min.	**Avg.	Max.	Min.	Avg.	Max.	Min.	Avg.
July	224.75	38.14	226.67	220.17	225.87	41.52	30.08	40.11	4.36	0.32	2.66	7.67	0.57	4.68
August	226.05	40.43	226.66	221.26	226.03	41.50	32.00	40.39	4.87	0.97	2.57	8.57	1.71	4.57
September	226.11	40.53	226.71	221.90	226.17	41.59	33.12	40.64	3.65	0.89	2.20	6.43	1.57	3.87
October	226.06	40.44	226.64	221.98	226.07	41.46	33.26	40.46	3.79	0.91	2.11	6.67	1.60	3.72
November	225.18	38.90	226.62	222.98	226.21	41.43	35.02	40.71	3.11	0.40	1.86	5.48	0.70	3.26
December	226.35	40.95	226.62	222.69	226.28	41.43	34.51	40.83	2.91	0.49	1.55	5.13	0.85	2.73
January	226.48	41.18	226.62	221.53	226.27	41.43	32.47	40.81	5.05	0.81	1.82	8.89	1.42	3.20
February	226.23	40.74	226.68	223.74	226.40	41.54	36.36	41.04	2.63	0.97	1.78	4.62	1.70	3.14
March	226.50	41.21	226.79	220.46	226.24	41.73	30.59	40.76	6.08	0.88	2.06	10.69	1.55	3.62
April	226.14	40.58	226.70	220.06	226.08	41.57	29.89	40.48	5.29	0.90	2.09	9.31	1.57	3.68
May	225.98	40.30	226.68	222.30	226.32	41.54	30.31	40.90	3.82	1.18	2.17	6.72	2.08	3.82
June	226.25	40.77	226.71	221.87	226.26	41.59	33.07	40.79	4.68	0.74	2.58	8.23	1.29	4.59
For Year			226.79	220.06	226.18	41.73	29.89	40.66	6.08	0.32	2.12	10.69	0.57	3.74

*Storage capacity at overflow elevation of 227.00=42,090,000 gallons. **Average of 7 A.M. statistics.

NOTE: Water levels are elevations in feet above mean high water in Providence harbor.

TABLE 30

WATER DISTRIBUTION SYSTEM

*LONGVIEW DISTRIBUTION RESERVOIR

OPERATING STATISTICS - YEAR ENDED JUNE 30, 1970

1969 1970	7 A.M. Statistics on First Day of Month		Water Level			Storage-Mil.Gals.			Daily Water Level Fluctuation-Ft.			Daily Storage Fluctuation-M.G.		
	Water Level	Storage Mil. Gals.	Max.	Min.	**Avg.	Max.	Min.	**Avg.	Max.	Min.	Avg.	Max.	Min.	Avg.
July	304.60	11.75	305.63	297.15	304.33	12.23	8.30	11.63	6.77	1.26	3.27	3.13	0.58	1.51
August	304.30	11.61	305.02	299.82	304.32	11.95	9.54	11.62	4.14	1.42	2.20	1.91	0.65	1.02
September	304.34	11.63	305.17	300.54	304.12	12.02	9.87	11.53	4.24	1.00	1.79	1.97	0.46	0.83
October	303.91	11.43	304.66	301.46	303.93	11.78	10.30	11.44	2.31	1.01	1.44	1.06	0.46	0.66
November	303.96	11.45	304.89	302.23	303.88	11.89	10.66	11.41	2.32	0.91	1.03	1.07	0.41	0.64
December	303.63	11.30	304.63	302.00	303.81	11.77	10.55	11.38	2.59	0.54	1.32	1.20	0.25	0.61
January	304.60	11.75	305.26	302.00	303.86	12.06	10.55	11.41	2.73	0.82	1.34	1.27	0.38	0.62
February	303.55	11.26	305.16	302.61	304.11	12.01	10.83	11.52	2.52	0.86	1.41	1.17	0.40	0.65
March	304.33	11.63	305.21	301.24	304.28	12.04	10.19	11.60	3.16	1.03	1.53	1.47	0.48	0.78
April	304.73	11.81	304.97	302.10	304.19	11.93	10.60	11.56	2.87	1.01	1.52	1.33	0.47	0.70
May	303.85	11.40	305.58	301.72	304.52	12.21	10.42	11.71	2.93	1.07	1.83	1.36	0.49	0.85
June	304.97	11.93	305.94	300.51	304.95	12.37	9.85	11.92	4.46	1.32	2.59	2.08	0.61	1.20
For Year			305.94	297.15	304.19	12.37	8.30	11.56	6.77	0.54	1.77	3.13	0.25	0.84

*Storage capacity at overflow elevation of 306.00=12,400,000 gallons. **Average of 7 A.M. statistics.

NOTE: Water levels are elevations in feet above mean high water in Providence harbor.

TABLE 31
WATER PIPE LAID, REMOVED AND ADDED
YEAR ENDED JUNE 30, 1970

City or Town	Pipe Laid in Feet								Total
	6"	8"	10"	12"	16"	20"	24"	30"	
Providence	1,248.53	990.53	0	75.00	0	0	0	0	2,314.06
Cranston	1,319.80	1,778.64	0	0	0	0	0	0	3,098.44
Johnston	503.98	3,086.15	0	0	0	0	0	0	3,590.13
North Providence	966.40	2,161.64	0	0	0	0	0	0	3,128.04
Totals	4,038.71	8,016.96	0	75.00	0	0	0	0	12,130.67

City or Town	Pipe Removed in Feet								Total
	6"	8"	10"	12"	16"	20"	24"	30"	
Providence	1,211.69	0	0	0	0	0	0	0	1,211.69
Cranston	135.86	0	0	0	0	0	0	0	135.86
Johnston	0	4.35	0	0	0	0	0	0	4.35
North Providence	270.74	0	0	0	0	0	0	0	270.74
Totals	1,618.29	4.35	0	0	0	0	0	0	1,622.64

City or Town	Net Length Added to Distribution System								Total
	6"	8"	10"	12"	16"	20"	24"	30"	
Providence	36.84	990.53	0	75.00	0	0	0	0	1,102.37
Cranston	1,183.94	1,778.64	0	0	0	0	0	0	2,962.58
Johnston	503.98	3,081.80	0	0	0	0	0	0	3,585.78
North Providence	695.66	2,161.64	0	0	0	0	0	0	2,857.30
Totals	2,420.42	8,012.61	0	75.00	0	0	0	0	10,508.03

NOTE: These amounts are for the 9-month period October 1, 1969 - June 30, 1970.

TABLE 32
PUBLIC WATER MAINS IN USE ON JUNE 30, 1970

	Providence		Cranston		Johnston		North Providence		*Total		Special High Pressure Fire Service Providence	
	Feet	Miles	Feet	Miles	Feet	Miles	Feet	Miles	Feet	Miles	Feet	Miles
6-inch	1,459,660.82	276.45	631,073.84	119.52	122,370.76	23.18	164,628.99	31.18	2,377,734.41	450.33	82.06	0.02
8-inch	347,304.81	65.78	373,390.89	70.72	186,453.95	35.31	139,166.53	26.36	1,046,316.18	198.17	1,221.65	0.23
10-inch	12,125.78	2.30	0	0	0	0	0	0	12,125.78	2.30	0	0
12-inch	244,928.10	46.39	106,243.88	20.12	13,556.11	2.57	33,169.10	6.28	397,897.19	75.36	7,242.57	1.37
16-inch	145,299.42	27.52	3,512.31	0.67	6,393.63	1.21	0	0	155,205.36	29.39	55,060.04	10.43
20-inch	20,172.24	3.82	0	0	0	0	0	0	20,172.24	3.82	0	0
24-inch	56,375.11	10.68	6,301.43	1.19	32,749.23	6.20	9,269.26	1.76	104,695.03	19.83	4,299.44	0.81
30-inch	50,205.19	9.51	31,894.62	6.04	0	0	4,009.29	0.76	86,109.10	16.31	0	0
36-inch	4,555.68	0.86	5,511.13	1.04	0	0	0	0	10,066.81	1.91	0	0
42-inch	2,893.25	0.55	22,607.49	4.28	0	0	0	0	25,500.74	4.83	0	0
48-inch	14,918.00	2.83	1,710.97	0.32	394.00	0.07	0	0	17,022.97	3.22	0	0
60-inch	5,559.00	1.05	12,910.89	2.45	4,340.00	0.82	0	0	22,809.89	4.32	0	0
66-inch	0	0	8,448.00	1.60	0	0	0	0	8,448.00	1.60	0	0
Totals	2,363,997.40	447.74	1,203,605.45	227.95	366,257.68	69.36	350,243.17	66.34	4,284,103.70	811.39	67,905.76	12.86

*Special High Pressure Fire Service Included.

The length of 6-inch mains tabulated for Providence includes 691.45 feet in Pawtucket.

"	"	"	12-inch mains	"	"	"	44.47	"	"	"	"	"
"	"	"	12-inch mains	"	"	Johnston	146.00	"	"	Smithfield.	"	"
"	"	"	6-inch mains	"	"	North Prov.	179.30	"	"	Pawtucket.	"	"

62

NOTE: The above table includes all gates in the special high pressure fire system in Providence and gates on Neutaconkanut Conduit and Scituate Aqueduct east of the Siphon Chamber.

TABLE 34
SERVICE PIPES INSTALLED AND REMOVED--YEAR ENDED JUNE 30, 1970

City or Town	INSTALLED				REMOVED			
	General		Fire Supply	Total	General		Fire Supply	Total
	Copper 3/4"-2"	Cast	Cast		Lead	Cast	Cast	
		Iron	Iron		or	Iron	Iron	
		4"-12"	4"-12"		Copper 1/2"-2"	4"-12"	4"-12"	
Providence	106	11	18	135	321	3	4	328
Cranston	109	9	5	123	17	0	0	17
Johnston	74	0	0	74	4	0	0	4
North Providence	69	1	2	72	5	0	0	5
Totals	358	21	25	404	347	3	4	354

Note: These figures are for the 9-month period Oct.1, 1969 - June 30, 1970.

TABLE 35
NUMBER AND SIZE OF ACTIVE SERVICES--YEAR ENDED JUNE 30, 1970

	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"	3"	4"	6"	8"	10"	12"	16"	24"	30"	Totals
Providence	216	24,611	7,519	1,841	486	423	580	6	1,013	909	91	4	10	2	0	0	37,711
Cranston	5	6,902	8,082	1,938	41	420	337	0	106	96	31	0	4	0	0	1	17,963
Johnston	0	759	2,312	932	9	211	69	0	9	15	2	0	0	0	0	0	4,318
North Providence	0	1,069	2,527	886	6	259	83	0	27	12	4	0	2	0	0	0	4,875
Totals	221	33,341	20,440	5,597	542	1,313	1,069	6	1,155	1,032	128	4	16	2	0	1	64,867

In addition, there is a 30-inch connection from the 78-inch aqueduct to the Kent County Water Authority pumping station located on Clinton Ave. in Hope, R.I.

TABLE 36

PUBLIC FIRE HYDRANTS

HYDRANT ACTIVITIES DURING YEAR ENDED JUNE 30, 1970

	Providence	Cranston	Johnston	North Providence	Totals
Post Hydrants Installed	54	15	7	7	83
Post Hydrants Removed	22	8	6	5	41
Flush Hydrants Removed	28	0	0	0	28

HYDRANTS IN DISTRIBUTION SYSTEM ON JUNE 30, 1970

Post Hydrants	2,871	1,134	311	358	4,674
Flush Hydrants	272	0	0	0	272
Totals	3,143	1,134	311	358	*4,946

*Includes Post Hydrants and Flush Hydrants in Special High Pressure Fire Service in Providence.

NOTE: These figures are for the 9-month period Oct. 1, 1969 - June 30, 1970.

TABLE 37

NUMBER, MAKE AND SIZE OF METERS ON ACTIVE SERVICES

YEAR ENDED JUNE 30, 1970

Size	5/8"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"	12"	16"	24"	30"	Total
*PROVIDENCE															
Make															
Trident	27,808	3,003	914	1,194	1,617	77	62	59	17	5	-	-	-	-	34,756
Thomson	2,477	222	170	36	102	-	3	-	-	-	-	-	-	-	3,010
Empire	33	-	8	2	1	-	-	-	-	-	-	-	-	-	44
Crown	14	4	2	1	-	-	-	-	-	-	-	-	-	-	21
Hersey	-	-	-	2	2	2	13	66	6	-	-	-	-	-	91
Venturi	-	-	-	-	-	-	-	-	-	-	-	2	-	-	2
Dall Flow	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
Totals	30,332	3,229	1,094	1,235	1,722	79	78	125	23	5	1	2	-	-	37,925

*Includes 1-12" Dall Flow Tube Meter supplying City of East Providence.

*CRANSTON

Make															
Trident	15,356	1,181	470	273	345	2	6	13	5	-	1	-	-	-	17,652
Thomson	251	14	-	8	11	-	-	-	-	-	-	-	-	-	284
Hersey	-	-	-	-	1	-	-	3	4	-	-	-	-	-	8
Venturi	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
Dall Flow	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2
Totals	15,607	1,195	470	281	357	2	6	16	9	-	2	-	1	1	17,947

*Includes 1-6" Trident Compound Meter supplying City of Warwick.
 2-6" Trident Protectus Meters supplying City of Warwick.
 1-12" Trident Crest Meter supplying Kent County Water Authority.
 1-24" Dall Flow Tube Meter supplying City of Warwick.
 1-30" Dall Flow Tube Meter supplying Kent County Water Authority pumping station,
 Clinton Avenue, Hope, R.I. from 30-inch connection off new 78-inch aqueduct.

*JOHNSTON

Make															
Trident	3,342	608	125	54	59	-	-	-	1	-	-	-	-	-	4,189
Thomson	140	5	2	-	-	-	-	-	-	-	-	-	-	-	147
Totals	3,482	613	127	54	59	-	-	-	1	-	-	-	-	-	4,336

*Includes 1-8" Trident Crest Meter supplying East Smithfield Water Co.

*NORTH PROVIDENCE

Make															
Trident	3,727	571	254	60	56	1	2	3	-	-	1	-	-	-	4,675
Thomson	189	4	3	1	1	-	-	-	-	-	-	-	-	-	198
Hersey	-	-	-	-	-	-	-	5	-	-	-	-	-	-	5
Venturi	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
Totals	3,916	575	257	61	57	1	2	8	-	-	2	-	-	-	4,879

*Includes 1-12" Trident Crest Meter supplying East Smithfield Water Co.
 1-12" Venturi Meter supplying Town of Smithfield.

TABLE 38
CAPACITY AND CONSUMPTION

				Consumption						
		Purification	Total	Maximum Day			Maximum Hour			
Year	Ended	Works	During		Percent	Percent		Percent	Percent	
Sept.	30	Capacity	Year	Average	Total	Plant	Average	Rate	Plant	
30		M.G.D.	M.G.	M.G.D.	M.G.	Capacity	Day	in	Capacity	
								M.G.D.	of	
									of	
									of	
1941		61.6	11,020.9	30.2	40.8	66.2	135.1	66.7	108.3	220.9
1942		61.6	11,409.3	31.3	38.3	62.2	122.4	54.7	88.8	174.8
1943		61.6	11,586.8	31.7	46.7	75.8	147.3	77.0	125.0	242.9
1944		61.6	12,538.9	34.3	49.5	80.4	144.3	69.8	113.3	203.5
1945		61.6	12,528.9	34.3	43.6	70.8	127.1	71.3	115.7	207.9
1946		61.6	12,685.3	34.8	50.5	82.0	145.1	82.1	133.3	235.9
1947		61.6	13,169.0	36.1	49.8	80.8	138.0	71.8	116.6	198.7
1948		61.6	13,644.7	37.3	54.7	88.8	146.6	82.3	133.6	220.6
1949		61.6	13,510.3	37.0	50.2	97.7	162.7	89.3	145.0	241.4
1950		61.6	13,373.8	36.6	62.0	100.6	169.4	98.4	159.7	268.9
1951		61.6	13,721.6	37.6	56.4	91.6	150.0	91.2	148.1	242.6
1952		61.6	13,829.3	37.8	70.0	113.6	185.2	110.4	179.2	292.1
1953		61.6	14,182.8	38.9	66.4	107.8	170.7	100.8	163.6	259.1
1954		105.0	13,840.6	37.9	68.6	65.3	181.0	118.1	112.5	311.6
1955		105.0	14,933.0	40.9	70.2	66.9	171.6	117.1	111.5	286.3
1956		105.0	15,145.2	41.4	68.8	65.5	166.2	103.6	98.7	250.2
1957		105.0	15,963.8	43.7	84.7	80.7	193.8	131.0	124.8	299.8
1958		105.0	14,761.0	40.4	68.5	65.2	169.6	108.7	103.5	269.1
1959		105.0	15,430.0	42.3	71.1	67.7	168.1	111.5	106.2	263.6
1960		105.0	15,859.0	43.3	77.4	73.7	178.8	120.3	114.6	277.8
1961		105.0	16,495.9	45.2	69.3	66.0	153.3	112.3	107.0	248.5
1962		105.0	16,687.5	45.7	73.8	70.3	161.5	112.5	107.1	246.2
1963		105.0	17,488.8	47.9	87.2	83.0	182.0	129.3	123.1	269.9
1964		105.0	18,383.0	50.2	86.0	81.9	171.3	139.6	133.0	278.1
1965		105.0	19,470.6	53.3	88.5	84.3	166.0	134.1	127.7	251.6
1966		105.0	18,425.5	50.5	82.3	78.4	163.0	118.9	113.2	235.4
1967		105.0	17,561.3	48.1	74.2	70.7	154.3	108.6	103.4	225.8
1968		105.0	18,609.1	50.8	84.6	80.6	166.5	122.8	117.0	241.7
1969		105.0	19,416.5	53.2	94.0	89.5	176.7	137.3	130.8	258.1
Year Ended June 30										
*1970		144.0	19,852.2	54.4	94.0	65.3	172.8	137.3	95.3	252.4

*July 1, 1969-June 30, 1970.

TABLE 39
CONSUMPTION OF WATER - MILLION GALLONS
YEAR ENDED JUNE 30, 1970

	Low Service (1)				High Service (2)				Total Service (1,2)			
	Max. Day	Min. Day	Avg. Day	Total	Max. Day	Min. Day	Avg. Day	Total	Max. Day	Min. Day	Avg. Day	Total
1969												
1970												
July	77.13	30.79	51.55	1,598.04	16.91	7.31	12.19	377.86	94.04	39.80	63.74	1,975.90
August	68.57	31.36	50.97	1,580.07	14.34	8.20	11.18	346.64	82.91	39.56	62.15	1,926.71
September	63.18	31.64	48.40	1,451.90	13.94	9.19	10.69	320.77	76.19	40.83	59.09	1,772.67
October	52.19	30.61	43.19	1,338.73	11.25	8.51	10.08	312.56	62.81	39.12	53.27	1,651.29
November	47.73	28.55	39.82	1,194.61	10.32	8.61	9.74	292.08	58.05	37.16	49.56	1,486.69
December	46.13	27.91	38.42	1,191.10	10.45	8.16	9.81	304.16	56.58	36.07	48.23	1,495.26
January	46.90	29.11	39.64	1,228.70	10.42	8.64	9.91	307.28	56.91	37.75	49.55	1,535.98
February	46.68	27.42	40.14	1,123.95	10.41	8.62	9.76	273.20	56.73	36.04	49.90	1,397.15
March	45.25	28.31	39.87	1,235.96	10.22	8.42	9.62	299.19	55.22	36.73	49.49	1,534.15
April	48.60	29.65	40.49	1,214.57	10.87	9.03	9.86	295.96	59.45	38.89	50.35	1,510.53
May	58.15	29.55	44.50	1,379.53	12.68	7.35	10.55	327.02	70.83	38.57	55.05	1,706.55
June	65.09	33.24	50.63	1,518.75	14.36	8.76	11.35	340.61	79.07	42.19	61.98	1,859.36
For Year	77.13(a)	27.42(b)	43.99	16,055.91	16.91(c)	7.31(d)	10.40	3,796.33	94.04(e)	36.04(f)	54.39	19,852.24
	(a) July 17; (b) Feb. 22				(c) July 17; (d) July 13				(e) July 17; (f) Feb. 22			

- (1) Includes water supplied to City of Warwick, Kent County Water Authority, State Institutions and City of East Providence.
(2) Includes water supplied to East Smithfield Water Co. and Smithfield Water Department.

TABLE 40

WATER SOLD TO STATE INSTITUTIONS AND CITY OF WARWICK

YEAR ENDED JUNE 30, 1970

		STATE INSTITUTIONS				CITY OF WARWICK					
		S.S.50,767 Sockanosset Rd. Cranston 12"x5.50" Venturi Meter	S.S.24,215A East St. Cranston 8" Tri-Prot. Meter	Total Gallons per Month	Average Gallons per Day	S.S.47,269 Petta- consett Cranston 24" Dall- sert Flow Meter	S.S.47,475 Pawtuxet Bridge- Cranston 6" Tri-Comp. Meter	S.S.61,515 Oaklawn Avenue Cranston 6" Tri- Protectus Meter	S.S.61,780 Dresden Street Cranston 6" Tri- Protectus Meter	Total Gallons per Month	Average Gallons per Day
1969-1970		Gallons per Month	Gallons per Month	Gallons per Month	Gallons per Day	Gallons per Month	Gallons per Month	Gallons per Month	Gallons per Month	Gallons per Month	Gallons per Day
68	July	45,471,000	0	45,471,000	1,466,806	229,291,000	Closed	13,803,225	30,203,025	273,297,250	8,816,040
	August	41,509,000	975	41,509,975	1,339,031	188,405,000	"	11,975,850	20,925,300	221,306,150	7,138,908
	September	44,985,000	900	44,985,900	1,499,530	191,902,000	"	8,683,950	18,118,800	218,704,750	7,290,158
	October	42,812,000	0	42,812,000	1,381,032	162,629,000	"	4,966,575	7,899,825	175,495,400	5,661,142
	November	35,689,000	0	35,689,000	1,189,633	127,713,000	"	3,798,975	5,176,200	136,688,175	4,556,273
	December	43,399,000	13,275	43,412,275	1,400,396	167,418,000	"	5,084,775	6,857,700	179,360,475	5,785,822
	January	37,798,000	20,700	37,818,700	1,219,958	143,547,000	"	4,313,625	5,629,500	153,490,125	4,951,294
	February	34,453,000	5,025	34,458,025	1,230,644	134,702,000	"	4,167,300	5,257,425	144,126,725	5,147,383
	March	41,267,000	4,425	41,271,425	1,331,336	154,105,000	"	4,689,750	6,241,350	165,036,100	5,323,745
	April	36,971,000	5,250	36,976,250	1,232,542	149,172,000	"	4,812,075	7,961,100	161,945,175	5,398,173
	May	34,697,000	3,000	34,700,000	1,119,355	159,310,000	"	6,826,050	13,780,200	179,916,250	5,803,750
	June	41,320,000	1,725	41,321,725	1,377,391	210,796,000	"	12,238,950	24,439,575	247,474,525	8,249,151
For Year		480,371,000	55,275	480,426,275	1,316,236	2,018,990,000		85,361,100	152,490,000	2,256,841,100	6,183,126

TABLE 41

WATER SOLD TO EAST SMITHFIELD WATER COMPANY, SMITHFIELD WATER DEPARTMENT,
KENT COUNTY WATER AUTHORITY AND THE CITY OF EAST PROVIDENCE

YEAR ENDED JUNE 30, 1970

	EAST SMITHFIELD WATER COMPANY				SMITHFIELD WATER DEPT.		KENT COUNTY WATER AUTHORITY				CITY OF EAST PROVIDENCE	
	S.S. 51,198 Waterman Street No. Prov. 6" Tri-Pro. Meter	S.S. 52,403 Dean Avenue Smithfield 8" Tri-Crest Meter	Total Gallons per Month	Average Gallons per Day	S.S. 71,980 Smithfield Road North Providence 12" Flow Meter	Average Gallons per Day	S.S. 58,985 Oaklawm Avenue Cranston 12" Tri-Crest Meter	S.S. 75,430 Clinton Avenue Scituate 30" Flow Meter	Total Gallons per Month	Average Gallons per Day	Total Gallons per Month	Average Gallons per Day
	Gallons per Month	Gallons per Month	Gallons per Month	Gallons per Day	Gallons per Month	Gallons per Day	Gallons per Month	Gallons per Month	Gallons per Month	Gallons per Day	Gallons per Month	Gallons per Day
1969-1970												
69 July	19,143,825	8,679,000	27,822,825	897,510	2,007,400	64,755	19,717,500	32,752,000	52,469,500	1,692,565	21,989,000	709,323
August	16,216,200	7,686,750	23,902,950	771,063	1,576,000	50,839	9,818,250	32,710,000	42,528,250	1,371,879	20,627,000	665,387
September	17,550,900	7,437,000	24,987,900	832,930	1,666,000	55,533	11,501,250	19,624,000	31,125,250	1,037,508	6,132,000	204,400
October	17,586,675	8,216,250	25,802,925	832,352	1,292,100	41,681	7,967,250	13,918,000	21,885,250	705,976	4,624,000	149,161
November	15,634,650	6,891,000	22,525,650	750,855	1,200,200	40,007	14,685,000	13,838,000	28,523,000	950,767	1,879,000	187,900
December	22,186,650	7,089,000	29,275,650	944,376	1,438,400	46,400	2,007,000	15,972,000	17,979,000	579,968	Closed	0
											11/10/69	0
January	21,620,100	6,874,170	28,494,270	919,170	1,144,700	36,926	7,671,000	18,284,000	25,955,000	837,258		0
February	16,679,175	5,381,175	22,060,350	787,870	1,155,500	41,268	7,270,500	16,748,000	24,018,500	857,804	Opened	0
March	13,772,850	8,239,500	22,012,350	710,076	1,913,600	61,729	7,743,750	15,765,000	23,508,750	758,347	4/27/70	0
April	11,972,250	7,879,500	19,851,750	661,725	1,562,400	52,080	7,962,750	16,750,000	24,712,750	823,758	*1,129,000	559,500
May	13,431,750	7,657,500	21,089,250	680,298	1,943,500	62,694	9,172,500	18,872,000	28,044,500	904,661	2,051,000	66,161
June	17,900,250	9,263,250	27,163,500	905,450	2,659,200	88,640	12,147,000	27,165,000	39,312,000	1,310,400	13,936,000	464,533
For Year	203,695,275	91,294,095	294,989,370	808,190	19,559,000	53,586	117,663,750	242,398,000	360,061,750	986,471	72,367,000	369,219

*Two days.

TABLE 42

AVERAGE DAILY CONSUMPTION OF WATER PER MONTH IN MILLION GALLONS

Year Ending Sept. 30	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Avg. for Year
1877				2.27	2.25	1.84	2.25	2.53	2.94	2.91	2.76	3.01	2.53*
1878	2.61	2.22	2.30	2.16	2.15	2.20	2.32	2.85	2.89	3.88	3.12	3.17	2.66
1879	2.84	2.39	2.38	2.82	2.93	2.59	2.38	3.22	3.48	3.78	3.52	3.32	2.97
1880	3.38	2.89	2.97	2.94	2.86	2.90	2.96	3.68	5.05	4.18	3.92	3.82	3.46
1881	3.67	3.35	3.22	3.54	4.07	3.13	2.98	3.54	3.81	4.05	4.46	4.16	3.66
1882	3.92	3.60	3.38	3.30	3.27	3.06	3.05	3.24	4.02	4.69	5.09	3.84	3.70
1883	3.40	3.33	3.65	3.94	3.74	3.91	3.43	3.82	4.64	5.24	5.18	4.70	4.08
1884	3.81	3.67	3.58	4.24	3.87	3.90	3.43	3.79	4.70	4.38	4.06	4.82	4.02
1885	4.24	3.67	3.99	4.48	4.73	4.80	4.10	4.10	5.44	5.56	5.01	4.92	4.59
1886	4.37	4.20	4.71	4.82	4.75	4.83	4.33	4.53	4.93	6.02	4.88	4.94	4.78
1887	4.62	4.24	4.94	5.06	4.90	4.84	4.41	4.90	5.16	5.58	5.00	5.08	4.89
1888	4.80	4.40	5.10	5.44	5.79	5.39	4.86	4.84	6.17	6.51	5.87	5.32	5.37
1889	5.34	5.18	5.51	5.72	7.34	5.80	5.27	5.75	6.14	5.69	5.59	5.52	5.74
1890	5.41	5.17	6.14	6.34	5.79	6.28	6.84	6.60	6.90	8.11	7.13	6.72	6.54
1891	6.28	6.08	6.83	6.35	6.53	6.72	6.67	7.55	7.75	7.73	7.78	7.57	6.99
1892	7.53	7.32	7.69	7.65	7.83	7.62	7.27	6.77	8.37	9.30	9.11	8.63	7.92
1893	8.00	7.65	8.48	9.30	8.85	8.74	8.07	8.58	9.92	10.78	10.50	9.48	9.03
1894	8.79	7.85	8.61	9.11	9.07	9.09	8.73	9.97	11.28	12.39	10.76	10.22	9.66
1895	10.20	8.86	9.08	9.02	9.82	8.60	7.70	8.78	9.49	8.99	9.50	9.10	9.10
1896	8.15	8.19	9.56	10.19	8.79	8.74	8.60	9.26	9.64	9.93	9.70	8.83	9.13
1897	8.49	8.05	8.98	8.83	8.52	8.44	8.06	8.27	8.90	9.13	8.70	9.07	8.62
1898	8.76	8.29	8.63	8.56	9.09	8.68	8.38	8.35	10.04	10.10	9.44	9.84	9.01
1899	8.94	8.75	9.64	9.45	9.53	8.91	8.52	9.18	11.18	10.21	10.12	9.70	9.51
1900	9.15	9.27	9.53	9.81	9.49	9.66	9.23	8.59	10.48	12.11	10.95	11.71	10.00
1901	9.99	9.54	9.95	10.09	10.52	10.20	8.92	10.05	11.50	12.02	11.69	11.15	10.47
1902	10.91	10.70	11.02	11.65	11.00	10.92	10.52	10.48	11.85	12.09	11.97	11.66	11.23
1903	11.89	11.81	12.85	12.84	12.62	11.92	12.33	13.92	13.02	13.54	12.91	13.76	12.78
1904	13.09	13.89	13.49	14.29	14.58	13.42	12.07	12.72	13.94	14.21	13.18	13.85	13.56
1905	14.57	14.88	14.60	14.20	14.65	13.88	13.85	14.77	15.06	16.34	14.30	13.99	14.59
1906	13.73	14.96	14.63	15.00	15.07	14.77	14.49	15.01	15.69	15.08	15.74	16.06	15.02
1907	15.02	14.37	14.25	15.74	16.24	16.26	15.62	16.29	17.18	18.50	18.00	15.02	16.04
1908	15.34	15.13	15.34	15.46	16.07	15.21	14.53	14.67	16.63	16.77	15.42	15.62	15.52
1909	15.83	15.80	15.44	15.16	14.87	14.88	13.94	14.04	15.54	17.71	16.15	14.80	15.35
1910	14.76	14.66	15.28	15.62	15.65	15.22	14.74	14.72	15.53	17.13	15.95	15.61	15.40
1911	15.56	14.98	16.11	16.39	16.27	16.00	15.30	16.19	17.09	19.36	17.09	16.08	16.37
1912	16.29	16.49	16.44	16.12	18.14	17.16	16.39	16.70	17.32	20.54	17.62	17.06	17.36
1913	17.36	16.72	17.17	17.49	17.98	17.59	17.06	17.12	18.95	19.55	18.40	17.12	17.71
1914	16.76	16.87	17.27	17.83	18.52	17.60	16.99	17.43	20.24	17.62	17.09	18.51	17.73
1915	17.29	16.43	17.27	17.07	17.60	17.44	16.80	16.68	18.04	16.49	16.76	17.80	17.14
1916	16.90	17.03	17.79	18.16	18.47	18.57	17.43	17.57	17.82	17.90	16.58	18.76	17.75
1917	18.51	18.08	18.50	19.73	20.62	19.31	18.09	17.67	18.28	19.61	20.03	18.76	18.93
1918	18.52	18.71	20.64	23.82	22.98	23.07	22.43	22.31	21.85	22.23	21.50	20.63	21.56
1919	20.42	20.31	21.04	21.72	20.94	19.35	19.45	19.60	21.77	20.70	20.40	20.68	20.53
1920	20.62	20.18	21.64	23.80	23.16	23.03	20.67	20.45	20.98	21.06	21.58	21.89	21.59

*Average for 9 months.

TABLE 42 (Continued)

AVERAGE DAILY CONSUMPTION OF WATER PER MONTH IN MILLION GALLONS

Year Ending Sept. 30	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Avg. for Year
1921	21.41	20.46	20.97	21.64	21.43	20.77	20.21	20.92	22.84	21.18	21.63	22.86	21.36
1922	22.84	22.16	22.18	24.14	23.64	22.01	21.64	21.49	22.18	21.91	22.11	22.53	22.40
1923	22.78	23.23	23.08	23.66	24.96	23.84	22.95	24.12	24.49	23.90	24.08	24.31	23.78
1924	24.68	24.09	23.33	24.19	24.58	23.44	23.51	23.28	24.10	25.11	22.48	22.51	23.78
1925	22.84	23.70	23.76	24.22	23.61	22.70	23.13	23.03	24.82	23.54	23.20	23.81	23.53
1926	23.41	22.47	23.29	23.95	24.12	24.25	23.36	22.80	24.16	24.80	23.94	23.53	23.67
1927	21.76	22.60	23.24	22.92	22.41	22.57	22.32	22.68	23.62	23.27	22.27	23.27	22.74
1928	23.37	22.99	22.39	23.04	22.80	23.21	22.79	23.83	23.05	24.31	26.69	25.38	23.65
1929	26.82	25.54	26.17	26.84	27.01	25.42	23.05	22.91	25.73	26.53	24.94	24.24	25.43
1930	23.83	24.24	24.29	23.85	24.88	23.34	23.38	25.15	26.85	26.81	25.95	27.45	25.00
1931	26.30	24.04	23.80	23.71	24.36	23.64	23.11	23.76	25.35	26.20	26.22	26.31	24.73
1932	25.36	23.42	23.82	23.20	23.23	22.99	22.72	23.47	25.27	25.34	25.16	24.59	24.05
1933	24.15	23.65	23.51	24.00	24.25	24.01	23.41	25.32	26.92	28.77	27.65	26.00	25.14
1934	24.89	24.43	25.04	25.55	28.05	26.38	24.78	25.78	27.95	31.00	28.77	26.39	26.58
1935	26.50	25.39	25.16	26.35	27.06	26.31	25.71	27.02	27.47	29.47	31.14	28.23	27.15
1936	29.45	28.03	27.42	27.97	28.73	26.44	25.75	27.02	30.27	30.23	30.79	29.23	28.44
1937	27.94	26.72	27.06	25.77	26.13	27.16	25.73	25.93	28.45	31.43	31.85	29.18	29.79
1938	27.84	26.42	25.57	25.11	24.67	24.38	23.56	24.56	27.13	26.34	28.82	28.34	26.07
1939	27.90	27.21	26.85	27.07	27.62	27.16	26.25	27.48	30.84	32.81	33.62	30.31	28.77
1940	30.12	28.96	28.26	28.74	28.06	27.23	25.77	26.15	28.49	30.10	31.57	28.96	28.54
1941	29.55	27.86	28.36	28.67	29.02	28.78	29.07	29.91	31.74	32.87	32.66	33.78	30.19
1942	32.74	31.44	31.84	31.34	31.21	29.84	29.18	29.76	31.34	32.13	32.14	32.11	31.26
1943	29.88	29.27	30.40	29.93	30.67	30.35	30.05	29.65	35.13	36.35	35.47	33.71	31.74
1944	31.87	31.25	32.35	32.29	32.52	32.95	31.51	34.27	36.80	39.10	40.60	35.43	34.26
1945	33.77	32.77	33.33	34.89	34.57	33.78	33.37	33.23	35.44	35.73	36.34	34.67	34.32
1946	32.74	32.27	33.21	34.01	33.69	33.80	33.64	33.59	36.70	40.70	35.92	36.69	34.75
1947	36.37	35.34	35.58	35.95	35.83	35.01	33.27	33.94	35.72	37.35	39.34	39.21	36.08
1948	38.91	36.19	35.55	34.84	37.31	36.92	36.15	33.95	36.90	39.33	41.55	39.76	37.28
1949	36.27	35.34	35.11	33.98	34.00	33.88	33.12	35.12	46.65	44.56	40.18	35.77	37.01
1950	34.61	35.94	34.51	33.92	34.34	34.71	33.39	34.90	40.27	43.27	41.40	38.24	36.64
1951	39.96	36.91	34.80	36.10	35.92	34.81	34.21	37.21	39.31	43.49	39.98	38.20	37.59
1952	36.92	34.79	33.63	34.20	34.59	33.98	33.98	34.33	41.21	54.79	40.66	40.11	37.78
1953	37.09	35.75	35.27	34.59	33.95	34.20	34.61	35.63	50.68	46.76	43.63	43.95	38.86
1954	38.20	35.43	35.03	34.85	35.63	35.31	35.10	35.05	45.09	45.27	40.72	39.22	37.92
1955	39.84	37.82	37.17	37.24	38.42	37.85	37.00	41.54	44.52	49.90	47.08	42.25	40.91
1956	40.29	38.30	38.18	38.42	39.31	38.37	38.55	40.08	49.50	44.93	48.86	41.70	41.38
1957	40.78	38.65	36.74	39.14	38.43	36.98	38.50	44.48	60.45	57.12	48.16	45.16	43.74
1958	42.22	38.27	38.42	39.09	38.20	37.40	40.03	38.60	42.57	45.05	43.60	41.63	40.44
1959	40.35	38.01	39.35	39.34	39.46	38.65	39.04	44.02	45.05	45.16	51.33	47.28	42.27
1960	41.93	40.00	39.63	39.48	40.19	39.72	40.34	42.06	51.75	49.75	49.49	45.57	43.33
1961	42.22	42.53	40.99	41.24	43.54	42.26	41.00	42.96	51.71	51.06	52.80	50.01	45.19
1962	43.66	41.94	40.90	42.42	41.91	42.38	42.74	46.45	53.07	51.39	54.38	47.10	45.72
1963	45.66	44.44	43.38	44.26	44.81	44.80	45.77	47.96	55.81	55.87	54.40	47.58	47.91
1964	46.77	42.66	43.07	45.45	45.81	46.23	46.54	56.23	63.98	57.44	53.33	55.16	50.23
1965	51.52	49.17	47.99	47.66	47.94	46.33	46.89	53.98	65.25	63.33	63.37	56.32	53.34

TABLE 42 (Continued)
AVERAGE DAILY CONSUMPTION OF WATER PER MONTH IN MILLION GALLONS

Year Ending Sept.30	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Avg. for Year
1966	50.11	47.17	44.67	44.73	44.94	45.77	46.82	48.47	59.32	61.74	59.88	51.70	50.48
1967	48.22	46.08	44.52	45.59	45.91	45.98	43.99	44.96	55.39	50.26	53.10	53.36	48.11
1968	49.14	45.67	43.99	47.40	47.06	47.07	49.07	50.71	52.94	61.60	59.19	56.06	50.84
1969	52.07	47.54	46.88	47.90	46.73	46.39	48.84	52.69	63.91	63.74	62.15	59.09	53.20

TABLE 43

AVERAGE DAILY CONSUMPTION OF WATER PER MONTH IN MILLION GALLONS

Year Ended June 30	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Avg. for Year
1877							2.27	2.26	1.84	2.25	2.53	2.94	*2.35
1878	2.91	2.76	3.01	2.61	2.22	2.30	2.16	2.15	2.20	2.32	2.85	2.89	2.53
1879	3.88	3.12	3.17	2.84	2.39	2.38	2.82	2.93	2.59	2.38	3.22	3.48	2.93
1880	3.78	3.52	3.32	3.38	2.89	2.97	2.94	2.86	2.90	2.96	3.68	5.05	3.35
1881	4.18	3.92	3.82	3.67	3.35	3.22	3.54	4.07	3.13	2.98	3.54	3.81	3.60
1882	4.05	4.46	4.16	3.92	3.60	3.38	3.30	3.27	3.06	3.05	3.24	4.02	3.63
1883	4.69	5.09	3.84	3.40	3.33	3.65	3.94	3.74	3.91	3.43	3.82	4.64	3.96
1884	5.24	5.18	4.70	3.81	3.67	3.58	4.24	3.87	3.90	3.43	3.79	4.70	4.18
1885	4.38	4.06	4.82	4.24	3.67	3.99	4.48	4.73	4.80	4.10	4.10	5.44	4.40
1886	5.56	5.01	4.92	4.37	4.20	4.71	4.82	4.75	4.83	4.33	4.53	4.93	4.75
1887	6.02	4.88	4.94	4.62	4.24	4.94	5.06	4.90	4.84	4.41	4.90	5.16	4.91
1888	5.58	5.00	5.08	4.80	4.40	5.10	5.44	5.79	5.39	4.86	4.84	6.17	5.20
1889	6.51	5.87	5.32	5.34	5.18	5.51	5.72	7.34	5.80	5.27	5.75	6.14	5.80
1890	5.69	5.59	5.52	5.41	5.17	6.14	6.34	6.79	6.28	6.84	6.60	6.90	6.10
1891	8.11	7.13	6.72	6.28	6.08	6.83	6.35	6.53	6.72	6.67	7.55	7.75	6.90
1892	7.73	7.78	7.57	7.53	7.32	7.69	7.65	7.83	7.62	7.27	6.77	8.37	7.59
1893	9.30	9.11	8.63	8.00	7.65	8.48	9.30	8.85	8.74	8.07	8.58	9.92	8.72
1894	10.78	10.50	9.48	8.79	7.85	8.61	9.11	9.07	9.09	8.73	9.97	11.28	9.44
1895	12.39	10.76	10.22	10.20	8.86	9.08	9.02	9.82	8.60	7.70	8.78	9.49	9.58
1896	8.99	9.50	9.10	8.15	8.19	9.56	10.19	8.79	8.74	8.60	9.26	9.64	9.06
1897	9.93	9.70	8.83	8.49	8.05	8.98	8.83	8.52	8.44	8.06	8.27	8.90	8.76
1898	9.13	8.70	9.07	8.76	8.29	8.63	8.56	9.09	8.68	8.38	8.35	10.04	8.80
1899	10.10	9.44	9.84	8.94	8.75	9.64	9.45	9.53	8.91	8.52	9.18	11.18	9.45
1900	10.21	10.12	9.70	9.15	9.27	9.53	9.81	9.49	9.66	9.23	8.59	10.48	9.60
1901	12.11	10.95	11.71	9.99	9.54	9.95	10.09	10.52	10.20	8.92	10.05	11.50	10.46
1902	12.02	11.69	11.15	10.91	10.70	11.02	11.65	11.00	10.92	10.52	10.48	11.85	11.16
1903	12.09	11.97	11.66	11.89	11.81	12.85	12.84	12.62	11.92	12.33	13.92	13.02	12.41
1904	13.54	12.91	13.76	13.09	13.89	13.49	14.29	14.58	13.42	12.07	12.72	13.94	13.47
1905	14.21	13.18	13.85	14.57	14.88	14.60	14.20	14.65	13.88	13.85	14.77	15.06	14.30
1906	16.34	14.30	13.99	13.73	14.96	14.63	15.00	15.07	14.77	14.49	15.01	15.69	14.83
1907	15.08	15.74	16.06	15.02	14.37	14.25	15.74	16.24	16.26	15.62	16.29	17.18	15.65
1908	18.50	18.00	15.02	15.34	15.13	15.34	15.46	16.07	15.21	14.53	14.67	16.63	15.83
1909	16.77	15.42	15.62	15.83	15.80	15.44	15.16	14.87	14.88	13.94	14.04	15.54	15.28
1910	17.71	16.15	14.80	14.76	14.66	15.28	15.62	15.65	15.22	14.74	14.72	15.53	15.41
1911	17.13	15.95	15.61	15.56	14.98	16.11	16.39	16.27	16.00	15.30	16.19	17.09	16.05
1912	19.36	17.09	16.08	16.29	16.49	16.44	18.12	18.14	17.16	16.39	16.70	17.32	17.13
1913	20.54	17.62	17.06	17.36	16.72	17.17	17.49	17.98	17.59	17.06	17.12	18.95	17.72
1914	19.55	18.40	17.12	16.76	16.87	17.27	17.83	18.52	17.60	16.99	17.43	20.24	17.88
1915	17.62	17.09	18.51	17.29	16.43	17.27	17.07	17.60	17.44	16.80	16.68	18.04	17.32
1916	16.49	16.76	17.80	16.90	17.03	17.97	18.16	18.47	18.57	17.43	17.57	17.82	17.58
1917	17.90	16.58	18.76	18.51	18.08	18.50	19.73	20.62	19.31	18.09	17.67	18.28	18.49
1918	19.61	20.03	18.76	18.62	18.71	20.64	23.82	22.98	23.07	22.43	22.31	21.85	21.06
1919	22.23	21.50	20.63	20.42	20.31	21.04	21.72	20.94	19.35	19.45	19.60	21.77	20.75
1920	20.70	20.40	20.68	20.52	20.18	21.64	23.80	23.16	23.03	20.67	20.45	20.98	21.36

*Average for 6 months.

TABLE 43 (Continued)

AVERAGE DAILY CONSUMPTION OF WATER PER MONTH IN MILLION GALLONS

Year Ended June 30	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Avg. for Year
1921	21.06	21.58	21.89	21.41	20.46	20.97	21.64	21.43	20.77	20.21	20.92	22.84	21.26
1922	21.18	21.63	22.86	22.84	22.16	22.18	24.14	23.64	22.01	21.64	21.49	22.18	22.32
1923	21.91	22.11	22.53	22.78	23.23	23.08	23.66	24.96	23.84	22.95	24.12	24.49	23.29
1924	23.90	24.08	24.31	24.68	24.09	23.33	24.19	24.58	23.44	23.51	23.28	24.10	23.95
1925	25.11	22.48	22.51	22.84	23.70	23.76	24.22	23.61	22.70	23.13	23.03	24.82	23.49
1926	23.54	23.20	23.81	23.41	22.47	23.29	23.95	24.12	24.25	23.36	22.80	24.16	23.53
1927	24.80	23.94	23.53	21.76	22.60	23.24	22.92	22.41	22.57	22.32	22.68	23.62	23.04
1928	23.27	22.27	23.27	23.37	22.99	22.39	23.04	22.80	23.21	22.79	23.83	23.05	23.02
1929	24.31	26.69	25.38	26.82	25.54	26.17	26.84	27.01	25.42	23.05	22.91	25.73	25.48
1930	26.53	24.94	24.24	23.83	24.24	24.29	23.85	24.88	23.34	23.38	25.15	26.85	24.62
1931	26.81	25.95	27.45	26.30	24.04	23.80	23.71	24.36	23.64	23.11	23.76	25.35	24.86
1932	26.20	26.22	26.31	25.36	23.42	23.82	23.20	23.23	22.99	22.72	23.47	25.27	24.36
1933	25.34	25.16	24.59	24.15	23.65	23.51	24.00	24.25	24.01	23.41	25.32	26.92	24.53
1934	28.77	27.65	26.00	24.89	24.43	25.04	25.55	28.05	26.38	24.78	25.78	27.95	26.26
1935	31.00	28.77	26.39	26.50	25.39	25.16	26.35	27.06	26.31	25.71	27.02	27.47	26.93
1936	29.47	31.14	28.23	29.45	28.03	27.42	27.97	28.73	26.44	25.75	27.02	30.27	28.33
1937	30.23	30.79	29.23	27.94	26.72	27.06	25.77	26.13	27.16	25.73	25.93	28.45	27.61
1938	31.43	31.85	29.18	27.84	26.42	25.57	25.11	24.67	24.38	23.56	24.56	27.13	26.83
1939	26.34	28.82	28.34	27.90	27.21	26.85	27.07	27.62	27.16	26.25	27.48	30.84	27.65
1940	32.81	33.62	30.31	30.12	28.96	28.26	28.74	28.06	27.23	25.77	26.15	28.49	29.06
1941	30.10	31.57	28.96	29.55	27.86	28.36	28.67	29.02	28.78	29.07	29.91	31.74	29.47
1942	32.87	32.66	33.77	32.74	31.44	31.84	31.34	31.21	29.84	29.18	29.76	31.34	31.50
1943	32.13	32.14	32.11	29.88	29.27	30.40	29.93	30.67	30.35	30.05	29.65	35.13	30.97
1944	36.35	35.47	33.71	31.87	31.25	32.35	32.29	32.52	32.95	31.51	34.27	36.80	33.45
1945	39.10	40.60	35.43	33.77	32.77	33.33	34.89	34.57	33.78	33.37	33.23	35.44	35.04
1946	35.73	36.34	34.67	32.74	32.27	33.21	34.01	33.69	33.80	33.64	33.59	36.70	34.20
1947	40.70	35.92	36.69	36.37	35.34	35.58	35.95	35.83	35.01	33.27	33.94	35.72	35.87
1948	37.35	39.34	39.21	38.91	36.19	35.55	34.84	37.31	36.92	36.15	33.95	36.90	36.88
1949	39.33	41.55	39.76	36.27	35.34	35.11	33.98	34.00	33.88	33.12	35.12	46.65	37.01
1950	44.56	40.18	35.77	34.61	35.94	34.51	33.92	34.34	34.71	33.39	34.90	40.27	36.44
1951	43.27	41.40	38.24	39.96	36.91	34.80	36.10	35.92	34.81	34.21	37.21	39.31	37.70
1952	43.49	39.98	38.20	36.92	34.79	33.63	34.20	34.59	33.98	33.98	34.33	41.21	36.61
1953	54.79	40.66	40.11	37.09	35.75	35.27	34.59	33.95	34.20	34.61	35.63	50.68	38.97
1954	46.76	43.63	43.95	38.20	35.43	35.03	34.85	35.63	35.31	35.10	35.05	45.09	38.68
1955	45.27	40.72	39.22	39.84	37.82	37.17	37.24	38.42	37.85	37.00	41.54	44.52	39.73
1956	49.90	47.08	42.25	40.29	38.30	38.18	38.42	39.31	38.37	38.55	40.08	49.50	41.69
1957	44.93	48.86	41.70	40.78	38.65	36.74	39.14	38.43	36.98	38.50	44.48	60.45	42.48
1958	57.12	48.16	45.16	42.22	38.27	38.42	39.09	38.20	37.40	40.03	38.60	42.57	42.14
1959	45.05	43.60	41.63	40.35	38.01	39.35	39.34	39.46	38.65	39.04	44.02	45.05	41.14
1960	45.16	51.33	47.28	41.93	40.00	39.63	39.48	40.19	39.72	40.34	42.06	51.75	43.24
1961	49.75	49.49	45.57	42.22	42.53	40.99	41.24	43.54	42.26	41.00	42.96	51.71	44.44
1962	51.06	52.80	50.01	43.66	41.94	40.90	42.42	41.91	42.38	42.74	46.45	53.07	45.80
1963	51.39	54.38	47.10	45.66	44.44	43.38	44.26	44.81	44.80	45.77	47.96	55.81	47.49
1964	55.87	54.40	47.58	46.77	42.66	43.07	45.45	45.81	46.23	46.54	56.23	63.98	49.56
1965	57.44	53.33	55.16	51.52	49.17	47.99	47.66	47.94	46.33	46.89	53.98	65.25	51.90

TABLE 43 (Continued)

AVERAGE DAILY CONSUMPTION OF WATER PER MONTH IN MILLION GALLONS

Year Ended June 30	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Avg. for Year
1966	63.33	63.37	56.32	50.11	47.17	44.67	44.73	44.94	45.77	46.82	48.47	59.32	51.29
1967	61.74	59.88	51.70	48.22	46.08	44.52	45.59	45.91	45.98	43.99	44.96	55.39	49.53
1968	50.26	53.10	53.36	49.14	45.67	43.99	47.40	47.06	47.07	49.07	50.71	52.94	49.15
1969	61.60	59.19	56.06	52.07	47.54	46.88	47.90	46.73	46.39	48.84	52.69	63.91	52.51
1970	63.74	62.15	59.09	53.27	49.56	48.23	49.55	49.90	49.49	50.35	55.05	61.98	54.39

TABLE 44

FUEL OIL CONSUMPTION

YEAR ENDED JUNE 30, 1970

1969-1970	Administration and Operations Building	Raw Water Booster Pumping Station	Water Purification Plant		Forestry and Maintenance Building	Nautaconkanut Pumping Station	Bath Street Pumping Station	Total	
	Gallons Used No. 6	Gallons Used No. 2	No. 2	No. 6	Gallons Used No. 2	Gallons Used No. 2	Gallons Used No. 2	Gallons Used No. 2	Gallons Used No. 6
July	356	0	1,667	20	188	0	0	1,855	376
August	705	0	1,643	90	148	0	0	1,791	795
September	901	27	413	2,133	286	0	0	726	3,034
October	2,880	1,190	46	4,576	708	95	146	2,185	7,456
November	4,413	1,100	3	5,651	1,435	384	100	3,022	10,064
December	5,795	2,100	0	8,801	2,170	701	250	5,221	14,596
January	7,151	2,470	0	8,671	3,206	740	400	6,816	15,822
February	5,803	2,030	0	6,975	2,284	674	250	5,238	12,778
March	5,346	2,100	0	12,052	2,088	557	200	4,945	17,398
April	4,125	1,680	61	6,787	671	244	0	2,656	10,912
May	1,453	0	1,510	2,933	1,266	86	0	2,862	4,386
June	505	0	1,620	0	200	0	0	1,820	505
Totals	39,433	12,697	6,963	58,689	14,650	3,481	1,346	39,137	98,122

TABLE 45

FINANCIAL STATEMENT

YEAR ENDED JUNE 30, 1970

Operating Revenues		
Sale of Water		\$2,332,916.90
Hydrant Rental		101,213.30
Electric Power		13,713.04
Setting Meters		2,249.50
Repairing Meters		1,016.34
Repairs to Water Services		1,031.36
Repairs to Distribution Mains		3,797.10
Repairs to Hydrants		2,827.39
Installation of New Fire Supplies		7,016.00
Installation of New Water Services		36,983.00
Installation of New Water Mains		21,553.87
Installation of New Gate Valves		217.91
Water Meters-Revolving Fund		2,406.35
Sale of Pulpwood, Logs and Misc. Timber Products		6,672.69
Total Operating Revenue		<u>\$2,533,614.75</u>
Operating Expenses		
Administrative	\$156,819.81	
Source of Supply	294,477.74	
Transmission and Distribution	687,791.72	
Accounting and Commercial	180,238.64	
Taxes	458,660.88	
Employees Retirement System	60,223.50	
Social Security	24,629.36	
Total		<u>* \$1,862,841.65</u>
Operating Income		<u>\$ 670,773.10</u>
Add Non-Operating Revenue		
Rental of Real Estate	\$ 294.46	
Sale of Scrap Material	4,388.24	
Sale of Material	337.83	
Special Items	8,600.00	
Other	2,711.49	
Total Non-Operating Revenue		<u>\$ 16,332.02</u>
Sub-Total		<u>\$ 687,105.12</u>
Less Non-Operating Expenses		
Interest on Bonded Debt	\$ 87,425.00	
Retirement-Serial Bonds	80,000.00	
Total Non-Operating Expense		<u>\$ 167,425.00</u>
Net Income Payable to General Fund		<u>\$ 519,680.12</u>

*See Table 41 for detailed account of Operating Expense.

Note:- The amounts shown on this page are for the 9-months October 1, 1969-June 30, 1970.

TABLE 46
*WATER SUPPLY BOARD OPERATING EXPENSES
YEAR ENDED JUNE 30, 1970

ADMINISTRATIVE

Salaries:		
001	Officials	\$26,467.00
	Clerical-Accounting	24,699.77
	Engineering	57,376.53
	Labor-General	10,884.50
008	Sick Leave Payrolls	5,075.50
009	Vacation Payrolls	4,800.40
Total		\$129,303.70
Services Other Than Personal:		
101	Accounting, Auditing and Tax Consulting Services	\$ 153.60
109	Fees Not Otherwise Classified	958.00
111	Telephone and Telegraph	1,567.14
112	Postage, Freight and Express	175.56
115	Transportation of Persons-Conventions	91.90
117	Travel Subsistence-Conventions	245.00
121	Printing and Binding	805.50
131	Heat, Light and Power	1,106.08
141	Repairs-Office Machinery	398.53
142	Repairs-Automobiles	409.43
146	Repairs-Plant Equipment	50.43
151	Maintenance and Servicing	96.70
161	Rental-Office Equipment	54.00
181	Laundry and Cleaning	513.00
183	Dues and Subscriptions	110.00
199	Miscellaneous Services	8,333.50
Total		\$ 15,068.37
Materials and Supplies:		
201	Stationery and Office Supplies	\$ 324.36
211	Motor Fuel	657.14
212	Lubricants	80.40
213	Tires and Tubes	784.96
214	Repair Parts and Supplies-Trucks and Autos	658.41
231	Medical, Chemical and Laboratory Supplies	18.73
241	Fuel	747.27
244	Housekeeping Supplies and Minor Equipment	72.95
266	Lumber and Hardware	16.32
267	Paint and Painters' Supplies	2.39
268	Plumbing and Electrical Supplies	162.45
299	Miscellaneous Services	59.00
Total		\$ 3,584.38
Special Items:		
331	Claims and Damages	\$ 165.98
350	Blue Cross and Physicians Services	4,601.75
Total		\$ 4,767.73
Capital Outlay:		
501	Office Furniture, Machinery and Equipment	\$ 498.00
502	Books, Maps and Charts	97.00
511	Automobiles	1,795.00
Total		\$ 2,390.00
Outstanding Commitments-Services Other Than Personal		701.78
Outstanding Commitments-Materials and Supplies		535.55
Outstanding Commitments-Capital Outlay		468.30
Total Administrative		\$156,819.81

*For 9-months October 1, 1969-June 30, 1970.

SOURCE OF SUPPLY

Hydro-Electric Station:

Salaries:

001 Labor-Operation	\$ 6,010.68	
Labor-Care of Grounds	347.00	
Repairs-Machinery and Equipment	79.55	
Total		\$ 6,437.23

Services Other Than Personal:

111 Telephone and Telegraph	\$ 267.18	
131 Light, Heat and Power	4,006.76	
146 Repairs-Plant Equipment	927.75	
Total		\$ 5,201.69

Materials and Supplies:

201 Stationery and Office Supplies	\$ 303.50	
211 Motor Fuel	619.50	
212 Lubricants	189.24	
241 Fuel	1,127.72	
Total		\$ 2,239.96

Capital Outlay:

561 Shop and Plant Equipment	\$ 1,750.00	
Total		\$ 1,750.00

Water Purification Plant:

Salaries:

001 Supervision	\$12,750.41	
Labor-Operation	50,565.76	
Labor-Care of Grounds	2,949.99	
Clerical	4,257.00	
Technical	22,110.60	
Total		\$92,633.76

Services Other Than Personal:

111 Telephone and Telegraph	\$ 904.43	
116 Transportation of Persons-Other	72.00	
118 Travel Subsistence-Other	104.25	
131 Heat, Light and Power	100.50	
141 Repairs-Office Machinery	74.24	
146 Repairs-Plant Equipment	3,967.67	
149 Repairs-Other Equipment	122.90	
150 Repairs-Buildings	293.00	
181 Laundry and Cleaning	1,179.68	
184 Hospitalization	7.00	
199 Miscellaneous Services	261.00	
Total		\$ 7,086.67

Materials and Supplies:

201 Stationery and Office Supplies	\$ 200.25	
204 Wearing Apparel and Personal Supplies	142.05	
212 Lubricants	72.95	
214 Repair Parts and Supplies-Trucks and Autos	101.91	
222 Repair Parts and Supplies - Plant Equipment	1,551.04	
229 Repair Parts and Supplies - Other Equipment	67.75	
231 Ferric Sulphate	38,687.98	
231 Lime	13,786.05	

231 Chlorine	\$ 3,614.00	
231 Sodium Silicofluoride	16,711.00	
231 Miscellaneous Laboratory Supplies	1,992.94	
241 Fuel	3,207.66	
244 Housekeeping Supplies	453.27	
252 Seeds, Fertilizer, Trees and Shrubs	321.00	
260 Loam	245.00	
266 Lumber and Hardware	269.31	
267 Paint and Painters' Supplies	112.47	
299 Miscellaneous Materials and Supplies	80.00	
Total		\$81,616.63
Special Items:		
302 Liability Insurance	\$ 125.00	
Total		\$ 125.00
Capital Outlay:		
501 Office Furniture, Machinery and Equipment	\$ 937.15	
511 Automobiles	2,443.00	
561 Shop and Plant Equipment	708.75	
Total		\$ 4,088.90
Scituate Reservoir:		
Salaries:		
001 Labor-Operation	\$ 3,146.58	
Labor-Care of Grounds	3,394.13	
Total		\$ 6,540.71
Services Other Than Personal:		
111 Telephone and Telegraph	\$ 194.96	
142 Repairs-Trucks and Autos	453.71	
Total		\$ 648.67
Materials and Supplies:		
213 Tires and Tubes	\$ 68.80	
214 Repair Parts and Supplies-Trucks and Autos	76.05	
252 Seeds, Fertilizer, Trees and Shrubs	87.00	
264 Fabricated Cement Products	1,300.00	
266 Lumber and Hardware	538.00	
267 Paint and Painters' Supplies	153.65	
Total		\$ 2,223.50
Other Reservoirs:		
Salaries:		
001 Labor-Operation	\$ 5,072.63	
Labor-Care of Grounds	144.80	
Total		\$ 5,217.43
Services Other Than Personal:		
142 Repairs-Automobiles	\$ 242.74	
Total		\$ 242.74
Materials and Supplies:		
214 Repairs-Trucks and Autos	\$ 29.57	
Total		\$ 29.57

Forestry and Maintenance:

Salaries:

001 Supervision	\$10,742.60
Labor-Operation	823.80
Labor-Care of Grounds	10,532.05

Total

\$22,098.45

Services Other Than Personal:

102 Expert Consultant and Other Service Fees	\$ 42.00
111 Telephone and Telegraph	133.43
115 Transportation of Persons - Conventions	10.00
117 Travel Subsistence - Conventions	138.00
142 Repairs-Trucks and Autos	1,064.87
143 Repairs-Other Automotive Equipment	43.90
149 Repairs-Other Equipment	40.00
150 Repairs-Buildings	295.98
183 Dues and Subscriptions	44.00
199 Miscellaneous Services	170.28

Total

\$ 1,982.46

Materials and Supplies:

201 Stationery and Office Supplies	\$ 39.20
202 Small Tools and Shop Supplies	359.89
204 Wearing Apparel & Personal Supplies	279.20
212 Lubricants	113.80
213 Tires and Tubes	151.46
214 Repair Parts and Supplies-Trucks and Autos	778.04
231 Medical Supplies	19.75
241 Fuel	1,116.35
244 Housekeeping Supplies	10.50
252 Seeds, Fertilizer, Trees and Shrubs	240.64
259 Other Agricultural, Horticultural and Landscaping Supplies	408.02
261 Gravel, Sand and Stone	70.00
265 Fabricated Metal Products	362.21
267 Paint and Painters' Supplies	79.63
268 Plumbing and Electrical Supplies	4.00

Total

\$ 4,032.69

Capital Outlay:

501 Office Machinery and Equipment	\$ 344.50
502 Books, Maps and Charts	27.65
512 Trucks and Tractors	2,599.00
571 Agricultural and Landscaping Equipment	1,000.70

Total

\$ 3,971.85

General:

Salaries:

001 Clerical	\$ 1,650.00
Labor-Operation	8,846.98
Labor-Care of Grounds	7,091.08
Repairs-Transmission Mains	1,557.40
Repairs-Care of Grounds-Rockland Cemetery	268.40
008 Sick Leave Payrolls	4,827.80
009 Vacation Payrolls	3,986.60
025 Injured Employees Payrolls	354.60
034 Holiday Payrolls	2,392.00

Total

\$30,974.86

Services Other Than Personal:

102 Expert Consultant and Other Service Fees	\$ 42.00
109 Fees Not Otherwise Classified	57.00
112 Postage, Freight and Express	188.77
142 Repairs-Trucks and Autos	403.55
148 Repairs-Communication Equipment	296.35
151 Maintenance and Servicing	795.00

Total

\$ 1,782.67

Materials and Supplies:

201 Stationery and Office Supplies	\$ 99.10	
202 Small Tools and Shop Supplies	229.28	
211 Motor Fuel	2,019.74	
214 Repair Parts and Supplies-Trucks and Autos	150.27	
244 Housekeeping Supplies	340.88	
265 Fabricated Metal Products	185.48	
266 Lumber and Hardware	212.80	
272 Valves and Fittings	30.00	
279 Water System Materials and Supplies Not Otherwise Classified	500.00	
299 Miscellaneous Materials and Supplies	341.50	
Total		\$4,109.05

Special Items:

350 Blue Cross and Physicians Service	\$6,787.10	
Total		\$6,787.10

Capital Outlay:

578 Photographic Equipment	\$ 209.15	
Total		\$ 209.15

Outstanding Commitments-Services Other Than Personal	313.22	
Outstanding Commitments-Materials and Supplies	1,030.28	
Outstanding Commitments-Capital Outlay	1,103.50	

Total - Source of Supply \$294,477.74

TRANSMISSION AND DISTRIBUTION

Pumping Stations:

Salaries:

001 Labor-Operation	\$19,059.48	
Total		\$19,059.48

Services Other Than Personal:

111 Telephone and Telegraph	\$ 494.71	
131 Heat, Light and Power	16,342.37	
146 Repairs-Plant Equipment	56.00	
150 Repairs-Buildings	479.05	
181 Laundry and Cleaning	56.00	
199 Miscellaneous Services	39.00	
Total		\$17,467.13

Materials and Supplies:

201 Stationery and Office Supplies	\$ 98.25	
211 Motor Fuel	451.40	
241 Fuel	664.28	
252 Seeds, Fertilizer, Trees and Shrubs	98.00	
268 Plumbing and Electrical Supplies	10.96	
272 Valves and Fittings	34.60	
Total		\$ 1,357.49

Pipe Lines:

Salaries:

001 Clerical	\$ 7,924.37
Labor-Operation	115,826.97
Repairs-Trucks and Autos	5,091.00
Repairs-Care of Grounds and Buildings	3,452.32
Repairs-Transmission Mains	1,059.07
Repairs-Distribution Mains	14,286.97
Repairs-Gates and Valves	20,128.98
Repairs-Hydrants	15,033.35
Repairs-Services	18,931.80
New Work-Distribution Mains	975.10
New Work-Gates and Valves	193.80
New Work-Hydrants	11,270.46
New Work-Services	30,348.88
Retirement Work-Distribution Mains	747.55
Retirement Work-Gates and Valves	130.29
Retirement Work-Hydrants	225.81
Retirement Work-Services	12,996.61

Total

\$258,623.33

Services Other Than Personal:

102 Expert Consultant and Other Service Fees	\$ 286.00
111 Telephone and Telegraph	329.91
112 Postage, Freight and Express	54.75
131 Light and Power	330.53
141 Repairs-Office Machinery	14.50
142 Repairs-Trucks and Autos	4,280.89
143 Repairs-Construction and Other Automotive Equipment	723.73
148 Repairs-Communication Equipment	900.70
149 Repairs-Other Equipment	97.50
150 Repairs-Buildings	37.56
153 Repairs-Street Openings	13,429.32
163 Rental-Other Equipment	1,026.00
165 Rental of Land	263.00
181 Laundry and Cleaning	474.80
199 Miscellaneous Services	294.00

Total

\$ 22,543.19

Materials and Supplies:

201 Stationery and Office Supplies	\$ 200.17
202 Small Tools and Shop Supplies	1,553.30
204 Wearing Apparel and Personal Supplies	929.65
211 Motor Fuel	5,256.60
212 Lubricants	360.70
213 Tires and Tubes	1,256.42
214 Repair Parts and Supplies-Trucks and Autos	3,927.13
241 Fuel	247.88
244 Housekeeping Supplies	39.63
259 Other Agricultural, Horticultural and Landscaping Supplies	7.60
261 Gravel, Sand and Stone	448.58
262 Plaster, Cement and Related Products	312.50
264 Fabricated Cement Products	271.17
266 Lumber and Hardware	426.84
267 Paint and Painters' Supplies	364.84
268 Plumbing and Electrical Supplies	1,232.32
271 Pipe-Asbestos Cement	3,869.65
271 Pipe-Services	8,419.40
272 Hydrants, Valves and Fittings	51,880.34
272 Gates and Valves	8,679.89
299 Miscellaneous Materials and Supplies	275.15

Total

\$ 89,959.76

Special Items:			
331	Claims and Damages	\$ 857.60	
	Total		\$ 857.60
Capital Outlay:			
512	Trucks and Tractors	\$ 1,995.00	
521	Construction and Engineering Equipment	3,902.62	
	Total		\$ 5,897.62
Other Structures and Improvements:			
721	New Main Extensions	\$88,939.24	
	Total		\$88,939.24
Distribution Reservoirs:			
Services Other Than Personal:			
111	Telephone and Telegraph	\$ 86.00	
131	Light and Power	80.99	
	Total		\$ 166.99
Materials and Supplies:			
268	Plumbing and Electrical Supplies	\$ 74.84	
	Total		\$ 74.84
Metering:			
Salaries:			
001	Supervision	\$ 6,609.15	
	Labor-Operation	8,063.39	
	Repairing Meters	6,449.77	
	Removing and Setting Meters	14,677.31	
	Installation-New Encoder Registers	15,600.10	
	Testing Meters	2,346.64	
	Inspection-Services	4,740.00	
	Total		\$58,486.36
Services Other Than Personal:			
142	Repairs-Trucks and Autos	\$ 44.00	
	Total		\$ 44.00
Materials and Supplies:			
202	Small Tools and Shop Supplies	\$ 858.23	
204	Wearing Apparel and Personal Supplies	263.29	
213	Tires and Tubes	36.06	
259	Landscaping Supplies	26.96	
266	Lumber and Hardware	25.00	
268	Plumbing and Electrical Supplies	573.16	
274	Meter Parts	17,426.65	
	Total		\$19,209.35
General:			
Salaries:			
001	Repairs-Trucks and Autos	\$ 3,062.46	
	Collection-Overdue Accounts	6,872.25	
008	Sick Leave Payrolls	11,000.85	
009	Vacation Payrolls	7,579.80	
025	Injured Payrolls	2,186.80	
034	Holiday Payrolls	7,258.90	
	Total		\$37,961.06

Services Other Than Personal:		
109	Fees Not Otherwise Classified	\$ 153.73
121	Printing and Binding	28.00
146	Repairs-Plant Equipment	56.86
150	Repairs-Buildings	469.80
151	Maintenance and Servicing	218.14
199	Miscellaneous Services	63.00
Total		\$ 989.53
Materials and Supplies:		
201	Stationery and Office Supplies	\$ 172.03
202	Small Tools and Shop Supplies	219.48
231	Medical, Chemical and Laboratory Supplies	347.29
241	Fuel	251.95
244	Housekeeping Supplies	357.89
266	Lumber and Hardware	556.23
268	Plumbing and Electrical Supplies	177.84
298	Materials for Snow and Ice Removal	35.40
Total		\$ 2,118.11
Special Items:		
350	Blue Cross and Physicians Service	\$15,551.55
Total		\$15,551.55
Outstanding Commitments-Services Other Than Personal		1,271.86
Outstanding Commitments-Materials and Supplies		13,470.88
Outstanding Commitments-Capital Outlay		21,777.00
Outstanding Commitments-New Main Extensions		11,965.35
Total-Transmission and Distribution		\$687,791.72

ACCOUNTING AND COMMERCIAL

Salaries:		
001	Supervision	\$ 6,658.89
	Clerical	65,842.21
	Meter Reading	41,137.00
	Labor-Operation	3,262.50
008	Sick Leave Payrolls	8,150.20
009	Vacation Payrolls	3,611.20
025	Injured Employees Payrolls	735.00
034	Holiday Payrolls	1,125.00
Total		\$130,522.00
Services Other Than Personal:		
102	Expert Consultant and Other Service Fees	\$ 35.00
109	Fees Not Otherwise Classified	6.00
111	Telephone and Telegraph	1,484.53
112	Postage, Freight and Express	1,411.10
116	Transportation of Persons - Carfares	768.75
121	Printing and Binding	95.00
131	Light and Power	1,262.64
141	Repairs-Office Machinery and Equipment	903.18
142	Repairs-Trucks and Autos	121.05
147	Repairs-Household Equipment	24.78
150	Repairs-Buildings	154.60
161	Rental of Office Machinery and Equipment	285.70
181	Laundry and Cleaning	1,124.96
183	Dues and Subscriptions	12.00
190	Data Processing	6,670.38
199	Miscellaneous Services	23,832.90
Total		\$ 38,192.57

Materials and Supplies:

201 Stationery and Office Supplies	\$2,182.56	
204 Wearing Apparel and Personal Supplies	141.90	
211 Motor Fuel	657.14	
213 Tires and Tubes	28.00	
214 Repair Parts-Trucks and Autos	87.00	
241 Fuel	505.96	
244 Housekeeping Supplies and Minor Equipment	139.76	
266 Lumber and Hardware	91.84	
268 Plumbing and Electrical Supplies	314.16	
299 Miscellaneous Materials and Supplies	66.72	
Total		\$4,215.04

Special Items:

350 Blue Cross and Physicians Services	\$4,726.20	
Total		\$4,726.20

Capital Outlay:

501 Office Machinery, Furniture and Equipment	\$1,605.60	
502 Books, Maps and Charts	10.00	
Total		\$1,615.60

Outstanding Commitments-Services Other Than Personal	275.47	
Outstanding Commitments-Materials and Supplies	631.76	
Outstanding Commitments-Capital Outlay	60.00	

Total-Accounting and Commercial \$ 180,238.64

Taxes	458,660.88	
Employees' Retirement System	60,223.50	
Social Security F.O.A.S.I.	24,629.36	

Total Operating Expense \$1,862,841.65

TABLE 47

SUMMARY OF ANNUAL WATER WORKS REVENUES 1930-1970

Fiscal Years Ended September 30	Receipts from Sale of Water	Miscellaneous Receipts	Total
1930	\$1,384,369.54	\$218,844.87	\$1,603,214.41
1931	1,414,836.00	237,172.64	1,652,008.64
1932	1,375,450.77	223,058.31	1,598,509.08
1933	1,345,444.69	212,066.79	1,557,511.48
1934	1,387,876.73	184,133.47	1,572,010.20
1935	1,409,259.47	237,518.68	1,646,788.15
1936	1,427,881.10	265,357.71	1,693,238.81
1937	1,429,107.08	229,317.39	1,721,424.47
1938	1,426,986.49	106,359.70	1,533,346.19
1939	1,491,918.63	124,901.37	1,616,820.00
1940	1,551,917.24	115,540.98	1,667,458.22
1941	1,615,351.79	114,960.58	1,730,312.37
1942	1,679,058.50	103,368.22	1,782,426.72
1943	1,629,268.35	86,580.98	1,715,849.33
1944	1,761,016.12	87,946.71	1,848,962.83
1945	1,812,311.82	99,271.44	1,911,583.26
1946	1,808,993.17	123,247.90	1,932,241.07
1947	1,877,471.18	124,372.47	2,001,843.65
1948	2,005,242.58	222,419.41	2,227,661.99
1949	2,031,633.37	229,317.72	2,260,951.09
1950	2,082,814.82	199,061.80	2,281,876.62
1951	2,078,209.84	214,868.70	2,293,078.54
1952	2,053,427.76	322,761.07	2,376,188.83
1953	2,093,625.85	343,477.23	2,437,103.08
1954	2,146,947.18	302,707.38	2,449,654.56
1955	2,166,180.84	379,010.13	2,545,190.97
1956	2,236,331.86	371,715.61	2,608,047.47
1957	2,262,879.80	322,948.62	2,585,828.42
1958	2,273,583.77	318,752.87	2,592,336.64
1959	2,255,865.23	374,493.67	2,630,358.90
1960	2,528,805.97	330,120.32	2,858,926.29
1961	2,758,603.26	351,179.65	3,109,782.91
1962	2,794,556.45	440,769.75	3,235,326.20
1963	2,947,872.00	366,756.30	3,314,628.30
1964	2,986,556.95	441,238.98	3,427,795.93
1965	3,113,868.26	362,201.67	3,476,069.93
1966	3,149,078.53	373,307.57	3,522,386.10
1967	3,033,036.68	369,911.49	3,402,948.17
1968	2,942,611.22	345,144.86	3,287,756.08
1969	3,097,831.73	310,117.04	3,407,948.77
Fiscal Year Ended June 30			
*1970	2,332,916.90	217,029.87	2,549,946.77

*October 1, 1969 - June 30, 1970.

TABLE 48
STATEMENT OF REVENUE - ESTIMATED AND ACTUAL
YEAR ENDED JUNE 30, 1970

Account	Estimated Revenue	Actual Revenue
Water Rents	\$2,428,956.00	\$2,332,916.90
Hydrant Rental	89,000.00	101,213.30
Electricity	12,000.00	13,713.04
Meter Revolving Fund	7,000.00	2,406.35
Repairing and Setting Meters	4,400.00	3,265.84
Fire Supplies, Gate Valves and Miscellaneous Repairs	16,000.00	14,889.76
New Service Installations	49,000.00	36,983.00
New Main Extensions	69,000.00	21,553.87
Rentals	300.00	294.46
Other Miscellaneous Receipts	12,100.00	22,710.25
Total	\$2,687,756.00	\$2,549,946.77

TABLE 49
STATEMENT OF WATER WORKS DEPRECIATION AND EXTENSION FUND
YEAR ENDED JUNE 30, 1970

	Investment	Cash	Due from Other Funds	Total
Balance - Sept. 30, 1969	\$1,749,660.00	\$ 36,399.53	Nil	\$1,786,059.53
Increase during year ended June 30, 1970	4,536,134.69	4,528,437.50		
Disbursements during year ended June 30, 1970	4,435,794.69	4,536,134.69		
Balance - June 30, 1970	\$1,850,000.00	\$ 28,702.34	Nil	\$1,878,702.34

Note:- Amounts shown in above Tables are for 9-months October 1, 1969-June 30, 1970.

TABLE 50
STATEMENT OF SERIAL BONDS OUTSTANDING
YEAR ENDED JUNE 30, 1970

Description	Rate of Interest %	Year of Issue	Year of Maturity	Serial Requirement	Bonds Issued	Bonds Outstanding
Additions, Alterations and Improvements to the Water Purification Works	3 $\frac{1}{2}$	1962	1992	\$25,000.00	\$1,100,000.00	\$ 940,000.00
New 40 Million Gallon Distribution Reservoir	3 $\frac{1}{4}$	1962	1992	55,000.00	2,050,000.00	1,710,000.00
Total Serial Bonds and Requirements				\$80,000.00	\$3,150,000.00	\$2,650,000.00

TABLE 51
A SUMMARY OF INVENTORIES OF PERSONAL PROPERTY
YEAR ENDED JUNE 30, 1970

REMOVABLE PROPERTY INVENTORY		\$203,663.05
SOURCE OF SUPPLY:		
Purification Works	\$30,216.49	
Laboratory	3,106.39	
Raw Water Pumping Station	2,712.71	
General and Reforestation	6,235.52	42,271.11
TRANSMISSION AND DISTRIBUTION:		
Pipe Lines	\$171,110.34	
Pumping Stations	487.38	
Garage	7,708.26	179,305.98
METERING		75,488.01
SUPPLIES		4,358.81
Total Personal Property Inventory		\$505,086.96

TABLE 52
STATEMENT OF METER REVOLVING FUND
YEAR ENDED JUNE 30, 1970

Cash Balance - September 30, 1969		\$10,000.00
Outstanding Commitments - September 30, 1969		15,030.65
Receipts - October 1, 1969 to June 30, 1970		38,711.61
Total Available		\$63,742.26
Disbursements - June 30, 1970	\$29,617.64	
Outstanding Commitments - June 30, 1970	21,718.27	
Transferred as Income to General Fund June 30, 1970	2,406.35	
Total Disbursements		\$53,742.26
Cash Balance - June 30, 1970		\$10,000.00

Note:- Amounts shown in above Tables are for 9-months October 1, 1969-June 30, 1970.

TABLE 53
STATEMENT OF WATER METER CONVERSION REVOLVING FUND
YEAR ENDED JUNE 30, 1970

Cash Balance - September 30, 1969		\$16,340.66
Outstanding Commitments - September 30, 1969		23,096.45
Receipts - October 1, 1969 to June 30, 1970		53,982.50
Total Available		\$93,419.61
Disbursements - October 1, 1969 to June 30, 1970	\$47,108.95	
Outstanding Commitments - June 30, 1970	17,179.75	
Total Disbursements		\$64,288.70
Cash Balance - June 30, 1970		\$29,130.91

TABLE 54
CONSTRUCTION OF MAJOR IMPROVEMENTS TO WATER SUPPLY SYSTEM
SUPPLEMENTAL TUNNEL AND AQUEDUCT

Authorized Bond Issue (Chapter 46 P.L. of R.I.) Approved April 26, 1965		\$13,000,000.00
Minus Adjustment to Land Condemnation and Easement Account Res. No. 742		171,000.00
Minus Adjustment to Rapid Sand Filters Account Res. No. 257		2,500,000.00
Balance		\$10,329,000.00
Disbursements - September 30, 1969	\$7,592,616.19	
Transferred to Federal Program EDA - December 31, 1969	300,000.00	
Transferred to Federal Program EDA - February 2, 1970	400,000.00	
Transferred to Federal Program EDA - February 18, 1970	400,000.00	
Transferred to Federal Program EDA - April 9, 1970	100,000.00	
Transferred to Federal Program EDA - May 21, 1970	100,000.00	
Total Disbursements		\$ 8,892,616.19
Unexpended Balance of Authorized Bond Issue - June 30, 1970		\$ 1,436,383.81

TABLE 55
CONSTRUCTION OF RAPID SAND FILTERS - PURIFICATION PLANT

Transferred from Tunnel and Aqueduct Account April 12, 1967		\$2,500,000.00
Disbursements - September 30, 1969	\$1,111,383.81	
Total Disbursements		\$1,111,383.81
Balance - June 30, 1970		\$1,388,616.19

Note:- Amounts shown in above Tables are for 9-months October 1, 1969-June 30, 1970.

TABLE 56

FEDERAL PROGRAMS

SUPPLEMENTAL TUNNEL AND AQUEDUCT (EDA 01-1-00087)

	Allotments	Encumbrances	Expenditures	Unencumbered Balance
Land Condemnation and Easements	\$ 189,000.00		\$ 162,046.74	\$ 26,953.26
Construction	11,409,500.00	\$ 67,201.69	13,237,540.04	-1,895,241.73
Architectural and Engineering	488,000.00	30,988.79	682,502.39	- 225,491.18
Legal and Administrative	1,500.00	4,965.00	275.00	- 3,740.00
Totals (EDA 01-1-00087)	\$12,088,000.00	\$103,155.48	\$14,082,364.17	\$-2,097,519.65

RAPID SAND FILTERS - PURIFICATION PLANT (EDA 01-1-00088)

Construction	\$2,417,900.00	\$94,606.93	\$1,818,802.17	\$504,490.90
Architectural and Engineering	82,100.00	490.00	126,537.26	-44,927.26
Totals (EDA 01-1-00088)	\$2,500,000.00	\$95,096.93	\$1,945,339.43	\$459,563.64

RAW WATER BOOSTER PUMPING STATION (EDA 01-1-00089)

Construction	\$1,148,000.00		\$1,153,104.07	\$- 5,104.07
Architectural and Engineering	44,200.00		57,377.06	-13,177.06
Legal and Administrative	1,000.00			1,000.00
Project Contingency	5,800.00			6,800.00
Totals (EDA 01-1-00089)	\$1,200,000.00		\$1,210,481.13	\$-10,481.13

SUMMARY FEDERAL PROGRAMS (87)

Land Condemnation and Easements	\$ 189,000.00		\$ 162,046.74	\$ 26,953.26
Construction	14,975,400.00	\$161,808.62	16,209,446.28	-1,395,854.90
Architectural and Engineering	614,300.00	31,478.79	866,416.71	- 283,595.50
Legal and Administrative	2,500.00	4,965.00	275.00	- 2,740.00
Project Contingency	6,800.00			6,800.00
Totals Summary (EDA 00087)	\$15,788,000.00	\$198,252.41	\$17,238,184.73	\$-1,648,437.14

TABLE 57

TAXES PAID TO VARIOUS CITIES AND TOWNS

(OCTOBER 1, 1969 TO JUNE 30, 1970)

Location of Property	ASSESSED VALUATIONS				TAX	
	Land Area (Acres)	Land	Buildings and Improvements	Total	Rate per \$100	Amount Paid
City of Warwick	0.060	\$ 160.00	\$ 0	\$ 160.00	\$----	\$ -----
City of Cranston	110.627	47,620.00	942,340.00	989,960.00	4.94	48,904.05
Town of Foster	1,994.280	198,930.00	3,000.00	201,930.00	----	-----
Town of Glocester	73.300	14,980.00	0	14,980.00	5.115	766.23
Town of Johnston	103.130	42,163.00	321,937.00	364,100.00	----	-----
Town of North Providence	8.529	29,880.00	185,100.00	214,980.00	5.00	10,749.00
Town of Scituate	13,149.030	1,112,500.00	9,250,000.00	*10,375,000.00	5.10	396,843.75
Town of West Warwick	8.940	34,740.00	0	34,740.00	4.00	1,389.60
Total Real Estate	15,447.896			12,195,850.00	**\$458,652.63	

*Includes \$12,500.00 Tangible Personal.

**In addition to this amount, \$8.25 was paid to the Harmony Fire District.

Notes: City of Providence Fiscal Year changed - now ends on June 30.
 Foster, Johnston and Warwick will be paid in the next fiscal year.
 Scituate was paid three installments.
 West Glocester Fire District will be paid in the next fiscal year.

Land Areas changed as follows:

Scituate

Exchange of Property - City of Providence & Town of Scituate:-Elmdale Road

Acquired	0.314 Acre
Reduced	0.836 Acre

Total Reduced By 0.522 Acre

TABLE 58
SUMMARY OF STATISTICS
PROVIDENCE WATER SUPPLY BOARD
YEAR ENDED JUNE 30, 1970

*PROVIDENCE (City or Town)	PROVIDENCE (County)	RHODE ISLAND (State)
GENERAL STATISTICS		
Estimated population of Providence (1970)		176,920
Estimated population supplied in suburbs (1970)		204,331
Total population supplied		381,251
Date of Construction	1870-76; 1915-28; 1935; 1938-40; 1954; 1960-1962; 1966-1970	
By whom owned	City of Providence	
Source of Supply	Surface water collected in Scituate Reservoir and five smaller reservoirs on north branch of Pawtuxet River.	
Available storage capacity of six impounding reservoirs		39,746 m.g.
Mode of Supply	80.9% by gravity; 19.1% by pumping	

STATISTICS OF CONSUMPTION OF WATER

1. Estimated population supplied	381,251
2. Total raw water influent for the year, gallons	20,515,563,000
3. Average daily raw water influent, gallons	56,207,000
4. Raw water consumption per capita, gallons daily	147.4
5. Total consumption for the year, gallons	19,852,240,000
6. Total registration on customers' meters, gallons	18,177,564,000
7. Percentage of consumption accounted for on customers' meters	91.6%
8. Average daily consumption, gallons	54,390,000
9. Per capita consumption, gallons daily	142.7
10. Gallons per day to each tap	838

*Supplying Providence, Cranston, and portions of East Providence, Johnston, North Providence, Warwick, Smithfield, Coventry, West Warwick and Scituate. (All of East Providence will be supplied by the end of 1970).

TABLE 58 (Continued)
SUMMARY OF STATISTICS
PROVIDENCE WATER SUPPLY BOARD
YEAR ENDED JUNE 30, 1970

FILTRATION

1. Type of filters	Rapid Sand
2. Number of filter units	18
3. Capacity of filter plant	18 units @ 8.0=144 m.g.d.
4. Chemicals used	Ferri-Floc, Quicklime, Chlorine and Sodium Silicofluoride
5. Total water filtered during year, gallons	20,025,534,000
6. Average quantity filtered per day, gallons	54,864,000
7. Total filtered water delivered to the distribution system during the year, gallons	19,853,483,000

TRANSMISSION SYSTEM

90-inch Scituate aqueduct (concrete). Also, 78-inch and 102-inch supplemental tunnel and aqueduct (prestressed reinforced concrete steel cylinder pipe).

STATISTICS RELATING TO THE DISTRIBUTION SYSTEM

1. Kind of pipe	Asbestos-Cement, Cast Iron, Steel and Concrete
2. Sizes	From 6 to 66 inches
3. Installed (Oct., 1, 1969-June 30, 1970)	12,130.67 feet
4. Removed (" " " " ")	1,622.64 feet
5. Net Increase (" " " " ")	10,508.03 feet
6. Total now in use	811.39 miles
7. Number of leaks per mile	0.12
8. Range of pressure on mains	14 to 95 pounds
9. Range of pressure on mains (special high pressure fire service)	94 to 130 pounds
10. Number of hydrants installed (Oct. 1, 1969-June 30, 1970)	83
11. Number removed (" " " " ")	69
12. Net increase (" " " " ")	14
13. Number of hydrants now in use	4,946
14. Number of stop gates installed (Oct. 1, 1969-June 30, 1970)	34
15. Number removed (" " " " ")	8
16. Net increase (" " " " ")	26
17. Number of stop gates now in use	11,131

TABLE 58 (Continued)
SUMMARY OF STATISTICS
PROVIDENCE WATER SUPPLY BOARD

YEAR ENDED JUNE 30, 1970

STATISTICS RELATING TO THE DISTRIBUTION SYSTEM
(Continued)

18. Kind of services		Lead, Copper and Cast Iron
19. Sizes		$\frac{1}{2}$ -inch to 30 inches
20. Number of service taps installed	(Oct. 1, 1969-June 30, 1970)	404
21. Number removed	(" " " " " ")	354
22. Net increase	(" " " " " ")	50
23. Number of services now in use		*64,867
24. Number of meters installed	(Oct. 1, 1969-June 30, 1970)	722
25. Number removed or condemned	(" " " " " ")	491
26. Net increase	(" " " " " ")	231
27. Number of meters now in use		**65,087
28. Per cent of services metered		100

*In addition, there is a 30-inch connection off the 78-inch Aqueduct to the Kent County Water Authority pumping station on Clinton Avenue, Hope, R. I.

**Many large services have batteries of meters.