CITY DOCUMENT

ANNUAL REPORT

of the

WATER SUPPLY BOARD

of the

CITY OF PROVIDENCE

RHODE ISLAND

For the Year Ended June 30, 1971

WATER SUPPLY BOARD
CITY OF PROVIDENCE, R. I. 02908
552 ACADEMY AVENUE

May 8, 1972

Mr. Vincent Vespia
City Clerk
City Hall
Providence, Rhode Island

Dear Mr. Vespia:

I am enclosing copy of the Annual Report of the Water Supply Board for the fiscal year ended June 30, 1971, which has been signed by Mr. John A. Doherty, Chairman of the Board.

Thirty copies are being forwarded to your office for presentation to the members of the City Council at the next scheduled meeting.

Very truly yours,

Joseph E. Martin
Chief Engineer

JEM/ms

Enc.

WATER SUPPLY BOARD

CITY OF PROVIDENCE, R. I. 02908
552 ACADEMY AVENUE

May 5, 1972

Mr. Vincent Vespia
City Clerk
City Hall
Providence, Rhode Island

Dear Mr. Vespia:

At the meeting of the Water Supply Board held today, the Annual Report for the year ending June 30, 1971 was approved. It is requested that this report be placed on the Docket for the next scheduled meeting of the City Council.

Sufficient copies for distribution among the members of the Council will be in your office no later than Wednesday afternoon, May 10.

Very truly yours,

Joseph E. Martin
Chief Engineer

JEM/ms

ADMINISTRATIVE OFFICE
WATER SUPPLY BOARD
CITY OF PROVIDENCE

IN CITY COUNCIL

MAY 16 1972

READ:

WHEREUPON IT IS ORDERED THAT THE SAME BE RECEIVED.

CLERK

July 1, 1971

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 thirty-first annual report of the Water Supply Board for the year ended June 30, 1971.

On March 5, 1971, Earl H. Ashley was reappointed a member of the Board for the ensuing term ending on the first Monday in January 1975.

At the reorganization meeting held on March 12, 1971, John A. Doherty was reelected Chairman and John J. Deary was reappointed Secretary.

The Board held regular semiweekly 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
Chairman

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

REPORT OF THE CHIEF ENGINEER

Providence, R. I.
July 1, 1971

WATER SUPPLY BOARD
CITY OF PROVIDENCE

Gentlemen:

The following is the report of the Providence Water System for the fiscal year ended June 30, 1971.

Although rainfall and runoff did not drop to a dangerously low amount, it is significant to note that the 44.23 inches of precipitation and 19.41 inches of runoff were the sixteenth and twelfth lowest, respectively, during the 55-year (July 1916—June 1971) period.

Consumption continued to increase — the average was 60,090,000 gallons per day, an amount 5,700,000 gallons per day more than during the previous year. With the addition of the City of East Providence and the Greenville Water District to our service area, a new hourly high and maximum day occurred on June 30, 1971. The maximum hourly rate was 158,350,000 gallons per day while the total for the day jumped to 109,030,000 gallons, a figure 14,990,000 gallons per day greater than the previous maximum of 94,040,000 gallons on July 17, 1969.

The quantity of water drawn by East Providence was 1,274,514,436 gallons, an average of 3,491,820 gallons per day. This includes 54,834,000 gallons furnished from a temporary connection on Allens Avenue during the period July 1—October 22, 1970; the service was a supplement to their supply. The 42-inch tie-in to our 102-inch aqueduct in Budlong Road, Cranston, was placed in service on October 30, 1970, at which time East Providence abandoned its previous source. Usage of Providence water from that time through June 30, 1971 totaled 1,219,680,436 gallons, an average for the 244 days of 4,998,690 gallons per day, with a maximum consumption of 9,375,200 gallons on June 30, 1971.

The Greenville Water District started receiving Providence water on December 4, 1970 from a 12-inch connection off our 24-inch prestressed reinforced concrete steel cylinder main in George Waterman Road near Putnam Pike, Johnston. The total consumption for the 209-day period ended June 30, 1971 was 72,474,460 gallons, an average of 346,768 gallons daily.

The City of Warwick is progressing with their transmission system which will be supplied through a 42-inch connection to the 102-inch aqueduct. It is anticipated this service will be in use during the next fiscal year.

A new documentary sound film in color, entitled "Pipeline For Tomorrow", was introduced by the Water Supply Board and was given the first showing on March 5, 1971 to a group of 21, including Mayor Joseph A. Doorley, Jr., members of the Water Supply Board, representatives of the Rhode Island State Water Resources Board and Honeywell, Inc., and various contractors.

The film, produced by Sales Promotion Services, Inc. of West Hartford, Connecticut, is a 16-millimeter pictorial review of the Major Construction Projects. It describes the many and varied aspects of the work, in addition to the magnitude and operation of the new Supplemental Tunnel and Aqueduct, the Raw Water Booster Pumping Station, the Centralized Control System and the four additional rapid sand filters.

The Department's previous film, "Pure Water—Lifeline of Providence", made in 1964, was updated by the same firm which prepared the documentary mentioned in the previous paragraph. It describes generally the source, collection, treatment, transmission and distribution, pumping, maintenance and servicing, metering, billing and forestry operations.

On April 15, 1971, the department was co-host, along with the East Providence Water Department, to the New England Water Works Association at the Southern New England meeting. The group, numbering more than 200 members and guests, met at the Metacomet Country Club in East Providence. Morning refreshments of coffee and doughnuts were served, after which more than one hundred persons were transported by bus to view the new Major Construction Projects in Scituate. Others were given a guided bus tour of points of interest and new facilities in the East Providence water system. At the luncheon meeting, Samuel H. Ramsay, Jr., Mayor of East Providence, welcomed the group to the city. Papers were read by Owen B. Devine, Superintendent of the East Providence Water Department, and Paul T. Carver and Allen B. Schwartz of Charles A. Maguire and Associates, Inc. The talks described the tie-in with the Providence water system at Budlong Road, Cranston, the abandonment of their previous source of supply, and the improvements to East Providence's storage and distribution facilities. Upon conclusion shortly thereafter, the general opinion of the group was that the meeting was quite successful and particularly gratifying due to the large attendance.

On November 23, 1970, the Board of Contract and Supply awarded a contract to the Zarrella Plumbing and Heating Company, Inc. of Cranston in the amount of $42,970.00. The work involved the removal of the electrically-driven 2700 GPM pump from the Neutaconkanut High Service Pumping Station and the furnishing and installation of a 7000 GPM pump in its place. The station will then have three electrically-driven units, (two 7000 GPM and one 3800 GPM) and a 7000 GPM gasoline engine-driven pump. This will provide for much needed increased capacity to meet the demands of the high service system. The contract also called for removing the 0.5 MGD fire pump at the Purification Plant, and furnishing and installing a 1 MGD unit. This pump will be used primarily to flush out the coagulation and sedimentation basins. It is felt that increased efficiency in this operation will result from the greater pressure and flow from the hydrants. In addition to the pump installations at both locations, the

contract requires that all necessary appurtenances be furnished and installed. Work was nearing completion at the end of the fiscal year.

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 gauges at Rocky Hill, Hopkins Mills, North Scituate, Westcott District and Gainer Dam. A total of 44.23 inches was recorded, which was 3.96 less than the 55-year (July 1916—June 1971) average of 48.19 inches and 70.0% of the maximum of 63.19 inches established during the year ended June 30, 1956. It was the sixteenth driest year of record. The runoff totaled 19.41 inches; this was 4.92 inches less than the 55-year average of 24.33 inches and 21.56 inches less than the maximum of 40.97 inches which occurred during the July 1955—June 1956 year. It was the twelfth lowest runoff of record.

STORAGE, DRAFT AND YIELD—On July 1, 1970 the combined storage on the watershed, including Regulating, Westconnaug, Barden, Moswansicut, Ponaganset and Scituate Reservoirs, amounted to 40,890,000,000 gallons, or 99.1% of combined total capacity. At the end of the year the combined storage was 40,632,000,000 gallons, or 98.5% of capacity.

The total draft from the Scituate Watershed for the year was 31,587,790,000 gallons, an average of 86,540,000 gallons daily. The draft for water supply purposes was 21,943,070,000 gallons and the discharge into the north branch of the Pawtuxet River totaled 9,644,720,000 gallons.

The yield from the watershed for the year totaled 31,329,790,000 gallons, an average of 85,840,000 gallons per day. This was 21,590,000 gallons per day less than the 107,430,000 gallons average daily yield for the 55-year period July 1916—June 1971.

FORESTRY OPERATIONS: The forest and water resources on the Scituate watershed, under professional management, continue to be responsible for a high quality raw water. Watershed management practices are planned and carried out in keeping with environmental concerns of the times.

Protection of these all-important resources is an essential part of the watershed management program. It is necessary to be constantly vigilant against violations or activities which may affect water quality. The pressures of suburban encroachment and resultant enforcement requirements are steadily increasing. During the year, for example, 87 separate acts of vandalism were accounted for. The number and extent of forest fires were negligible because of prompt presuppression and control measures taken by local, state and departmental fire-fighting agencies and patrols. The fire tower on Tunk Hill was manned on 44 high-hazard days during the year.

The department continues to cooperate with the U. S. Forest Service in forest insect and disease survey and control. A Forest Service survey of **Fomes annosus** infestations in 76 previously thinned coniferous plantations disclosed mortality of 2.7 trees per acre killed by the root-rotting disease. The 2.7 mortality rate, compared with an average of 11.2 dead trees per acre in other plantations statewide, indicates the value of departmental efforts in a stump-treatment control program. Complete defoliation of larch trees by larch sawfly (**Pristiphora erichsonii**) is occurring in plantations in the southern portion of the watershed and is expected to spread. Populations of the gypsy moth (**Porthetria dispar**) were found at scattered locations at low levels.

Forest-culture operations included aesthetic development of forest stands at various roadside locations, thinning of plantations, timber-stand improvement following logging operations, pruning and reforestation. Salvage of storm or disease damaged trees, roadside slash disposal and brush control were other work projects. Contractual or departmental woods operations resulted in the harvest of an estimated 800,000 board feet of timber products consisting of sawlogs, pulpwood, fuelwood and miscellaneous materials. Intensive forest management activity occurred on approximately 500 acres of watershed forestland during the year.

Turf management was carried out at Gainer Dam, the Purification Works, distribution reservoirs and at other facilities throughout the system. Brush control practices were applied to 12.3 miles of forest access roads, 9.9 miles of roadside fencelines and 5.8 miles of aqueduct rights-of-way. An additional two miles of forest access roads were cleared or improved by grading or gravelling, bringing the total mileage of forest access roads on the watershed to 52. The rustic rail fencing at the base of Gainer Dam was supplemented with the installation of 655 feet. Maintenance of fencing, gates, macadam firelanes and other facilities was conducted as scheduled.

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 14,000 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 1970—June 1971) amounted to 112,048. Based on a 35-hour week, the water was receiving one test or another every 58 seconds.

Chemists carried out frequent coagulation tests on 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 3,219, or an average of 268 per month, a figure 40% 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 mechines are automatically controlled in direct proportion to the volume of water being tested. 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 1970—June 1971):—1,957,484 pounds of ferric sulfate before influent aeration, 2,063,724 pounds of quicklime after influent aeration and before mixing, 91,672 pounds of chlorine prior to filtration and 267,428 pounds of sodium silicofluoride after filtration, a grand total of 4,380,308 pounds.

During the year, 21,927.81 million gallons were delivered into the distribution system, an average of 60.08 million gallons daily. The maximum hourly demand in the system was at the rate of 158.35 million gallons daily; consumption during the maximum day, June 30, 1971, amounted to 109.03 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 4,293,566 feet (813.18 miles) of water mains ranging from 6-inches to 66-inches in diameter. The network consists of iron, steel, asbestos-cement and reinforced concrete steel cylinder pipe. There were 64,769 services, 16,130 valves and 4,964 hydrants in use on June 30, 1971. The amount of pipe laid during the year totaled 14,417 feet; 4,955 feet were removed, resulting in a net increase to the system of 9,462 feet. Services installed and removed were 403 and 501, respectively, a loss of 98. One hundred and nineteen valves were installed and 36 removed, a gain of 83. One hundred and forty-six hydrants were installed and 128 removed, a net increase of 18.

Total water distribution was 21,933.23 million gallons, or 60.09 million gallons per day. The low service area, a gravity supply, consumed 81.8%; 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 18.2%. Registration on customers' meters totaled 19,804.93 million gallons, accounting for 90.3% of the amount delivered into the system.

Leaks in the transmission and distribution mains totaled 116 during the year, 34 occurring at joints and 82 as a result of ruptured mains. Leaks at joints averaged one for every 24 miles of pipe and total leaks averaged one for every 7 miles of main. Fifty-one of the 116 leaks were caused by various contractors excavating while performing unrelated work.

The number of meters on active services totaled 65,111. 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

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.

The staff has cooperated with the City of Cranston in its program to bring Providence water to the western section of the city. The second phase of water main installations was completed, with the exception of leakage tests and disinfection; this additional work should be completed during the early part of calendar 1972. Under the third phase of Cranston's program, construction was started on a pumping station in the vicinity of Aqueduct Reservoir, and a 5-million gallon covered underground reservoir off Plainfield Pike to be known as the Lawton Hill Reservoir. It is anticipated that the pumping station and storage facility will be ready for service by mid 1972.

COMMERCIAL AND ACCOUNTING

At the end of the fiscal year the department had 64,769 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 (July 1, 1970—June 30, 1971) 3,534 installations were made bringing the total to 13,751 since the program was initiated in May 1968.

FINANCIAL

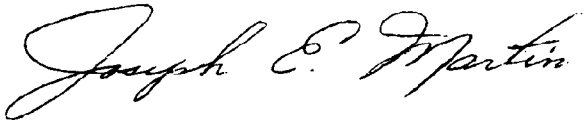
The gross income for the 12-month year (July 1, 1970—June 30, 1971) totaled $3,708,998.66. Revenue from the sale of water alone amounted to $3,411,376.76. The remaining income of $297,621.90 was received from other sources, including hydrant rentals, installation of services and fire supplies, miscellaneous items and the surplus in the Meter Revolving Fund. At the end of the fiscal year, unpaid water bills totaled $452,739.15, or 12.6% of the total net billing. This total includes an amount of $132,157 which has been received prior to the printing of this report, from a community supplied under a wholesale agreement.

Operating expenses continued to increase. The total for the 12-month period amounted to $2,667,476.67. As usual, it is anticipated 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 $2,570,000.00 at the close of the fiscal year; interest charges paid during the year came to $84,825.00.

Financial accounts of the department, together with other statistical data for the year ended June 30, 1971, are appended to this report.

Respectfully submitted,



Joseph E. Martin
Chief Engineer

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MONTHLY RAINFALL IN INCHES ON SCITUATE WATERSHED

YEAR ENDED JUNE 30, 1971

1970-1971	STATIONS ON WATERSHED					
	Rocky Hill	Hopkins Mills	North Scituate	Westcott	Gainer Dam	Average
July	0.69	0.67	0.70	0.89	0.78	0.75
August	5.90	4.69	5.62	4.69	5.23	5.23
September	2.38	2.17	1.87	2.16	1.86	2.09
October	4.22	3.10	3.56	3.78	3.88	3.71
November	6.01	5.67	5.55	5.91	5.67	5.76
December	5.36	5.53	6.20	5.03	5.76	5.58
January	2.50	2.45	2.12	2.02	2.15	2.25
February	5.61	5.18	5.45	5.20	5.33	5.35
March	3.37	3.10	3.33	3.07	3.47	3.27
April	3.79	3.38	3.46	2.81	3.41	3.37
May	4.65	4.39	4.42	4.43	4.23	4.42
June	2.15	2.50	1.73	3.01	2.84	2.45
Total	46.63	42.83	44.01	43.00	44.61	*44.23
Monthly Average	3.89	3.57	3.67	3.58	3.72	3.69

*Total of Averages

TABLE 2

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. Year	Dec. 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	5.35	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	3.35	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	Jan.-Dec. 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	4.91	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
1954-1965	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.

TABLE 3

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	Jan.-Dec. 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	6.05	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	Jan.-Dec. 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	5.55	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	46.26
1970-1971	0.75	5.23	2.09	3.71	5.76	5.58	2.25	5.35	3.27	3.37	4.42	2.45	44.23	1971	----
55 Years Average	3.76	4.26	4.04	3.53	4.75	4.26	4.05	3.94	4.42	4.13	3.56	3.49	*48.19	Avg.	*48.24
55 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
55 Years Minimum	0.75	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 July was the minimum of record for that month.

NOTE: The 55-Year calendar year average is for the years 1916-1970.

TABLE 4

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	Jan.-Dec. 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	Jan.-Dec. Total
1950-1951	0.04	1.85	2.59	3.24	4.95	4.36	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	2.66	3.56	4.01	3.71	0.33	-0.01	0.93	3.96	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	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total	Jan.-Dec. Year	Jan.-Dec. 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	2.64	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	0.56	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	Jan.-Dec. 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	20.55
1970-1971	-0.07	0.10	0.04	0.22	1.43	1.50	1.37	3.61	4.90	2.79	2.79	0.73	19.41	1971	----
55 Years Average	0.60	0.49	0.65	0.79	1.83	2.50	2.75	2.77	4.69	3.77	2.37	1.12	*24.33	Avg.	*24.44
55 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
55 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.

NOTE: The 55-Year calendar year average is for the years 1916-1970.

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	Jan.-Dec. Year	Jan.-Dec. Total
1915-1916	27.3(e	43.0(e	51.7(e	133.0	62.9	152.2	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	66.5	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	43.0

(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	Jan.-Dec. 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	52.9	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	Jan.-Dec. 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	Jan.-Dec. 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	-5.8	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	44.4
1970-1971	-9.3	1.9	1.9	5.9	24.8	26.9	60.9	67.5	149.8	82.8	63.1	29.8	43.9	1971	----
55 Years Average	16.0	11.5	16.1	22.4	38.5	58.7	67.9	70.3	106.1	91.3	66.6	32.1	50.5	Avg.	50.7
55 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.	61.5
55 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

NOTE: The 55-Year calendar year average is for the years 1916-1970.

TABLE 8

SCITUATE WATERSHED

(92.8 Square Miles)

STATISTICS OF STORAGE - YEAR ENDED JUNE 30, 1971

1970-1971	1 Regulating Reservoir Elev.	Avail. Storage M.G.	2 Westconnaug Reservoir Elev.	Avail. Storage M.G.	3 Barden Reservoir Elev.	Avail. Storage M.G.	4 Moswansicut Reservoir Elev.	Avail. Storage M.G.	5 Ponaganset Reservoir Elev.	Avail. Storage M.G.	Total 1-5 Avail. Storage M.G.	% of *Tot. Avail.	6 Scituate Reservoir Elev.	Avail. Storage M.G.	Total 1-6 Avail. Storage M.G.	% of **Tot. Avail.
July	285.50	421	454.31	461	345.20	861	301.92	717	633.20	704	3,164	100.9	283.63	36,204	39,368	99.0
August	285.00	382	453.93	439	345.00	845	301.80	705	632.86	679	3,050	97.3	281.21	33,615	36,665	92.2
September	284.55	349	453.70	426	344.90	837	301.72	697	632.67	665	2,974	94.9	279.11	31,421	34,395	86.5
October	283.67	288	453.43	411	344.84	832	301.63	688	632.55	657	2,876	91.7	277.10	29,400	32,276	81.2
November	283.60	283	453.47	413	345.18	859	301.82	707	632.62	662	2,924	93.3	275.29	27,584	30,508	76.8
December	285.55	425	454.38	465	345.30	869	301.94	719	633.35	716	3,194	101.9	275.41	27,702	30,896	77.7
January	285.55	425	454.39	465	345.21	862	302.02	727	633.49	727	3,206	102.3	275.73	28,025	31,231	78.6
February	285.59	428	454.35	463	345.29	868	301.98	723	633.41	721	3,203	102.2	275.87	28,167	31,370	78.9
March	285.78	444	454.35	463	345.84	912	302.18	744	633.75	747	3,310	105.6	279.66	32,020	35,330	88.9
April	285.65	433	452.98	386	345.14	856	302.05	730	633.62	737	3,142	100.2	284.28	36,914	40,056	100.8
May	285.64	432	453.85	435	344.93	839	302.02	727	633.55	731	3,164	100.9	284.50	37,160	40,324	101.5
June	285.58	427	454.44	468	345.24	864	301.98	723	633.49	727	3,209	102.4	284.90	37,608	40,817	102.7
Maximum for Year	Feb. 13 & 27 285.80	445	Feb. 13 454.82	490	Feb. 27 345.87	915	Feb. 13 & 27 302.20	746	Mar. 20 633.85	755	Feb. 27 3,313	105.7	May 18 285.15	37,885	May 22 40,850	102.8
Minimum for Year	Oct. 17 283.15	253	Apr. 1 452.98	386	Oct. 17 344.70	821	Oct. 17 301.50	675	Oct. 17 632.50	653	Oct. 17 2,805	89.5	Dec. 11 275.18	27,476	Nov. 1 30,508	76.8

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		Total Storage	4,257 M.G.;	Dead Storage	1,122 M.G.;	Total Available Storage	*3,135 M.G.
6.	Scituate " " "	284.01;	" "	37,011 "	" " "	400 "	" " "	36,611 "
	Total 1-6		Total Storage	41,268 M.G.;	Dead 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.

TABLE 9

SCITUATE RESERVOIR ELEVATIONS

YEARS ENDED JUNE 30

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	284.50	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	284.35

TABLE 9 (Continued)

SCITUATE RESERVOIR ELEVATIONS

YEARS ENDED JUNE 30

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
1970-1971	283.63	281.21	279.11	277.10	275.29	275.41	275.73	275.87	279.66	284.28	284.50	284.90
43 Years Average	282.49	280.72	278.87	277.44	276.17	276.26	277.23	278.20	279.20	282.18	283.26	283.35
43 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
43 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, 1971

	DRAFT FROM SCITUATE RESERVOIR Million Gallons						WATERSHED YIELD Million Gallons		
	To River Below Gainer Dam				Total			Average per Day	
1970-1971	Over Spill-way	Through Gate-house	Total	To Water Purification Works	For Month	Average per Day	For Month	1970-1971	55-Year Mean 1917-1971
July	0	435.17	435.17	2,158.22	2,593.39	83.66	-109.61	-3.54	31.21
August	0	321.03	321.03	2,117.37	2,438.40	78.66	168.40	5.43	25.49
September	0	337.30	337.30	1,853.03	2,190.33	73.01	71.33	2.38	34.94
October	0	377.54	377.54	1,747.27	2,124.81	68.54	356.81	11.51	41.10
November	0	352.59	352.59	1,563.08	1,915.67	63.86	2,303.67	76.79	98.38
December	0	411.25	411.25	1,677.00	2,088.25	67.36	2,423.25	78.17	130.06
January	0	376.57	376.57	1,700.12	2,076.69	66.99	2,215.69	71.47	143.07
February	0	253.52	253.52	1,601.05	1,854.57	66.23	5,814.57	207.66	158.13
March	12.69	1,391.18	1,403.87	1,776.55	3,180.42	102.59	7,906.42	255.05	243.99
April	102.39	2,450.22	2,552.61	1,679.37	4,231.98	141.07	4,499.98	150.00	202.67
May	182.19	2,065.51	2,247.70	1,753.34	4,001.04	129.07	4,494.04	144.97	123.30
June	125.04	450.53	575.57	2,316.67	2,892.24	96.41	1,185.24	39.51	60.21
For Year	*422.31	9,222.41	9,644.72	21,943.07	31,587.79	86.54	31,329.79	85.84	107.43

*Includes Flashboard Leakage.

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
1971	0	0	0	2,000	500	0	0	0	0	500	2,000	0	***5,040
Totals	1,000	4,140	2,638,427	2,838,965	16,928	101,221	136,000	121,750	821,781	221,049	69,000	48,461	7,019,062

*Includes 200 Black Walnut.
**Includes 100 Chestnut.
***Includes 40 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	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	809,600	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	2,462,400	13,498.88
July 1969-June 1970	3,383,700	941,350	2,556,800	14,350.10
July 1970-June 1971	1,385,800	1,089,130	737,600	3,008.43

*1875 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, 1971

1970-1971	Influent Aerator Hours Operated	Plant Influent Mil. Gals. Total	Plant Influent Mil. Gals. Average per Day	Water Filtered Mil. Gals. Total	Water Filtered Mil. Gals. Average per Day	Wash Water Mil. Gals. Total	Wash Water Mil. Gals. Average per Day	Wash Water Mil. Gals. % of Water Filt.	Plant Effluent Mil. Gals. Total	Plant Effluent Mil. Gals. Average per Day	Plant Effluent Flow Hours	Number of Filters in Operation Max.	Number of Filters in Operation Min.	Number of Filters in Operation Avg.
July	744.0	2,158.222	69.620	2,091.330	67.462	16.167	0.521	0.8	2,075.163	66.941	744.0	18.0	5.0	11.3
August	742.3	2,117.368	68.302	2,033.315	65.591	18.501	0.597	0.9	2,014.814	64.994	744.0	17.0	6.0	10.9
September	719.0	1,853.027	61.768	1,772.030	59.068	17.003	0.567	1.0	1,755.027	58.501	720.0	16.0	5.0	9.9
October	741.6	1,747.271	56.364	1,761.201	56.813	21.994	0.709	1.2	1,739.207	56.103	745.0	13.5	5.0	9.5
November	720.0	1,563.083	52.103	1,669.508	55.650	15.977	0.533	1.0	1,653.531	55.118	720.0	12.0	6.0	9.4
December	744.0	1,676.998	54.097	1,725.091	55.648	18.157	0.586	1.1	1,706.934	55.062	744.0	12.0	5.0	9.2
January	744.0	1,700.117	54.842	1,723.635	55.601	19.881	0.641	1.2	1,703.754	54.960	744.0	12.0	5.0	9.2
February	672.0	1,601.055	57.181	1,616.854	57.745	17.016	0.608	1.1	1,599.838	57.137	672.0	12.0	5.0	9.6
March	744.0	1,776.549	56.748	1,777.277	57.332	18.074	0.583	1.0	1,759.203	56.748	744.0	12.5	5.0	9.6
April	719.0	1,679.375	55.979	1,726.562	57.552	20.427	0.681	1.2	1,706.135	56.871	719.0	12.0	6.0	9.7
May	744.0	1,753.338	56.559	1,859.424	59.981	20.361	0.657	1.1	1,839.063	59.325	744.0	13.0	5.5	10.0
June	719.0	2,316.672	77.222	2,405.379	80.179	30.241	1.008	1.3	2,375.138	79.171	720.0	18.0	7.0	13.4
Totals	8,752.9	21,943.075		22,161.606		233.799			21,927.807		8,760.0			
Average	729.4		60.118		60.717		0.641	1.1		60.076	730.0			10.2

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, 1971

1970-1971	Average Rate of Filtration per Filter M.G.D.	Number of Filters Washed Total	Avg. per Day	Average Filter Run Hours	Ferri-Floc Used Lbs.	Avg. per Day	Gr. per Gal.	Quicklime Used Lbs.	Avg. per Day	Gr. per Gal.	Chlorine Used Lbs.	Avg. per Day	Parts per Mil.	Sodium Silicofluoride Used Lbs.	Avg. per Day	Parts per Mil.*
July	5.95	96	3.1	86.69	176,308	5,687	0.57	207,949	6,708	0.67	10,025	323	0.58	25,248	814	0.87
August	6.00	109	3.5	75.39	157,695	5,087	0.52	206,056	6,647	0.68	10,085	325	0.60	24,350	785	0.86
September	5.94	107	3.6	71.03	137,531	4,584	0.52	189,620	6,321	0.72	8,890	296	0.60	21,603	720	0.88
October	5.95	130	4.2	55.89	152,084	4,906	0.62	169,431	5,466	0.69	6,875	222	0.47	21,096	681	0.87
November	5.95	92	3.1	72.18	190,110	6,337	0.85	153,978	5,133	0.69	6,282	209	0.45	20,140	671	0.87
December	6.02	113	3.6	61.47	177,363	5,721	0.74	158,013	5,097	0.66	5,574	180	0.39	19,340	618	0.81
January	6.01	136	4.4	50.54	178,696	5,764	0.74	156,246	5,040	0.65	5,074	164	0.35	19,230	620	0.81
February	6.00	117	4.2	57.63	168,612	6,022	0.74	149,585	5,342	0.66	5,049	180	0.37	19,008	679	0.85
March	5.95	124	4.0	56.54	169,575	5,470	0.67	164,391	5,303	0.65	7,238	233	0.49	22,055	711	0.89
April	5.97	137	4.6	51.94	137,692	4,590	0.57	146,351	4,875	0.61	7,111	237	0.49	22,061	735	0.92
May	5.98	135	4.4	56.44	139,792	4,509	0.56	156,289	5,041	0.62	7,785	251	0.50	24,097	777	0.94
June	5.97	194	6.5	49.57	172,026	5,734	0.52	205,815	6,861	0.62	11,684	389	0.58	29,200	973	0.88
Totals		1,490			1,957,484			2,063,724			91,672			267,428		
Average	5.97		4.1	60.38		5,363	0.63		5,654	0.66		251	0.50		733	0.87

Total filter hours for year, 89,029.35; average per day, 243.92.
Average quantity of water filtered per run, 15.03 m.g.
*Dosage expressed as p.p.m. of Fluoride ion.

TABLE 14

WATER PURIFICATION WORKS

CHEMICALS USED - YEAR ENDED JUNE 30, 1971

	Pounds of Chemicals Used		Total Gallons of Water Treated	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)				
Ferri-Floc	1,957,484	5,363	21,914,639,000	$ 60,243.25	89.32	$2.75
Quicklime	2,063,724	5,654	21,901,154,000	25,423.69	94.23	1.16
Chlorine	91,672	251	22,148,115,000	6,371.20	4.14	0.29
Sodium Silicofluoride	267,428	733	21,872,734,000	26,274.15	12.23	1.20
Totals	4,380,308			$118,312.29		$5.40

Price of Ferri-Floc--From July 1, 1970 to Oct. 4, 1970--$60.05 per ton; from Oct. 5, 1970 to Jan. 21, 1971--$61.25 per ton; from Jan. 22, to June 30, 1971--$63.05 per ton.

Price of Quicklime---From July 1 to July 2, 1970--$22.50 per ton; from July 3, 1970 to June 30, 1971--$24.75 per ton.

Price of Chlorine----From July 1, 1970 to June 30, 1971--$139.00 per ton.

Price of Sodium Silicofluoride--From July 1, 1970 to Oct. 26, 1970--$196.60 per ton; from Oct. 27, 1970 to June 30, 1971--$196.40 per ton.

TABLE 15

WATER PURIFICATION WORKS

*CHEMICAL AND PHYSICAL CHARACTERISTICS OF WATER IN PROCESS OF FILTRATION

YEAR ENDED JUNE 30, 1971

	Monthly Averages												Avg. for Year
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	
pH													
Raw	5.7	5.7	5.7	6.0	6.3	6.1	6.1	5.9	6.0	6.0	5.9	5.8	5.9
Aerated Influent	4.3	4.3	4.4	4.3	4.3	4.2	4.3	4.1	4.2	4.3	4.3	4.3	4.3
Treated	10.2	10.1	10.1	10.0	10.3	10.3	10.4	10.3	10.3	10.3	10.3	10.2	10.2
Settled	10.1	10.0	10.1	9.9	10.2	10.2	10.3	10.2	10.2	10.2	10.1	10.1	10.1
Filtered	10.1	10.0	10.0	9.9	10.1	10.2	10.3	10.2	10.2	10.2	10.1	10.1	10.1
**Effluent	10.1	10.0	10.0	9.9	10.2	10.2	10.3	10.2	10.2	10.2	10.1	10.1	10.1
Tap	10.0	10.0	10.0	9.9	10.1	10.2	10.3	10.2	10.2	10.2	10.1	10.1	10.1
Acidity													
Raw	4.3	5.7	7.2	4.7	1.5	1.2	1.7	2.6	2.4	1.7	1.8	2.7	3.1
Aerated Influent	7.7	7.1	7.7	7.2	7.5	6.9	7.5	7.8	7.0	5.9	5.7	5.9	7.0
Phenolphthalein Alkalinity													
Treated	10.0	11.1	11.7	10.1	9.0	9.8	8.6	9.1	9.8	9.7	9.8	9.9	9.9
Settled	9.0	9.7	10.6	8.7	7.4	8.3	7.6	8.1	8.3	8.0	7.9	8.0	8.4
Filtered	8.6	9.5	10.2	8.6	7.3	8.1	7.4	7.9	8.0	7.8	8.2	8.2	8.3
**Effluent	8.7	9.6	10.1	8.7	7.4	8.1	7.3	7.9	8.2	8.0	8.3	8.3	8.4
Tap	6.9	7.5	8.3	7.0	5.9	6.4	5.9	6.6	6.5	6.7	6.8	6.7	6.8
Methyl Orange Alkalinity													
Raw	3.5	3.4	3.7	4.0	4.0	3.8	3.5	3.5	3.5	3.5	3.5	3.2	3.6
Treated	16.3	17.7	19.0	16.6	14.0	14.8	13.9	14.8	15.2	14.9	15.1	15.3	15.6
Settled	15.4	16.6	17.9	15.7	12.9	13.6	12.7	13.7	14.0	13.8	13.7	13.9	14.5
Filtered	15.0	16.5	17.5	15.7	12.9	13.4	12.5	13.5	13.8	13.9	13.9	13.9	14.4
**Effluent	15.2	16.4	17.0	15.8	12.9	13.4	12.5	13.5	13.8	13.8	14.0	13.9	14.4
Tap	13.8	15.1	16.4	14.4	11.6	12.2	11.2	12.6	12.5	12.8	12.8	12.7	13.2
Color													
Raw	8	8	11	12	7	7	7	7	7	7	7	6	8
Settled	10	10	11	8	7	8	11	11	10	9	9	9	9
**Effluent	3	3	3	2	2	3	3	3	3	3	3	2	3
Tap	3	3	3	2	2	3	3	3	3	3	3	2	3
Turbidity													
Raw	0.1	0.2	0.3	0.6	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Settled	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
**Effluent	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hardness													
Raw	12	12	12	12	12	12	13	13	13	12	12	12	12
**Effluent	31	30	31	30	29	29	30	31	30	29	27	28	30
Tap	30	31	31	30	29	30	30	31	31	29	28	28	30
Iron													
Raw	0.04	0.07	0.18	0.29	0.11	0.07	0.06	0.06	0.05	0.04	0.03	0.04	0.09
Settled	.36	.31	.27	.27	.27	.31	.46	.44	.37	.30	.34	.39	.34
**Effluent	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Tap	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.02	.01
Manganese													
Raw	0.03	0.06	0.12	0.16	0.07	0.07	0.04	0.06	0.05	0.04	0.04	0.04	0.07
Settled	.01	.01	.03	.04	.01	.01	.01	.01	.01	.01	.01	.01	.01
**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	0.14	0.15	0.15	0.15	0.15	0.15
**Effluent	.15	.15	.15	.15	.15	.15	.15	.14	.15	.15	.15	.15	.15
Tap	1.00	1.00	1.00	1.00	1.00	1.00	.99	.97	1.00	1.00	1.04	.97	1.00
Chlorine Residual													
Filtered	0.20	0.25	0.30	0.23	0.20	0.17	0.14	0.12	0.18	0.16	0.15	0.22	0.19
**Effluent	.19	.24	.29	.23	.18	.16	.13	.11	.16	.14	.13	.19	.18
28 Phenix Ave. (C)	.09	.13	.19	.16	.09	.08	.07	.08	.08	.03	.04	.06	.09
Neut.Reservoir	.04	.07	.09	.09	.02	.03	.04	.06	.06	.02	.02	.04	.05
Tap	.04	.09	.14	.13	.07	.07	.07	.07	.06	.02	.02	.02	.07

*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, 1971

Monthly Analyses	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Avg. for Year
Color													
Ponaganset Reservoir	3	8	5	5	5	7	8	6	7	2	3	12	6
Coventry Brook	12	27	28	26	23	23	12	18	15	18	21	28	21
Wilbur Brook	60	49	95	115	64	32	27	33	30	32	58	78	56
Westconnaug Reservoir	12	37	17	27	17	11	9	13	13	12	8	14	17
Barden Reservoir	90	85	18	16	23	18	17	22	19	14	16	37	31
Cork Brook	11	22	18	17	17	12	7	12	13	10	10	11	13
Rush Brook	17	32	28	47	28	18	17	18	12	16	24	45	25
Huntinghouse Brook	12	18	27	32	22	14	12	17	13	14	21	18	18
Harrisdale Brook	11	21	10	23	22	13	8	17	12	12	23	22	16
Blanchard Brook	110	32	140	190	90	65	47	49	45	62	115	290	103
Moswansicut Pond	11	8	7	12	8	8	8	17	12	12	12	12	11
Regulating Reservoir	8	18	8	7	13	11	13	12	12	6	13	10	11
Quonopaug Brook	250	38	190	112	68	38	42	38	36	44	90	160	92
Hemlock Brook	13	17	13	32	47	27	26	32	23	22	16	15	24
Betty Pond Stream	23	22	23	22	22	13	17	12	12	12	14	22	18
Spruce Brook	47	37	36	28	30	22	22	28	21	20	28	35	30
Brandy Brook	34	32	25	56	67	67	38	56	24	37	60	7	42
Moswansicut-South	110	65	49	45	23	12	11	13	12	13	27	23	34
Windsor Brook	17	13	35	18	17	12	10	17	13	12	18	17	17
Paine Pond	**	**	**	**	63	60	36	27	18	17	34	46	38
Unnamed Brook-A	**	**	**	**	64	31	22	23	18	38	85	**	40
Unnamed Brook-B	70	33	60	18	28	11	12	17	13	13	22	30	27
Turbidity													
Ponaganset Reservoir	0.2	0.6	0.2	0.2	0.3	0.1	0.3	0.2	0.2	0.1	0.1	0.2	0.2
Coventry Brook	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1
Wilbur Brook	0.6	1.2	0.3	0.3	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.6	0.3
Westconnaug Reservoir	0.1	0.4	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.1	0.2	0.2
Barden Reservoir	2.3	6.6	0.3	0.2	0.4	0.2	0.2	0.2	0.1	0.1	0.2	0.9	1.0
Cork Brook	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Rush Brook	0.2	2.2	0.3	0.4	0.5	0.2	0.2	0.2	0.2	0.1	0.2	1.2	0.5
Huntinghouse Brook	0.1	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
Harrisdale Brook	0.2	0.5	0.1	0.2	0.2	0.1	0.1	0.3	0.1	0.1	0.2	0.3	0.2
Blanchard Brook	4.5	1.0	0.3	0.3	0.2	0.2	0.1	0.2	0.1	0.2	0.1	1.5	0.7
Moswansicut Pond	0.7	0.2	0.3	0.3	0.2	0.3	0.2	0.1	0.2	0.2	0.2	0.6	0.3
Regulating Reservoir	0.3	0.5	0.1	0.1	0.2	0.1	0.1	0.2	0.0	0.1	0.2	0.2	0.2
Quonopaug Brook	1.7	0.8	0.5	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.6	0.4
Hemlock Brook	0.2	0.4	0.2	0.3	0.1	0.1	0.2	0.9	0.1	0.1	0.3	0.3	0.3
Betty Pond Stream	0.8	0.3	0.2	0.5	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.4	0.3
Spruce Brook	0.9	0.4	0.1	0.1	0.2	0.1	0.1	0.1	0.9	0.0	0.1	0.1	0.3
Brandy Brook	1.5	0.7	0.1	0.2	0.7	0.4	0.5	0.5	0.7	0.5	0.8	0.2	0.6
Moswansicut-South	7.4	3.5	1.6	1.4	1.4	0.2	0.2	0.3	0.4	0.1	1.5	1.1	1.6
Windsor Brook	0.6	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2
Paine Pond	**	**	**	**	0.8	0.4	0.8	0.3	0.2	0.2	0.3	0.4	0.4
Unnamed Brook-A	**	**	**	**	0.3	0.5	0.8	0.4	0.2	0.7	1.1	**	0.6
Unnamed Brook-B	0.4	0.5	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.2

*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, 1971

Monthly Analyses	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Avg. for Year
pH													
Ponaganset Reservoir	4.6	4.7	4.7	4.7	4.7	5.0	4.7	4.5	4.7	4.7	4.5	4.4	4.7
Coventry Brook	6.5	6.2	6.3	5.7	6.0	6.5	6.2	5.6	5.7	6.6	5.7	6.2	6.1
Wilbur Brook	6.4	6.1	6.4	4.9	5.6	6.2	5.7	5.3	5.6	6.2	5.8	6.3	5.9
Westconnaug Reservoir	6.5	6.4	6.6	6.0	6.4	6.3	6.6	5.9	5.8	6.5	6.0	6.5	6.3
Barden Reservoir	5.9	6.2	6.5	6.1	6.0	5.9	6.0	5.1	5.1	5.7	5.5	5.8	5.8
Cork Brook	6.3	5.9	6.4	5.6	5.5	5.8	5.9	5.2	5.4	6.1	5.6	6.1	5.8
Rush Brook	5.9	6.3	6.0	5.9	5.9	6.0	6.4	5.5	5.8	6.2	6.0	6.3	6.0
Huntinghouse Brook	6.3	6.4	6.4	5.8	6.0	6.3	6.2	5.5	5.6	6.3	6.2	6.5	6.1
Harrisdale Brook	6.6	6.6	6.6	6.3	6.3	6.4	6.3	5.8	6.1	6.5	6.4	6.7	6.4
Blanchard Brook	5.6	5.8	5.7	4.5	5.9	5.3	5.2	4.8	6.3	5.5	5.3	5.5	5.5
Moswansicut Pond	6.2	6.6	6.4	5.8	6.5	6.6	6.4	6.9	6.4	6.5	6.4	6.4	6.4
Regulating Reservoir	6.5	6.6	6.7	6.3	6.5	6.2	6.3	5.5	6.0	6.6	6.2	6.4	6.3
Quonopaug Brook	6.1	5.9	6.0	4.9	5.4	5.5	5.5	4.9	5.3	5.8	5.7	5.9	5.6
Hemlock Brook	6.2	6.1	6.3	6.2	4.9	5.4	5.7	4.8	4.9	5.5	5.5	6.1	5.6
Betty Pond Stream	6.0	5.9	5.7	6.1	6.0	5.5	5.8	5.4	5.8	6.0	5.9	5.9	5.8
Spruce Brook	6.4	5.7	6.5	5.5	5.1	5.6	5.6	5.1	5.3	5.8	5.4	5.9	5.7
Brandy Brook	6.7	6.5	6.7	6.1	6.3	6.9	6.6	6.2	6.4	6.4	6.3	6.1	6.4
Moswansicut-South	6.6	6.6	6.4	6.2	6.4	6.6	6.5	6.2	6.4	6.4	6.4	6.5	6.4
Windsor Brook	6.6	6.6	6.3	5.7	6.2	6.7	5.7	5.3	5.3	6.1	6.0	6.4	6.1
Paine Pond	**	**	**	**	5.7	6.0	5.7	5.4	5.4	5.6	5.7	5.7	5.7
Unnamed Brook-A	**	**	**	**	6.1	6.2	6.2	6.3	6.2	6.4	6.4	**	6.3
Unnamed Brook-B	5.2	5.0	5.9	4.5	4.6	5.5	4.8	4.5	4.6	4.7	4.5	4.7	4.9
Acidity													
Ponaganset Reservoir	2.5	2.5	3.5	3.0	3.0	3.5	2.5	1.0	8.0	4.5	1.5	5.0	3.4
Coventry Brook	2.5	4.0	5.5	3.0	2.5	4.0	2.5	3.5	4.0	3.0	3.0	4.0	3.5
Wilbur Brook	6.5	7.0	7.0	18.0	7.5	8.5	8.0	8.0	4.5	4.0	7.0	6.5	7.7
Westconnaug Reservoir	2.0	3.0	2.0	4.5	1.0	2.5	2.0	3.5	3.0	2.0	2.0	1.5	2.4
Barden Reservoir	6.5	5.0	2.0	1.5	3.0	4.0	3.0	4.5	4.0	2.5	3.0	4.0	3.6
Cork Brook	2.0	3.5	3.0	5.0	4.5	4.5	4.5	4.5	3.0	2.0	3.0	2.5	3.7
Rush Brook	3.5	6.0	13.0	5.5	5.0	4.5	3.5	4.0	3.5	2.0	3.0	6.5	5.0
Huntinghouse Brook	3.0	5.5	9.0	4.0	2.0	5.0	6.0	4.5	3.0	2.0	3.0	6.0	4.4
Harrisdale Brook	3.0	3.5	3.0	4.5	2.5	4.5	5.5	4.5	3.0	2.0	2.5	2.0	3.4
Blanchard Brook	12.5	9.0	12.5	20.0	8.0	11.5	10.5	11.0	6.0	3.5	7.5	15.5	10.6
Moswansicut Pond	3.5	2.5	2.5	2.5	2.0	2.0	2.5	1.5	3.0	1.0	1.0	2.5	2.2
Regulating Reservoir	1.5	1.5	1.5	2.0	2.5	4.5	4.0	4.5	3.5	2.0	3.0	1.5	2.7
Quonopaug Brook	19.0	6.5	18.0	18.5	8.5	10.5	15.5	11.5	6.0	4.0	8.0	13.5	11.6
Hemlock Brook	2.0	2.0	1.5	3.5	6.0	4.5	6.5	6.0	4.5	3.5	3.5	2.0	3.8
Betty Pond Stream	6.0	2.5	6.5	3.0	2.0	10.0	15.5	8.5	4.0	2.0	2.5	3.5	5.5
Spruce Brook	1.5	5.0	3.0	2.5	6.0	3.5	5.0	6.0	4.0	2.0	4.0	3.5	3.8
Brandy Brook	3.5	2.0	2.5	4.5	3.0	2.5	3.0	2.5	2.5	1.0	4.5	2.0	2.8
Moswansicut-South	3.5	6.5	13.0	7.0	3.5	5.5	5.0	7.0	2.5	1.5	4.5	6.0	5.5
Windsor Brook	2.0	2.5	7.0	3.5	1.0	2.0	4.0	4.0	4.0	1.5	2.5	3.0	3.1
Paine Pond	**	**	**	**	4.5	11.5	21.0	10.0	7.5	4.0	5.5	6.0	8.8
Unnamed Brook-A	**	**	**	**	6.0	11.0	14.5	8.5	6.5	6.0	9.0	**	8.8
Unnamed Brook-B	4.5	3.0	4.0	6.5	7.5	4.5	6.5	6.0	6.0	4.0	1.5	6.0	5.0

*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, 1971

Monthly Analyses	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Avg. for Year
Iron													
Ponaganset Reservoir	0.05	0.26	0.17	0.08	0.08	0.07	0.09	0.11	0.08	0.04	0.05	0.29	0.11
Coventry Brook	.05	.14	.35	.10	.05	.04	.05	.05	.02	.04	.05	.12	.09
Wilbur Brook	.23	.52	.70	.70	.07	.14	.16	.09	.10	.10	.28	.65	.31
Westconnaug Reservoir	.16	.20	.23	.20	.19	.11	.14	.09	.06	.10	.13	.26	.16
Barden Reservoir	5.00	1.35	.54	.58	.28	.14	.12	.10	.07	.09	.15	.58	.75
Cork Brook	.03	.03	.05	.04	.03	.02	.02	.02	.02	.02	.15	.05	.04
Rush Brook	.15	.72	2.20	.25	.24	.15	.14	.11	.10	.13	.03	1.65	.49
Huntinghouse Brook	.19	.16	.08	.06	.06	.03	.03	.03	.02	.04	.10	.17	.08
Harrisdale Brook	.19	.32	.03	.15	.10	.06	.08	.05	.04	.07	.19	.25	.13
Blanchard Brook	.70	.26	1.40	1.40	.40	.34	.28	.16	.14	.19	1.10	2.40	.73
Moswansicut Pond	.10	.05	.07	.14	.07	.05	.05	.04	.05	.04	.03	.10	.07
Regulating Reservoir	.09	.26	.06	.05	.09	.04	.07	.05	.02	.02	.09	.15	.08
Quonopaug Brook	1.10	.27	.49	1.30	.20	.14	.15	.06	.05	.14	.50	.70	.43
Hemlock Brook	.20	.36	.26	.48	.21	.13	.13	1.04	.06	.10	.14	.19	.28
Betty Pond Stream	.23	.14	.05	.08	.05	.15	.35	.03	.04	.06	.16	.47	.15
Spruce Brook	.21	.10	.30	.04	.04	.05	.06	.05	.03	.05	.08	.15	.10
Brandy Brook	1.00	.31	.12	.09	.10	.21	.17	.14	.07	.24	.10	.07	.22
Moswansicut-South	.45	.76	1.85	.80	.28	.21	.14	.10	.08	.13	.58	2.20	.63
Windsor Brook	.17	.03	.06	.05	.11	.02	.08	.04	.02	.02	.04	.08	.06
Paine Pond	**	**	**	**	.10	.12	.20	.14	.08	.04	.16	.46	.16
Unnamed Brook-A	**	**	**	**	.20	.15	.70	.15	.11	.48	1.42	**	.46
Unnamed Brook-B	.95	.35	.70	.16	.15	.08	.12	.09	.05	.06	.07	.30	.23
Manganese													
Ponaganset Reservoir	0.02	0.10	0.12	0.08	0.16	0.09	0.12	0.08	0.09	0.06	0.06	0.06	0.09
Coventry Brook	.00	.01	.01	.02	.00	.00	.01	.01	.01	.00	.00	.01	.01
Wilbur Brook	.01	.06	.04	.22	.02	.02	.03	.02	.02	.00	.02	.04	.04
Westconnaug Reservoir	.00	.02	.02	.01	.02	.01	.03	.01	.04	.01	.01	.02	.02
Barden Reservoir	.06	.16	.02	.01	.05	.06	.07	.07	.05	.04	.04	.05	.06
Cork Brook	.01	.01	.02	.06	.07	.02	.03	.04	.03	.00	.03	.02	.03
Rush Brook	.08	.05	.21	.08	.16	.08	.15	.14	.09	.05	.05	.03	.10
Huntinghouse Brook	.01	.02	.06	.02	.04	.02	.02	.03	.01	.01	.03	.02	.02
Harrisdale Brook	.00	.01	.00	.02	.02	.01	.02	.01	.02	.00	.04	.04	.02
Blanchard Brook	.02	.01	.04	.09	.08	.06	.04	.04	.02	.02	.03	.04	.04
Moswansicut Pond	.06	.03	.03	.04	.02	.02	.01	.02	.02	.01	.02	.09	.03
Regulating Reservoir	.00	.00	.01	.01	.00	.01	.02	.02	.03	.00	.04	.00	.01
Quonopaug Brook	.01	.00	.01	.13	.03	.02	.02	.00	.01	.01	.02	.01	.02
Hemlock Brook	.00	.00	.00	.04	.17	.07	.03	.06	.02	.04	.07	.04	.05
Betty Pond Stream	.00	.00	.00	.02	.07	.03	.03	.01	.03	.00	.00	.00	.02
Spruce Brook	.01	.02	.01	.05	.01	.02	.02	.01	.02	.01	.03	.01	.02
Brandy Brook	.06	.02	.04	.00	.01	.02	.07	.03	.02	.01	.03	.00	.03
Moswansicut-South	.08	.01	.00	.05	.02	.02	.12	.01	.01	.01	.14	.00	.04
Windsor Brook	.01	.00	.01	.07	.11	.03	.02	.07	.04	.01	.02	.01	.03
Paine Pond	**	**	**	**	.12	.08	.11	.12	.04	.01	.04	.04	.07
Unnamed Brook-A	**	**	**	**	.02	.05	.11	.04	.03	.02	.05	**	.05
Unnamed Brook-B	.03	.08	.07	.22	.21	.10	.10	.08	.06	.06	.06	.06	.09

*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, 1971

Monthly Analyses Alkalinity	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Avg. for Year
Ponaganset Reservoir	1.0	1.5	1.0	1.0	1.0	1.5	0.5	1.0	1.0	1.5	4.5	1.0	1.4
Coventry Brook	7.5	5.5	8.5	4.5	4.0	4.5	4.5	3.5	3.5	5.5	4.0	6.0	5.1
Wilbur Brook	9.0	6.5	11.0	3.0	2.5	4.0	5.0	2.5	3.0	5.0	4.5	7.5	5.3
Westconnaug Reservoir	8.0	6.0	9.5	7.0	5.5	5.0	6.0	3.0	3.0	6.0	4.5	6.5	8.7
Barden Reservoir	5.0	5.5	4.5	4.0	3.0	2.5	3.5	2.5	2.5	3.5	3.5	3.0	3.6
Cork Brook	6.0	4.0	5.0	3.5	3.5	3.0	3.5	2.5	2.5	4.0	3.5	4.0	3.8
Rush Brook	7.5	11.5	9.0	6.5	6.0	4.0	5.5	3.0	3.5	5.0	5.5	9.5	6.4
Huntinghouse Brook	13.5	11.5	13.5	5.5	4.0	4.0	5.0	3.0	3.0	4.5	5.0	10.5	6.9
Harrisdale Brook	12.5	12.0	11.0	10.0	7.0	6.0	7.0	4.0	4.5	7.0	7.0	12.0	8.3
Blanchard Brook	7.5	4.0	4.5	0.5	2.5	2.5	2.5	1.5	2.5	3.5	3.5	5.0	3.3
Moswansicut Pond	7.0	6.0	6.5	6.5	6.5	5.5	5.5	11.0	6.5	7.0	6.0	6.5	6.7
Regulating Reservoir	7.0	8.0	7.0	7.0	5.5	5.5	5.5	3.5	3.5	4.5	5.0	7.0	5.8
Quonopaug Brook	14.5	6.0	11.5	2.5	3.5	3.5	3.5	2.0	2.5	4.0	5.0	9.5	5.7
Hemlock Brook	3.5	4.0	3.5	3.5	2.0	3.0	4.0	1.5	2.0	3.0	3.5	3.5	3.1
Betty Pond Stream	5.0	4.5	3.5	4.5	4.5	6.5	7.0	3.5	3.5	4.5	4.0	4.0	4.6
Spruce Brook	5.5	3.5	8.0	3.0	2.0	3.0	3.0	2.0	2.0	4.0	3.0	4.0	3.6
Brandy Brook	10.0	8.0	10.0	10.0	7.5	12.0	12.0	8.0	6.5	8.0	10.0	5.0	8.9
Moswansicut-South	18.5	17.5	18.5	19.0	15.0	12.5	12.5	9.5	6.5	9.5	11.0	17.0	13.9
Windsor Brook	9.5	7.0	8.0	3.5	3.5	3.0	3.0	2.5	2.0	3.5	3.0	5.5	4.5
Paine Pond	**	**	**	**	4.0	4.0	5.5	3.5	3.0	3.5	4.0	4.0	3.9
Unnamed Brook-A	**	**	**	**	9.0	8.5	11.5	9.0	8.0	12.0	17.5	**	10.8
Unnamed Brook-B	2.5	2.0	3.5	1.0	1.5	1.5	1.5	1.0	0.5	2.0	4.5	1.5	1.9

*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, 1971

Monthly Averages

	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Avg. for Year
pH													
Neutaconkanut Reservoir	10.0	10.0	10.0	9.9	10.1	10.2	10.3	10.2	10.2	10.2	10.1	10.1	10.1
28 Phenix Ave., Cranston	10.0	10.0	10.0	9.9	10.1	10.2	10.3	10.2	10.2	10.2	10.1	10.1	10.1
Westminster St., Olneyville	10.0	10.0	10.0	9.9	10.1	10.2	10.3	10.2	10.2	10.2	10.1	10.1	10.1
1275 Reservoir Ave.,Cranston	10.0	10.0	10.0	9.9	10.1	10.2	10.3	10.2	10.2	10.2	10.1	10.1	10.1
750 Reservoir Ave.,Cranston	10.0	10.0	10.0	9.9	10.1	10.2	10.3	10.2	10.2	10.2	10.1	10.1	10.1
1520 Atwood Ave., Johnston	10.0	10.0	10.0	9.9	10.1	10.2	10.3	10.2	10.2	10.2	10.1	10.1	10.1
Biltmore Hotel	10.0	10.0	10.0	9.9	10.1	10.2	10.3	10.2	10.2	10.2	10.1	10.1	10.1
Dexter Manor	10.0	10.0	10.0	9.9	10.1	10.2	10.3	10.2	10.2	10.2	10.1	10.1	10.1
State Office Building	10.0	10.0	10.0	9.9	10.1	10.2	10.3	10.2	10.2	10.2	10.1	10.1	10.1
*Longview Reservoir	10.0	10.0	10.0	9.9	10.1	10.2	10.3	10.2	10.2	10.2	10.1	10.1	10.1
208 Weybosset Street	10.0	10.0	10.0	9.9	10.1	10.2	10.3	10.2	10.2	10.2	10.1	10.1	10.1
Phenolphthalein Alkalinity													
Neutaconkanut Reservoir	6.7	7.3	8.1	7.0	6.0	6.2	5.9	6.4	6.0	6.3	6.4	5.9	6.5
28 Phenix Ave., Cranston	6.9	7.5	8.2	7.3	6.1	6.7	6.2	6.7	6.6	6.8	6.9	6.8	6.9
Westminster St., Olneyville	7.0	7.6	8.2	7.1	5.9	6.5	6.0	6.6	6.4	6.7	6.8	6.8	6.8
1275 Reservoir Ave.,Cranston	7.0	7.7	8.3	7.1	6.0	6.5	6.0	6.7	6.5	6.6	6.9	6.8	6.8
750 Reservoir Ave.,Cranston	7.0	7.7	8.3	7.1	5.9	6.5	5.9	6.8	6.4	6.7	6.9	6.8	6.8
1520 Atwood Ave., Johnston	7.0	7.7	8.3	7.2	6.1	6.6	6.0	6.7	6.5	6.7	6.9	6.8	6.9
Biltmore Hotel	6.9	7.5	8.2	7.1	6.0	6.5	6.0	6.7	6.5	6.7	6.8	6.7	6.8
Dexter Manor	7.0	7.5	8.3	7.1	6.0	6.6	6.0	6.7	6.4	6.8	6.9	6.8	6.8
State Office Building	7.0	7.5	8.2	7.0	5.9	6.6	6.0	6.7	6.4	6.6	6.9	6.8	6.8
*Longview Reservoir	6.9	7.6	8.4	7.5	6.4	6.7	6.2	6.7	6.4	6.8	6.8	6.8	6.9
208 Weybosset Street	7.0	7.6	8.3	7.0	5.9	6.5	5.9	6.7	6.5	6.8	6.9	6.8	6.8
Methyl Orange Alkalinity													
Neutaconkanut Reservoir	13.6	14.8	16.2	15.2	12.2	12.1	11.6	12.4	12.0	12.5	12.5	12.5	13.1
28 Phenix Ave., Cranston	13.8	15.0	16.3	15.0	12.4	12.6	11.5	12.7	12.8	12.9	13.0	12.9	13.4
Westminster St., Olneyville	13.9	15.0	16.3	14.5	11.7	12.3	11.3	12.6	12.5	12.6	12.9	12.6	13.2
1275 Reservoir Ave.,Cranston	14.0	15.0	16.4	14.6	11.6	12.3	11.3	12.6	12.6	12.6	13.0	12.7	13.2
750 Reservoir Ave.,Cranston	13.9	15.1	16.4	14.5	11.7	12.2	11.3	12.7	12.6	12.7	12.9	12.8	13.2
1520 Atwood Ave., Johnston	14.0	15.2	16.5	14.7	11.7	12.3	11.3	12.7	12.5	12.7	12.9	12.7	13.3
Biltmore Hotel	13.9	15.0	16.4	14.6	11.8	12.3	11.4	12.7	12.5	12.8	12.9	12.7	13.3
Dexter Manor	14.0	15.1	16.5	14.5	11.6	12.3	11.4	12.7	12.5	12.8	12.9	12.8	13.3
State Office Building	13.9	15.0	16.4	14.5	11.7	12.3	11.4	12.6	12.5	12.7	12.9	12.8	13.2
*Longview Reservoir	14.0	15.3	16.6	15.7	13.0	12.6	11.8	12.7	12.6	13.0	13.0	12.9	13.6
208 Weybosset Street	13.9	15.0	16.4	14.5	11.7	12.3	11.3	12.6	12.5	12.8	12.8	12.8	13.2
Color													
Neutaconkanut Reservoir	3	3	3	2	2	3	3	3	3	3	3	2	3
28 Phenix Ave., Cranston	3	3	3	2	2	3	3	3	3	3	3	2	3
Westminster St., Olneyville	3	3	3	2	2	2	3	3	2	3	3	2	3
1275 Reservoir Ave.,Cranston	3	3	3	2	2	2	3	3	2	3	3	2	3
750 Reservoir Ave.,Cranston	3	3	3	2	2	2	3	3	2	3	3	2	3
1520 Atwood Ave., Johnston	3	3	3	2	2	2	3	3	2	3	3	2	3
Biltmore Hotel	3	3	3	2	4	4	4	3	3	3	3	3	3
Dexter Manor	3	3	3	2	2	2	3	3	3	3	3	3	3
State Office Building	3	3	3	2	2	3	3	3	3	3	3	2	3
*Longview Reservoir	5	5	4	4	3	4	4	5	4	5	5	4	4
208 Weybosset Street	3	3	3	3	2	2	3	3	2	3	3	2	3
Iron													
Neutaconkanut Reservoir	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
28 Phenix Ave., Cranston	.02	.01	.02	.01	.01	.02	.02	.02	.02	.02	.02	.02	.02
Westminster St., Olneyville	.01	.00	.01	.01	.00	.01	.01	.01	.01	.01	.01	.01	.01
1275 Reservoir Ave.,Cranston	.01	.00	.01	.00	.00	.00	.01	.00	.00	.01	.01	.01	.01
750 Reservoir Ave.,Cranston	.01	.00	.01	.01	.00	.00	.01	.01	.00	.01	.01	.01	.01
1520 Atwood Ave., Johnston	.01	.01	.01	.01	.00	.00	.01	.01	.01	.01	.01	.01	.01
Biltmore Hotel	.02	.01	.01	.02	.07	.05	.06	.02	.02	.03	.04	.03	.03
Dexter Manor	.02	.01	.01	.01	.01	.01	.02	.02	.04	.02	.02	.04	.02
State Office Building	.01	.01	.01	.01	.01	.01	.01	.01	.01	.02	.02	.02	.01
*Longview Reservoir	.04	.04	.05	.05	.05	.05	.06	.07	.07	.06	.06	.07	.06
208 Weybosset Street	.02	.01	.02	.03	.02	.01	.02	.02	.02	.02	.02	.02	.02

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

NOTE: Sampling locations were changed as follows: From 28 Phenix Ave. to 275 Atwood Ave., Cranston on Oct. 1, from Westminster St., Olneyville to 630 Atwells Ave. on Oct. 1 and from Biltmore Hotel to 15 Branch Ave. on Oct. 19.

TABLE 17 (Continued)

WATER PURIFICATION WORKS

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

YEAR ENDED JUNE 30, 1971

Monthly Averages

	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Avg. for Year
Chlorides													
Neutaconkanut Reservoir	12.2	12.2	12.3	12.9	13.4	13.5	13.7	14.5	14.8	14.3	14.3	14.5	13.6
28 Phenix Ave., Cranston	12.0	12.1	12.4	12.8	13.5	13.5	13.6	14.6	14.7	14.0	14.2	14.5	13.5
Westminster St.,Olneyville	12.1	12.2	12.3	13.0	13.5	13.5	13.6	14.6	14.7	14.0	14.1	14.5	13.5
1275 Reservoir Ave.,Cranston	12.0	12.1	12.3	12.9	13.5	13.5	13.7	14.5	14.7	14.0	14.1	14.5	13.5
750 Reservoir Ave.,Cranston	12.1	12.1	12.3	12.8	13.5	13.5	13.6	14.6	14.7	14.0	14.1	14.5	13.5
1520 Atwood Ave., Johnston	12.1	12.1	12.3	12.8	13.5	13.5	13.7	14.6	14.7	14.0	14.1	14.4	13.5
Biltmore Hotel	12.0	12.1	12.3	12.8	13.5	13.6	13.6	14.4	14.7	14.0	14.1	14.4	13.5
Dexter Manor	12.0	12.1	12.3	12.8	13.5	13.5	13.7	14.4	14.7	14.0	14.1	14.4	13.5
State Office Building	12.1	12.1	12.3	12.8	13.5	13.5	13.6	14.4	14.7	14.0	14.1	14.4	13.5
*Longview Reservoir	12.1	12.1	12.4	12.7	13.4	13.5	13.6	14.2	14.7	14.0	14.1	14.4	13.4
208 Weybosset Street	12.0	12.1	12.3	12.9	13.5	13.5	13.7	14.4	14.7	14.0	14.1	14.4	13.5
Nitrites													
Neutaconkanut Reservoir	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
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
1520 Atwood Ave., Johnston	.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	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
208 Weybosset Street	.001	.001	.001	.001	.000	.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
1520 Atwood Ave., Johnston	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
1520 Atwood Ave., Johnston	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	1.00	1.00	1.00	1.00	1.00	0.93	0.96	1.00	0.99	0.98	0.99
28 Phenix Ave., Cranston	0.98	0.99	1.00	0.99	1.00	1.00	0.99	0.92	0.97	1.00	0.94	0.99	0.98
Westminster St.,Olneyville	1.00	0.99	1.00	0.99	0.99	1.00	1.00	0.93	0.97	1.00	1.01	0.95	0.99
1275 Reservoir Ave.,Cranston	0.98	1.00	1.00	0.99	0.99	1.00	0.99	0.95	0.99	1.00	0.97	0.97	0.99
750 Reservoir Ave.,Cranston	1.01	1.00	1.00	0.97	1.00	1.00	1.00	0.96	1.00	1.00	1.03	0.98	1.00
1520 Atwood Ave., Johnston	1.00	1.00	1.00	1.00	1.00	0.99	1.00	0.92	0.97	1.00	1.00	0.99	0.99
Biltmore Hotel	1.00	1.00	1.00	0.99	1.00	1.00	1.00	0.92	0.99	0.99	0.99	1.00	0.99
Dexter Manor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.03	1.00	1.00
State Office Building	1.00	1.00	1.00	0.99	1.00	1.00	1.00	0.98	1.00	1.00	1.02	1.00	1.00
*Longview Reservoir	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.97	0.99	1.01	0.99	0.99
208 Weybosset Street	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1.04	0.99	1.00

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

NOTE: Sampling locations were changed as follows: From 28 Phenix Ave. to 275 Atwood Ave., Cranston on Oct. 1, from Westminster St., Olneyville to 630 Atwells Ave. on Oct. 1 and from Biltmore Hotel to 15 Branch Ave. on Oct. 19.

TABLE 18

WATER PURIFICATION WORKS

BACTERIOLOGICAL EXAMINATION OF WATER IN PROCESS OF FILTRATION

YEAR ENDED JUNE 30, 1971

Bacteria per Ml. (48 Hours on Agar at 20°C.)

1970-1971	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.	Avg.
July	340	18	52	300	1	38	20	0	2	3	0	0	2	0	0	4	0	0
August	270	10	103	240	1	54	8	0	1	3	0	0	5	0	1	9	0	0
September	130	1	55	110	1	45	60	0	3	2	0	0	20	0	2	1	0	0
October	2000	40	158	130	17	63	4	0	1	4	0	1	50	0	4	4	0	0
November	120	20	66	120	6	56	300	0	29	30	0	3	16	0	3	1	0	0
December	120	20	41	70	11	34	1200	0	159	25	0	2	30	0	4	2	0	0
January	95	12	49	90	20	42	1440	0	121	75	0	11	35	0	7	1	0	0
February	1700	6	104	70	10	32	1400	0	269	200	2	40	420	5	79	5	0	1
March	50	1	25	45	9	20	770	0	201	460	1	49	350	2	66	13	0	1
April	280	10	42	130	5	34	560	0	55	180	30	58	600	0	186	120	0	29
May	150	20	70	240	20	59	360	0	44	100	6	48	600	20	107	110	0	21
June	120	20	56	85	8	39	80	0	5	45	0	8	40	0	6	2	0	0
For Year	2000	1	69	300	1	43	1440	0	74	460	0	18	600	0	39	120	0	4

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

TABLE 19

WATER PURIFICATION WORKS

BACTERIOLOGICAL EXAMINATION OF WATER IN PROCESS OF FILTRATION

YEAR ENDED JUNE 30, 1971

Bacteria per Ml. (24 Hours on Agar at 35°C.)

1970-1971	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.	Avg.
July	15	0	5	8	0	2	10	0	2	15	0	1	4	0	0	20	0	1
August	16	1	6	30	0	5	7	0	1	3	0	0	40	0	3	11	0	1
September	55	2	18	30	4	14	5	0	1	10	0	1	3	0	0	1	0	0
October	90	6	32	80	12	31	17	0	1	5	0	1	10	0	1	6	0	1
November	45	7	12	40	1	12	10	0	2	8	0	0	20	0	2	5	0	1
December	11	1	4	12	1	4	9	0	1	2	0	0	0	0	0	1	0	0
January	8	0	3	16	0	4	25	0	2	16	0	1	1	0	0	2	0	0
February	7	0	2	18	0	3	11	0	1	3	0	0	2	0	0	2	0	0
March	6	0	2	6	0	2	10	0	1	5	0	0	1	0	0	9	0	1
April	10	0	3	25	0	5	6	0	1	7	0	0	30	0	2	4	0	0
May	450	0	24	175	0	12	80	0	5	6	0	1	2	0	0	30	0	2
June	25	0	4	50	0	5	12	0	1	80	0	3	25	0	4	3	0	0
For Year	450	0	10	175	0	8	80	0	2	80	0	1	40	0	1	30	0	1

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, 1971

COLIFORM BACTERIA

	Raw A.M.				Raw P.M.	Settled	Effluent A.M.	Effluent P.M.		*Tap	
	No. of Portions Positive Per No. Tested										
1970-1971	10 ml.	1.0 ml.	0.1 ml.	Geometric Mean MPN Per 100 ml.	No. of 10 ml. Portions Positive Per No. Tested	No. of 10 ml. Portions Positive Per No. Tested	No. of 10 ml. Portions Positive Per No. Tested	No. of 10 ml. Portions Positive Per No. Tested	No. of 10 ml. Portions Tested	10 ml. Portions Positive No.	%
July	8/78	3/78	0/78	< 3.5	5/44	1/52	0/52	0/44	1,340	2	0.1
August	10/75	0/75	0/75	< 3.7	5/40	2/50	0/50	1/40	1,225	3	0.2
September	30/75	3/75	0/75	< 6.2	16/40	0/50	0/50	1/40	1,280	2	0.2
October	70/78	25/78	4/78	38.1	37/40	1/52	0/52	0/42	1,310	11	0.8
November	66/66	51/66	22/66	213.5	36/36	1/44	1/44	0/36	1,100	0	0.0
December	77/78	55/78	16/78	149.4	40/40	4/52	1/52	0/40	1,260	4	0.3
January	50/75	15/75	5/75	< 17.4	29/40	1/50	0/50	0/40	1,225	0	0.0
February	18/69	1/69	0/69	< 4.5	6/38	0/46	0/46	0/38	1,160	3	0.3
March	7/81	3/81	1/81	< 3.8	4/46	0/54	0/54	0/46	1,405	2	0.1
April	14/78	0/78	1/78	< 3.8	5/42	0/52	0/52	0/42	1,305	2	0.2
May	13/72	3/72	1/72	< 4.2	5/38	0/48	0/48	0/38	1,165	0	0.0
June	23/78	3/78	0/78	< 4.8	16/44	0/52	0/52	0/44	1,345	0	0.0
For Year	386/903	162/903	50/903	< 10.4	204/488	10/602	2/602	2/490	15,120	29	0.2

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

*Twelve fixed sampling points in the distribution system. Of the 29 positives, 22 gave negative results in E.C. medium.

NOTE: Portions positive means through the confirmed test.

TABLE 21

WATER PURIFICATION WORKS

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

YEAR ENDED JUNE 30, 1971

	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	600	420	250	480	100	50	20	90	110	90	80	1,500	316
Coventry Brook	900	1,500	8,700	3,600	400	80	240	200	150	450	540	840	1,467
Wilbur Brook	960	6,000	6,000	6,000	750	240	450	300	400	2,800	1,400	3,000	2,358
Westconnaug Reservoir	1,000	8,000	1,800	6,400	700	550	350	250	480	1,200	850	450	1,836
Barden Reservoir	800	1,000	1,100	3,300	450	480	780	650	650	390	450	720	898
Cork Brook	3,600	3,600	5,400	2,800	2,300	160	500	270	400	450	400	2,200	1,840
Rush Brook	1,200	4,800	11,000	6,300	4,000	560	600	480	440	480	960	1,800	2,718
Huntinghouse Brook	1,200	5,400	4,800	6,500	3,600	360	110	320	900	800	480	900	2,114
Harrisdale Brook	1,800	1,400	3,000	4,500	7,200	120	140	1,400	700	2,300	960	3,000	2,210
Blanchard Brook	11,000	11,000	8,400	4,300	750	300	500	210	160	900	3,200	5,000	3,810
Moswansicut Pond	1,100	1,100	3,500	480	280	15	160	80	120	320	210	3,000	864
Regulating Reservoir	280	540	450	3,000	270	450	180	900	600	200	100	3,500	873
Quonopaug Brook	2,400	12,000	9,000	4,000	830	240	360	300	350	360	480	5,400	2,977
Hemlock Brook	240	520	720	1,900	600	300	480	870	550	1,200	280	180	653
Betty Pond Stream	3,500	900	3,400	3,400	800	1,700	1,100	3,600	2,400	400	540	3,600	2,111
Spruce Brook	2,000	7,000	6,500	1,500	840	450	540	630	450	540	650	2,400	1,958
Brandy Brook	6,000	1,100	3,600	5,600	900	5,000	900	6,300	5,400	720	1,200	1,000	3,143
Moswansicut-South	7,200	9,700	12,000	8,400	4,200	1,800	3,000	2,000	1,200	850	1,600	3,600	4,629
Windsor Brook	5,200	3,000	7,800	2,000	400	180	240	450	500	400	400	2,000	1,881
Paine Pond	*	*	*	*	3,200	1,800	280	7,200	1,100	540	240	900	1,908
Unnamed Brook--A	*	*	*	*	4,500	1,300	2,000	6,300	2,400	4,900	1,400	*	3,257
Unnamed Brook--B	5,500	1,000	2,500	2,500	500	1,200	200	300	350	850	300	3,500	1,558
						Bacteria per ml. 24 Hours on Agar at 35°C.							
Ponaganset Reservoir	300	600	680	160	11	0	2	14	110	4	12	420	193
Coventry Brook	320	780	2,300	400	20	16	9	15	25	30	50	190	346
Wilbur Brook	800	4,200	2,100	4,000	100	25	32	49	15	90	400	900	1,059
Westconnaug Reservoir	520	7,000	300	2,100	90	8	14	13	7	240	90	180	880
Barden Reservoir	720	500	240	200	25	11	10	60	15	25	80	1,100	249
Cork Brook	1,100	800	2,500	480	60	19	15	50	40	40	100	440	470
Rush Brook	1,000	3,600	7,800	3,600	160	28	22	53	35	50	200	700	1,437
Huntinghouse Brook	500	1,100	750	360	65	16	14	35	30	45	110	1,000	335
Harrisdale Brook	1,200	1,200	720	1,200	100	20	12	100	45	70	100	2,400	597
Blanchard Brook	4,800	7,200	3,000	900	110	30	18	31	40	540	720	4,200	1,799
Moswansicut Pond	700	510	900	550	9	3	4	12	15	35	60	2,200	417
Regulating Reservoir	300	900	120	210	30	15	7	57	18	30	70	960	226
Quonopaug Brook	1,400	4,800	4,200	540	60	45	24	90	40	50	120	2,700	1,172
Hemlock Brook	90	480	180	440	85	18	30	135	35	80	80	110	147
Betty Pond Stream	1,500	1,300	2,400	420	35	30	14	110	50	55	400	3,600	826
Spruce Brook	600	2,400	800	320	60	40	17	47	10	50	100	480	410
Brandy Brook	1,300	1,200	330	400	400	450	160	780	500	480	1,000	540	628
Moswansicut-South	9,000	6,000	9,600	4,200	320	80	280	370	350	90	550	6,000	3,070
Windsor Brook	3,600	600	4,800	120	55	8	6	53	30	10	110	720	843
Paine Pond	*	*	*	*	300	240	30	290	60	60	130	400	189
Unnamed Brook--A	*	*	*	*	2,700	70	150	280	110	400	280	*	570
Unnamed Brook--B	5,400	850	680	110	20	12	1	50	15	240	120	3,200	892

*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, 1971

	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
	Coliform Bacteria Index per 100 ml.											
Ponaganset Reservoir	60	25	25	60	13	25	-5	25	6	60	6	250
Coventry Brook	250	2500	700	700	250	25	25	13	14	130	60	60
Wilbur Brook	13	700	7000	600	130	25	25	60	25	2500+	50	600
Westconnaug Reservoir	250	2500+	700	1100+	250	25	6	60	60	200	600	14
Barden Reservoir	60	250	60	60	250	60	-5	25	25	25	200	13
Cork Brook	2500	2500	2500	60	25	25	2500+	-5	6	25	25	700
Rush Brook	60	2500+	7000	600	250	25	60	14	-5	50	25	250
Huntinghouse Brook	250	2500+	700	250	700	25	250	25	25	60	25	700
Harrisdale Brook	250	700	200	1100+	1100+	60	60	130	60	13	60	2500+
Blanchard Brook	700	250	7000	600	250	50	130	25	60	700	60	700
Moswansicut Pond	150	240	250	460	9	-5	-5	9	93	11	43	1100
Regulating Reservoir	50	25	60	25	6	60	6	250	25	60	25	60
Quonopaug Brook	250	7000	2500	600	60	25	13	25	25	60	130	2500+
Hemlock Brook	6	250	25	1100+	600	20	60	60	130	25	6	25
Betty Pond Stream	2500	25	60	60	6	25	700	60	13	25	50	25
Spruce Brook	2500	2500+	2500	250	60	60	60	60	13	20	25	25
Brandy Brook	60	700	700	250	25	700	250	700	250	60	130	60
Moswansicut-South	7000	7000	7000	7000	250	200	600	250	2500	250	600	2500
Windsor Brook	2500	2500	2500	600	25	60	6	25	60	60	30	250
Paine Pond	*	*	*	*	930	430	75	150	93	93	230	2400
Unnamed Brook-A	*	*	*	*	4600	230	230	1100	90	930	1500	*
Unnamed Brook-B	130	130	700	25	25	25	130	60	25	130	700	250

*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, 1971

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	19	0	0	0	2	2	1	13	10	1	4
28 Phenix Ave., Cranston	0	0	0	0	0	0	2	5	6	32	29	1	6
Westminster St.,Olneyville	0	1	0	0	0	0	1	1	5	37	24	1	6
1275 Reservoir Ave.,Cranston	0	0	0	0	1	0	3	6	5	47	27	2	8
750 Reservoir Ave.,Cranston	0	1	0	0	1	1	1	2	2	29	26	1	5
1520 Atwood Ave., Johnston	0	0	0	0	1	0	1	2	3	34	27	2	6
Biltmore Hotel	1	0	0	1	0	0	0	1	3	23	14	1	4
Dexter Manor	0	0	0	0	0	0	0	0	3	44	28	200	23
State Office Building	0	1	0	2	0	0	0	0	2	27	20	1	4
*Longview Reservoir	1	0	0	0	0	1	1	1	7	21	11	0	4
208 Weybosset Street	0	0	0	0	0	0	0	1	2	33	25	1	5
					Bacteria per ml. 24 Hours on Agar at 35°C.								
Neutaconkanut Reservoir	0	3	1	0	0	0	0	0	0	0	0	1	0
28 Phenix Ave., Cranston	0	0	0	2	0	0	0	0	0	0	0	0	0
Westminster St.,Olneyville	1	1	0	1	0	0	0	0	0	5	1	1	1
1275 Reservoir Ave.,Cranston	0	0	1	0	0	0	1	1	0	1	1	0	0
750 Reservoir Ave.,Cranston	0	0	1	0	0	0	0	0	0	0	1	0	0
1520 Atwood Ave., Johnston	0	0	0	1	0	0	0	1	0	0	0	2	0
Biltmore Hotel	0	0	0	0	0	0	1	46	0	0	1	0	4
Dexter Manor	0	1	1	1	0	0	0	0	1	1	1	1	1
State Office Building	0	0	2	3	0	0	0	0	0	0	1	0	1
*Longview Reservoir	0	0	2	0	0	0	1	1	0	0	1	0	0
208 Weybosset Street	0	0	0	1	0	0	0	1	0	1	0	0	0
					Coliform Bacteria Index per ml.								
Neutaconkanut Reservoir	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28 Phenix Ave., Cranston	.000	.000	.001	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000
Westminster St.,Olneyville	.002	.000	.000	.001	.000	.000	.000	.000	.001	.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	.001	.000	.000	.000	.000	.001	.000	.000	.000	.000
1520 Atwood Ave., Johnston	.000	.000	.000	.001	.000	.000	.000	.000	.000	.002	.000	.000	.000
Biltmore Hotel	.000	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Dexter Manor	.000	.000	.000	.000	.000	.000	.000	.003	.000	.000	.000	.000	.000
State Office Building	.000	.000	.000	.000	.000	.001	.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	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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

NOTE: Sampling locations were changed as follows: From 28 Phenix Ave. to 275 Atwood Ave., Cranston on Oct. 1, from Westminster St., Olneyville to 630 Atwells Ave. on Oct. 1 and from Biltmore Hotel to 15 Branch Ave. on Oct. 19.

TABLE 23

WATER PURIFICATION WORKS

MINERAL ANALYSIS OF WATER - YEAR ENDED JUNE 30, 1971

Parts per Million	Raw Water* 1970 July-Sept.	1970 Oct.-Dec.	1971 Jan.-Mar.	1971 Apr.-June	Avg.	Tap Water 1970 July-Sept.	1970 Oct.-Dec.	1971 Jan.-Mar.	1971 Apr.-June	Avg.
Aluminum	0.02	0.04	0.01	0.03	0.03	0.03	0.01	0.01	0.03	0.02
Arsenic	0.00		0.00		0.00	0.00		0.00		0.00
Calcium	3.6	4.1	4.4	4.0	4.0	10.9	11.0	11.1	10.6	10.9
Chloride	11.4	12.8	13.7	13.8	12.9	12.1	13.3	14.3	14.3	13.5
Copper	0.03	0.02	0.01	0.02	0.02	0.01	0.00	0.00	0.00	0.00
Fluoride	0.15	0.15	0.15	0.15	0.15	1.00	1.00	0.99	1.00	1.00
Hardness	12	12	13	12	12	31	30	31	28	30
Iron	0.10	0.16	0.06	0.04	0.09	0.01	0.01	0.01	0.01	0.01
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magnesium	0.73	0.43	0.48	0.49	0.53	0.93	0.62	0.80	0.37	0.68
Manganese	0.07	0.10	0.05	0.04	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
Selenium	0.00		0.00		0.00	0.00		0.00		0.00
Silica	3.8	3.1	3.7	4.0	3.7	3.6	3.0	3.5	4.2	3.6
Sulphate	8.4	7.9	9.4	6.9	8.2	14.6	15.9	15.2	13.5	14.8
Total Solids	55	52	54	51	53	73	70	73	70	72
Loss on Ignition	29	20	25	26	25	30	23	28	31	28
Total Alkalinity	3.5	3.9	3.5	3.4	3.6	15.1	12.7	12.1	12.8	13.2
Phenolphthalein Alkalinity	0.0	0.0	0.0	0.0	0.0	7.6	6.4	6.3	6.7	6.8
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, 1971

1970-1971	Raw Water* Ammonia Free	Ammonia Alb.	Ni-trites	Ni-trates	Chlo-rides	Dissolved Oxygen P.P.M.	% Sat.	Total Solids	Loss on Igni-tion	Tap Water Ammonia Free	Ammonia Alb.	Ni-trites	Ni-trates	Chlo-rides	Dissolved Oxygen P.P.M.	% Sat.	Total Solids	Loss on Igni-tion
July	0.040	0.048	0.000	0.07	11.2	7.8	70.3	75	48	0.022	0.029	0.001	0.06	12.0	---	--	79	36
August	.026	.031	.000	.08	11.6	5.8	53.7	46	18	.022	.014	.001	.06	12.1	---	--	75	25
September	.036	.034	.000	.15	11.5	4.8	45.7	44	22	.032	.018	.001	.05	12.3	---	--	66	28
October	.022	.047	.000	.03	12.4	9.2	89.3	51	17	.020	.025	.001	.01	12.8	---	--	71	22
November	.021	.032	.000	.04	13.1	10.3	91.2	50	21	.009	.021	.001	.02	13.5	---	--	66	23
December	.030	.054	.000	.04	13.0	11.8	92.2	54	23	.021	.023	.001	.02	13.5	---	--	72	24
January	.034	.084	.000	.05	13.1	13.5	95.1	58	22	.014	.039	.001	.04	13.7	---	--	73	29
February	.019	.052	.000	.07	14.0	12.5	91.2	58	27	.020	.079	.001	.06	14.5	---	--	74	27
March	.003	.062	.000	.08	14.1	12.6	94.7	45	26	.016	.047	.001	.06	14.7	---	--	73	27
April	.006	.059	.000	.07	13.5	12.7	96.9	48	21	.013	.036	.001	.05	14.0	---	--	64	23
May	.009	.053	.000	.08	14.0	11.5	95.4	47	26	.005	.031	.001	.05	14.5	---	--	74	33
June	.005	.031	.000	.10	14.0	10.3	91.2	58	31	.026	.051	.001	.07	14.5	---	--	71	37
Averages	0.021	0.049	0.000	0.07	13.0	10.2	83.9	53	25	0.018	0.034	0.001	0.05	13.5	---	--	72	28

*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, 1971

	Source of Water Tested	Frequency of Test or Examination	Number of Tests or Analyses Made During the Fiscal Year: Chemical	Bacteriological	Microscopical	Sanitary Chemical	Mineral	Miscellaneous	Total
I	Brooks and Streams on Watershed								
	Fourteen Brooks, Two Streams and One Pond	Monthly	1,715	3,252		178			5,145
II	Smaller Storage Reservoirs on Watershed								
	Regulating Reservoir	Monthly	84	127					211
	Westconnaug Reservoir	Monthly	84	143					227
	Barden Reservoir	Monthly	84	128					212
	Moswansicut Pond	Monthly	84	183					267
	Ponaganset Reservoir	Monthly	84	121					205
III	Scituate Reservoir								
	Surface Water	Bi-Weekly	208	329	26	156			719
	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	1,583		2,184			6,107
V	Water Purification Works								
	Raw Water (from Bottom of Scituate Reservoir)	Daily	2,943	4,614		1,432		358	9,347
	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	716						716
	Mixer	Daily	1,854						1,854
	Settled	Daily	2,441	1,223		298		358	4,320
	Settled	Bi-Weekly			26				26
	Settled	Monthly				36			36
	Filtered	Daily	1,074	1,213		300			2,587
	Filtered	Monthly				36			36
	Effluent	Daily	3,157	1,206		1,732			6,095
	Effluent	Bi-Weekly			26				26
	Effluent	Monthly				24			24
	Raw Water (from Bottom of Scituate Reservoir)	Daily at 3:00 P.M.	976	1,438		976			3,390
	Effluent	Daily at 3:00 P.M.	980	986		980			2,946

*Composite of 13 Weekly Samples.

TABLE 25 (Continued)

WATER PURIFICATION WORKS

LABORATORY EXAMINATIONS MADE DURING THE FISCAL YEAR ENDED JUNE 30, 1971

	Source of Water Tested	Frequency of Test or Examination	Number of Tests or Analyses Made During the Fiscal Year						
			Chemical	Bacteri-ological	Micro-scopical	Sanitary Chemical	Mineral	Miscel-laneous	Total
VI	Neutaconkanut Distribution Reservoir								
	Sample from nearby Tap	Daily	1,494	1,743		1,245			4,482
	Sample from nearby Tap	Bi-Weekly			26				26
VII	Longview Distribution Reservoir								
	Sample from nearby Tap	Daily	1,494	1,743		996			4,233
	Sample from nearby Tap	Bi-Weekly			26				26
VIII	Distribution System								
	Providence City Hall Tap Water	Daily	2,400	2,132		1,500		300	6,332
	Providence City Hall Tap Water	Bi-Weekly			26				26
	Providence City Hall Tap Water	Monthly				60			60
	*Providence City Hall Tap Water	Every 13 Weeks					32		32
	Consumers' Complaints (19 during the year)		182	49		55			286
	Disinfection of Newly Laid Mains			392		31			423
	**Sectional Tests	Daily	13,314	15,939		9,124			38,377
IX	Miscellaneous Tests								
	Coagulation Tests to Determine Chemical Dosages		90					45	135
	Analysis of Ferri-Floc used for Treatment		69					23	92
	Analysis of Quicklime used for Treatment		19					38	57
	Analysis of Sod. Silicofluoride used for Treatmant		7						7
	Water, Filter Sand and Other Materials		2,988	7,919		1,241			12,148
	Totals		41,245	46,463	182	22,968	68	1,122	112,048

*Composite of 13 Weekly Samples.
**Samples from nine fixed locations.

TABLE 26

WATER DISTRIBUTION SYSTEM

NEUTACONKANUT HIGH SERVICE PUMPING STATION

OPERATING STATISTICS - YEAR ENDED JUNE 30, 1971

	Electrically-Driven Pumps								Gasoline Engine-Driven Pump			
	No. 1 10" Pump 2700 GPM. TDH 90'		No. 2 12" Pump 3800 GPM. TDH 104'		No. 3 16" Pump 7000 GPM. TDH 96'		Power Used*		No. 4 16" Pump 7000 GPM. TDH 96'			
1970-1971	Operated		Operated		Operated				**Operated		Gas.	Oil
	Days	Hours and Minutes	Days	Hours and Minutes	Days	Hours and Minutes	KWH	Cost	Days	Hours and Minutes	Used Gals.	Used Qts.
July	---	----	---	----	---	----	173,500	$ 1,301.18	5	5-00	106	0
August	---	----	---	----	---	----	124,500	1,844.79	4	4-00	148	0
September	4	3-55	30	659-00	6	42-30	80,500	1,434.15	4	4-00	38	0
October	0	0-00	31	737-40	0	0-00	87,500	1,364.94	4	4-00	158	0
November	0	0-00	30	702-25	0	0-00	72,500	1,218.62	4	4-00	80	0
December	0	0-00	31	732-50	0	0-00	93,000	1,376.73	5	5-00	160	0
January	2	2-45	31	722-40	0	0-00	73,000	1,193.83	4	4-00	120	0
February	1	1-00	28	656-25	0	0-00	79,000	1,243.17	4	4-00	156	0
March	2	4-30	31	735-45	0	0-00	77,000	1,228.87	5	5-00	38	98
April	0	0-00	30	715-00	0	0-00	85,000	1,283.34	4	4-00	56	0
May	---	----	31	738-25	0	0-00	77,000	1,233.49	4	4-00	179	0
June	---	----	28	420-25	24	474-30	102,500	1,559.39	4	4-00	169	0
Totals	---	----	---	----	---	----	1,125,000	$16,282.50	51	51-00	1,408	98

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

NOTE: Records incomplete from July 26 to Aug. 31 due to phasing-out of the manned operation. No. 1 pump removed from service on May 13, 1971. To be replaced by a 7000 GPM unit.

TABLE 26 (Continued)

WATER DISTRIBUTION SYSTEM

NEUTACONKANUT HIGH SERVICE PUMPING STATION

OPERATING STATISTICS -- YEAR ENDED JUNE 30, 1971

	Electrically-Driven Pumps			Gasoline Engine-Driven Pump		
1970-1971	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.	
	Water Pumped Mil. Gals.	Water Pumped Mil. Gals.	Water Pumped Mil. Gals.	Water Pumped Mil. Gals.	For Month	Avg. per Day
July	----	----	----	----	---	---
August	----	----	----	----	---	---
September	0.693	186.506	17.778	1.849	206.826	6.894
October	0.000	208.881	0.000	1.858	210.739	6.798
November	0.000	198.078	0.000	1.817	199.895	6.663
December	0.000	209.569	0.000	2.281	211.850	6.834
January	0.606	201.862	0.000	1.751	204.219	6.588
February	0.277	186.047	0.000	1.730	188.054	6.716
March	1.144	206.123	0.000	2.163	209.430	6.756
April	0.000	200.421	0.000	1.781	202.202	6.740
May	0.000	205.026	0.000	1.793	206.819	6.672
June	0.000	95.637	177.552	3.403	276.592	9.220
Totals	----	----	----	----	---	---

NOTE: Records incomplete from July 26 to Aug. 31 due to phasing-out of the manned operation. No. 1 pump removed from service on May 13, 1971. To be replaced by a 7000 GPM unit.

TABLE 27

WATER DISTRIBUTION SYSTEM

BATH STREET HIGH SERVICE PUMPING STATION

OPERATING STATISTICS -- YEAR ENDED JUNE 30, 1971

1970-1971	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		
	Days	Hours and Minutes	Days	Hours and Minutes	KWH	Cost	Days	Hours and Minutes	Gas. Used Gals.
July	---	----	---	----	46,200	$ 725.77	5	5-00	41
August	---	----	---	----	46,480	738.94	4	4-00	65
September	30	399-50	30	387-05	44,240	722.26	4	4-00	67
October	31	415-20	30	344-50	46,900	750.79	5	5-25	111
November	30	329-55	30	329-00	44,520	727.03	4	4-00	99
December	30	347-10	30	347-35	41,860	688.95	5	5-00	78
January	31	375-35	30	404-10	39,060	660.76	4	4-00	81
February	28	346-30	28	409-55	48,020	737.38	4	4-00	72
March	31	413-25	31	424-55	46,200	720.83	5	5-00	106
April	30	407-10	30	396-00	50,260	746.27	4	4-00	64
May	31	458-40	31	456-40	52,220	777.44	4	4-00	72
June	30	594-15	30	585-50	60,900	850.15	4	4-00	90
Totals	---	----	---	----	566,860	$8,846.57	52	52-00	946

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

NOTE: Records incomplete from July 26 to Aug. 31 due to phasing-out of the manned operation at Neutaconkanut pumping station.

TABLE 27 (Continued)

WATER DISTRIBUTION SYSTEM

BATH STREET HIGH SERVICE PUMPING STATION

OPERATING STATISTICS - YEAR ENDED JUNE 30, 1971

	Electrically-Driven Pumps		Gasoline Engine-Driven Pump		Total Water Pumped	
	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		Mil. Gals.	
1970-1971	Water Pumped Mil. Gals.	Water Pumped Mil. Gals.	Water Pumped Mil. Gals.	For Month		Avg. per Day
July	----	----	----	---		---
August	----	----	----	---		---
September	53.938	52.056	1.180	107.174		3.572
October	57.365	47.029	1.489	105.883		3.416
November	46.359	45.818	1.218	93.395		3.113
December	48.237	45.336	1.521	95.094		3.068
January	50.982	54.653	1.167	106.802		3.445
February	47.864	56.820	1.169	105.853		3.780
March	58.432	60.049	1.504	119.985		3.870
April	57.212	55.502	1.204	113.918		3.797
May	64.816	64.156	1.201	130.173		4.199
June	79.498	78.344	1.197	159.039		5.301
Totals	----	----	----	---		---

NOTE: Records incomplete from July 26 to Aug. 31 due to phasing-out of the manned operation at Neutaconkanut pumping station.

TABLE 28

WATER DISTRIBUTION SYSTEM

*AQUEDUCT DISTRIBUTION RESERVOIR

OPERATING STATISTICS - YEAR ENDED JUNE 30, 1971

1970-1971	7 A.M. Statistics on First Day of Month		Operating Characteristics During 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	229.25	40.46	230.47	225.75	229.74	42.52	34.46	41.30	4.16	1.15	2.35	7.13	1.97	4.02
August	230.16	42.00	230.35	225.68	229.66	42.32	34.34	41.16	4.13	1.23	2.25	7.08	2.09	3.91
September	230.18	42.04	230.41	225.83	229.51	42.42	34.59	40.90	3.77	1.18	2.43	6.47	2.01	4.15
October	229.61	41.08	230.46	226.45	229.59	42.50	35.66	41.04	3.28	1.03	2.15	5.60	1.76	3.67
November	229.88	41.54	230.35	225.69	229.57	42.32	34.35	41.01	3.34	1.58	2.43	5.73	2.71	4.16
December	229.51	40.90	230.34	226.53	229.57	42.30	35.79	41.01	3.19	1.25	2.15	5.70	2.14	3.68
January	229.68	41.19	230.53	226.39	229.59	42.62	35.55	41.04	3.24	1.38	2.41	5.55	2.37	4.12
February	229.65	41.14	230.04	226.44	229.40	41.81	35.64	40.72	3.25	1.60	2.20	5.57	2.74	3.77
March	229.97	41.69	229.99	226.15	229.38	41.72	35.14	40.68	3.14	1.55	2.32	5.39	2.66	3.98
April	229.30	40.55	230.42	226.25	229.55	42.44	35.31	40.97	3.22	1.49	2.33	5.53	2.56	3.99
May	229.65	41.14	230.34	226.66	229.63	42.30	36.02	41.11	3.63	1.43	2.29	6.20	2.46	3.92
June	229.80	41.40	230.76	225.86	229.82	43.00	34.64	41.43	3.96	1.72	2.86	6.77	2.95	4.89
For Year			230.76	225.68	229.58	43.00	34.34	41.02	4.16	1.03	2.35	7.13	1.76	4.02

*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, 1971

1970-1971	7 A.M. Statistics on First Day of Month		Operating Characteristics During 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	226.34	40.93	226.67	220.50	226.00	41.52	30.66	40.34	4.48	1.48	2.80	7.88	2.60	4.92
August	225.65	39.72	226.78	221.94	226.13	41.72	33.19	40.57	4.53	0.83	2.76	7.97	1.47	4.86
September	226.33	40.91	226.94	221.90	226.15	42.00	33.12	40.60	4.68	1.02	2.39	8.24	1.79	4.21
October	226.27	40.81	226.87	222.77	226.38	41.88	34.66	41.00	4.84	0.97	2.08	6.36	1.70	3.52
November	226.50	41.21	227.00	223.49	226.53	42.09	35.92	41.27	3.16	0.69	1.87	5.57	1.21	3.29
December	226.40	41.04	226.85	223.88	226.39	41.84	36.61	41.02	2.82	0.81	1.65	4.96	1.42	2.90
January	226.29	40.84	226.70	223.19	226.19	41.57	35.39	40.67	2.61	0.48	1.68	4.59	0.85	2.95
February	226.35	40.95	226.85	224.05	226.32	41.84	36.91	40.90	2.51	0.45	1.49	4.41	0.79	2.62
March	226.53	41.27	226.72	223.90	226.32	41.61	36.64	40.90	2.78	0.58	1.54	4.90	1.02	2.71
April	226.30	40.86	227.02	223.96	226.49	42.12	36.75	41.19	2.91	0.77	1.62	5.12	1.34	2.85
May	226.38	41.00	226.99	224.08	226.51	42.07	36.96	41.23	2.43	0.60	1.62	4.27	1.07	2.85
June	226.21	40.71	226.62	220.90	226.01	41.43	31.36	40.36	5.10	1.55	2.78	8.98	2.72	4.88
For Year			227.02	220.50	226.29	42.12	30.66	40.84	5.10	0.45	2.02	8.98	0.79	3.55

*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, 1971

1970-1971	7 A.M. Statistics on First Day of Month		Operating Characteristics During 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	303.97	11.46	306.17	296.65	304.87	12.47	8.07	11.88	7.60	1.14	3.81	3.52	0.53	1.76
August	305.15	12.01	306.12	300.98	305.03	12.45	10.07	11.95	4.63	1.46	2.86	2.14	0.68	1.33
September	304.94	11.91	305.63	301.16	304.67	12.23	10.16	11.78	4.49	1.17	2.21	2.08	0.54	1.03
October	305.33	12.09	305.77	303.07	305.16	12.29	11.04	12.01	2.30	0.94	1.57	1.07	0.43	0.73
November	305.77	12.29	305.82	302.73	305.14	12.32	10.89	12.00	2.60	0.60	1.64	1.20	0.28	0.76
December	304.15	11.54	305.60	303.09	305.08	12.21	11.05	11.98	2.47	0.84	1.27	1.15	0.40	0.59
January	305.35	12.10	305.82	303.69	305.26	12.32	11.33	12.06	1.93	0.94	1.33	0.90	0.44	0.62
February	305.52	12.18	305.75	302.74	305.08	12.28	10.89	11.98	2.31	0.73	1.43	1.07	0.33	0.66
March	304.90	11.89	305.51	302.75	305.04	12.17	10.90	11.96	2.63	0.95	1.59	1.21	0.45	0.74
April	305.17	12.02	305.62	303.03	305.07	12.22	11.02	11.97	2.10	0.97	1.42	0.98	0.46	0.67
May	304.93	11.91	305.58	301.75	304.99	12.21	10.43	11.94	3.46	0.95	2.08	1.61	0.45	0.97
June	304.89	11.89	305.65	294.35	305.02	12.24	7.00	11.95	11.13	1.17	4.66	5.16	0.54	2.16
For Year			306.17	294.35	305.03	12.47	7.00	11.95	11.13	0.60	2.16	5.16	0.28	1.00

*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, 1971

Pipe Laid in Feet

City or Town	6"	8"	10"	12"	16"	20"	24"	30"	Total
Providence	*1,939.28	*2,908.80	0	89.00	656.80	0	0	0	*5,593.88
Cranston	1,840.70	1,924.88	0	0	0	0	0	0	3,765.58
Johnston	871.90	1,038.18	0	0	0	0	0	0	1,910.08
North Providence	806.85	2,340.38	0	0	0	0	0	0	3,147.23
Totals	*5,458.73	*8,212.24	0	89.00	656.80	0	0	0	*14,416.77

Pipe Removed in Feet

	6"	8"	10"	12"	16"	20"	24"	30"	Total
Providence	*3,226.75	*757.28	0	8.89	549.50	0	0	0	*4,542.42
Cranston	280.81	131.70	0	0	0	0	0	0	412.51
Johnston	0	0	0	0	0	0	0	0	0
North Providence	0	0	0	0	0	0	0	0	0
Totals	*3,507.56	*888.98	0	8.89	549.50	0	0	0	*4,954.93

Net Length Added to Distribution System

	6"	8"	10"	12"	16"	20"	24"	30"	Total
Providence	-*1,287.47	*2,151.52	0	80.11	107.30	0	0	0	*1,051.46
Cranston	1,559.89	1,793.18	0	0	0	0	0	0	3,353.07
Johnston	871.90	1,038.18	0	0	0	0	0	0	1,910.08
North Providence	806.85	2,340.38	0	0	0	0	0	0	3,147.23
Totals	*1,951.17	*7,323.26	0	80.11	107.30	0	0	0	*9,461.84

*NOTE: Included in the 1971 figures are the following:
545.50' of 6" C.I. installed in 1928 and not accounted for until 1971.
727.20' of 8" C.I. installed in 1928 and not accounted for until 1971.
118.65' of 6" C.I. removed in 1928 and not accounted for until 1971.
610.00' of 8" C.I. removed in 1928 and not accounted for until 1971.

TABLE 32

PUBLIC WATER MAINS IN USE ON JUNE 30, 1971

	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	1,458,373.35	276.21	632,633.73	119.82	123,242.66	23.34	165,435.84	31.33	2,379,685.58	450.70	82.06	0.02
8-inch	349,456.33	66.18	375,184.07	71.06	187,492.13	35.51	141,506.91	26.80	1,053,639.44	199.55	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	245,008.21	46.40	106,243.88	20.12	13,556.11	2.57	33,169.10	6.28	397,977.30	75.37	7,242.57	1.37
16-inch	145,406.72	27.54	3,512.31	0.67	6,393.63	1.21	0	0	155,312.66	29.42	55,167.34	10.45
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	2,365,048.86	447.93	1,206,958.52	228.59	368,167.76	69.72	353,390.40	66.93	4,293,565.54	813.18	68,013.06	12.88

*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.

TABLE 33

GATES IN USE ON JUNE 30, 1971

Stop Gates													Gates on Public Fire Hydrants			Gates on Unwatering Hydrants			Gates on Blow-offs			Total number of Gates
6"	8"	10"	12"	16"	20"	24"	30"	36"	42"	48"	60"	Total	6"	8"	Total	6"	8"	Total	6"	8"	12" Total	
PROVIDENCE																						
4,440	995	16	655	277	28	72	39	6	3	10	0	6,541	1,624	1,462	3,086	8	14	22	1	2	1 4	9,653
CRANSTON																						
1,746	934	0	220	9	0	11	16	13	14	4	3	2,970	1,140	7	1,147	3	14	17	0	2	28 30	4,164
JOHNSTON																						
343	407	1	31	12	6	5	0	0	0	1	0	806	290	11	301	3	0	3	0	0	2 2	1,112
NORTH PROVIDENCE																						
459	*305	0	72	0	0	5	1	1	0	0	0	843	355	0	355	0	3	3	0	0	0 0	1,201
TOTALS																						
6,988	2,641	17	978	298	34	93	56	20	17	15	3	11,160	3,409	1,480	4,889	14	31	45	1	4	31 36	16,130

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

*One gate installed in 1950; not accounted for until 1971.

TABLE 34

SERVICE PIPES INSTALLED AND REMOVED--YEAR ENDED JUNE 30, 1971

City or Town	INSTALLED				REMOVED			
	General		Fire Supply		General		Fire Supply	
	Copper 3/4"-2"	Cast Iron 4"-12"	Cast Iron 4"-12"	Total	Lead or Copper 1/2"-2"	Cast Iron 4"-12"	Cast Iron 4"-12"	Total
Providence	101	9	12	122	452	5	15	472
*Cranston	115	9	4	128	23	0	0	23
Johnston	92	1	0	93	3	0	0	3
North Providence	53	3	1	57	3	0	0	3
Totals	361	22	17	400	481	5	15	501

*In addition, there was a 42-inch service installed from the 102-inch aqueduct to supply the City of East Providence.

TABLE 35

NUMBER AND SIZE OF ACTIVE SERVICES--YEAR ENDED JUNE 30, 1971

	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"	3"	4"	6"	8"	10"	12"	16"	30"	42"	Totals
Providence	212	24,278	7,476	1,871	479	426	584	6	1,016	908	91	4	10	2	0	0	37,363
Cranston	5	6,885	8,124	1,986	41	428	348	0	114	97	35	0	4	0	1	1	18,069
Johnston	0	759	2,346	975	9	220	72	0	9	15	2	0	1	0	0	0	4,408
North Providence	0	1,067	2,548	905	6	265	89	0	31	12	4	0	2	0	0	0	4,929
Totals	217	32,989	20,494	5,737	535	1,339	1,093	6	1,170	1,032	132	4	17	2	1	1	64,769

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, 1971

	Providence	Cranston	Johnston	North Providence	Totals
Post Hydrants Installed	117	22	5	2	146
Post Hydrants Removed	35	8	3	2	48
Flush Hydrants Removed	80	0	0	0	80

HYDRANTS IN DISTRIBUTION SYSTEM ON JUNE 30, 1971

Post Hydrants	**2,954	**1,147	313	358	4,772
Flush Hydrants	192	0	0	0	192
Totals	**3,146	**1,147	313	358	*4,964

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

**One Providence Post Hydrant entered in Cranston in 1968. Corrected - 1971.

TABLE 37

NUMBER, MAKE AND SIZE OF METERS ON ACTIVE SERVICES

. YEAR ENDED JUNE 30, 1971

Size	5/8"	3/4"	1"	1½"	2"	3"	4"	6"	8"	10"	12"	16"	24"	30"	36"	Total
						*PROVIDENCE										
Make																
Trident	28,193	2,990	925	1,194	1,626	77	62	58	17	5	-	-	-	-	-	35,147
Thomson	1,892	191	151	35	102	-	3	-	-	-	-	-	-	-	-	2,374
Empire	32	-	8	-	1	-	-	-	-	-	-	-	-	-	-	41
Crown	14	4	2	1	-	-	-	-	-	-	-	-	-	-	-	21
Hersey	-	-	-	2	2	2	13	62	6	-	-	-	-	-	-	87
Venturi	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2
Dall Flow	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
Totals	30,131	3,185	1,086	1,232	1,731	79	78	120	23	5	1	2	-	-	-	37,673

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

						*CRANSTON										
Make																
Trident	15,672	1,202	486	275	368	2	6	13	6	-	1	-	-	-	-	18,031
Thomson	4	13	-	8	11	-	-	-	-	-	-	-	-	-	-	36
Hersey	-	-	-	-	1	-	-	3	4	-	-	-	-	-	-	8
Venturi	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	2
Dall Flow	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	2
Totals	15,676	1,215	486	283	380	2	6	16	10	-	2	-	1	1	1	18,079

*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.
1-36" Venturi Meter supplying City of East Providence.

						*JOHNSTON										
Make																
Trident	3,418	622	133	55	60	-	-	-	1	-	-	-	-	-	-	4,289
Thomson	130	3	2	-	-	-	-	-	-	-	-	-	-	-	-	135
Dall Flow	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
Totals	3,548	625	135	55	60	-	-	-	1	-	-	-	1	-	-	4,425

*Includes 1-8" Trident Crest Meter supplying East Smithfield Water Co.
1-24" Dall Flow Tube Meter supplying Greenville Water District.

						*NORTH PROVIDENCE										
Make																
Trident	3,752	588	258	63	62	1	2	4	-	-	-	-	-	-	-	4,730
Thomson	189	4	3	1	1	-	-	-	-	-	-	-	-	-	-	198
Hersey	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	5
Venturi	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
Totals	3,941	592	261	64	63	1	2	9	-	-	1	-	-	-	-	4,934

*Includes 1-6" Trident Protectus Meter supplying East Smithfield Water Co.
1-12" Venturi Meter supplying Town of Smithfield.

TABLE 38

CAPACITY AND CONSUMPTION

Year Ended Sept. 30	Purification Works Capacity M.G.D.	Total During Year M.G.	Consumption Average M.G.D.	Total M.G.	Maximum Day Percent of Plant Capacity	Maximum Day Percent of Average Day	Maximum Hour Rate in M.G.D.	Maximum Hour Percent of Plant Capacity	Maximum Hour Percent of Average Day
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	60.2	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
1971	144.0	21,927.8	60.1	109.0	75.7	181.4	158.4	110.0	263.6

TABLE 39

CONSUMPTION OF WATER - MILLION GALLONS

YEAR ENDED JUNE 30, 1971

1970-1971	Low Service (1) Max. Day	Min. Day	Avg. Day	Total	High Service (2) Max. Day	Min. Day	Avg. Day	Total	Total Service (1,2) Max. Day	Min. Day	Avg. Day	Total
July	73.148	29.999	---	-----	16.236	9.828	---	-----	89.384	39.827	66.912	2,074.283
August	---	---	---	-----	---	---	---	-----	81.904	44.634	64.958	2,013.684
September	62.209	33.447	48.069	1,442.087	12.628	9.121	10.461	313.820	72.815	42.645	58.530	1,755.907
October	56.751	31.540	45.862	1,421.725	11.055	8.979	10.207	316.422	67.784	40.902	56.069	1,738.147
November	52.857	36.721	45.368	1,361.051	10.624	7.472	9.801	294.040	63.050	45.098	55.170	1,655.091
December	51.875	32.253	45.158	1,399.900	10.550	8.398	9.883	306.384	62.277	40.651	55.041	1,706.284
January	51.800	33.485	44.959	1,392.673	10.635	8.566	10.030	310.941	61.858	42.051	54.955	1,703.614
February	52.000	36.910	46.609	1,305.061	11.156	9.568	10.507	294.197	63.156	46.772	57.116	1,599.258
March	51.509	36.034	46.172	1,431.338	11.165	9.737	10.622	329.285	62.605	45.821	56.794	1,760.623
April	52.924	33.552	46.310	1,389.285	11.069	9.158	10.541	316.230	63.900	42.720	56.851	1,705.515
May	56.991	33.296	48.455	1,502.101	12.057	8.816	10.871	337.012	68.997	42.112	59.326	1,839.113
June	88.706	43.331	64.809	1,944.277	20.319	10.994	14.581	437.431	109.025	55.142	79.390	2,381.708
For Year	88.706(a)	29.999(b)	---	-----	20.319(c)	7.472(d)	---	-----	109.025(e)	39.827(f)	60.091	21,933.227

(a) June 30; (b) July 4 (c) June 30; (d) Nov. 1 (e) June 30; (f) July 4

(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., Smithfield Water Department and Greenville Water District.

NOTE: Records from July 26 to August 31 are incomplete due to change in metering equipment at Neutaconkanut and Bath St. pumping stations.

TABLE 40

WATER SOLD TO STATE INSTITUTIONS AND CITY OF WARWICK

YEAR ENDED JUNE 30, 1971

	STATE INSTITUTIONS				CITY OF WARWICK					
	S.S.50,767 Sookanosset Rd. Cranston 12"x5.50" Venturi Meter	S.S.24,215A East St. Cranston 8" Tri-Prot. Meter			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		
1970-1971	Gallons per Month	Gallons per Month	Total Gallons per Month	Average Gallons per Day	Gallons per Month	Gallons per Month	Gallons per Month	Gallons per Month	Total Gallons per Month	Average Gallons per Day
July	44,283,000	0	44,283,000	1,428,484	226,575,000	Closed	15,845,625	30,922,725	273,343,350	8,817,527
August	45,413,000	450	45,413,450	1,464,950	213,860,000	"	15,394,950	25,414,800	254,669,750	8,215,153
September	41,301,000	675	41,301,675	1,376,723	168,224,000	"	6,166,725	11,971,275	186,362,000	6,212,067
October	44,193,000	0	44,193,000	1,425,581	156,462,000	"	5,092,200	8,043,000	169,597,200	5,470,877
November	35,072,000	76,650	35,148,650	1,171,622	147,979,000	"	4,822,125	6,566,175	159,367,300	5,312,243
December	44,234,000	0	44,234,000	1,426,903	148,191,000	"	5,023,575	6,286,125	159,500,700	5,145,184
January	36,774,585	16,012	36,790,597	1,186,793	139,725,107	"	4,479,225	6,743,475	150,947,807	4,869,284
February	34,322,940	0	34,322,940	1,225,819	136,736,000	"	4,480,500	5,428,575	146,645,075	5,237,324
March	40,452,045	0	40,452,045	1,304,905	161,886,000	"	5,373,450	7,025,175	174,284,625	5,622,085
April	40,476,000	37,500	40,513,500	1,350,450	153,672,000	"	5,212,125	7,911,000	166,795,125	5,559,838
May	38,363,000	1,500	38,364,500	1,237,565	153,548,000	"	5,127,375	11,720,775	170,396,150	5,496,650
June	51,394,000	0	51,394,000	1,713,133	269,935,000	"	9,730,125	38,010,075	317,675,200	10,589,173
For Year	496,278,570	132,787	496,411,357	1,360,031	2,076,793,107		86,748,000	166,043,175	2,329,584,282	6,382,423

TABLE 41

WATER SOLD TO EAST SMITHFIELD WATER COMPANY, SMITHFIELD WATER DEPARTMENT AND THE GREENVILLE WATER DISTRICT

YEAR ENDED JUNE 30, 1971

	EAST SMITHFIELD WATER COMPANY				SMITHFIELD WATER DEPT.		GREENVILLE WATER DISTRICT	
1970-1971	S.S.51,198 Waterman Avenue No. Prov. 6" Tri-Pro. Meter Gallons per Month	S.S.52,403 Dean Avenue Smithfield 8" Tri-Crest Meter Gallons per Month	Total Gallons per Month	Average Gallons per Day	S.S.71,980 Smithfield Road North Providence 12" Flow Meter Gallons per Month	Average Gallons per Day	S.S.76,310 George Waterman Road Johnston 12" Flow Meter Gallons per Month	Average Gallons per Day
July	19,143,000	7,618,500	26,761,500	863,274	3,283,500	105,919		
August	16,675,500	5,952,000	22,627,500	729,919	3,350,100	108,068		
September	12,829,500	7,893,000	20,722,500	690,750	2,254,500	75,150		
October	14,442,450	7,876,500	22,318,950	719,966	2,311,300	74,558	Open	
November	14,090,625	8,015,250	22,105,875	736,863	2,136,700	71,223	12/4/70	
December	14,014,500	8,163,750	22,178,250	715,427	2,061,700	66,506	7,860,000	280,714
January	13,319,325	7,665,750	20,985,075	676,938	2,411,900	77,803	9,392,460	302,983
February	13,173,225	7,451,250	20,624,475	736,588	3,776,500	134,875	8,519,700	304,275
March	15,129,750	8,464,500	23,594,250	761,105	3,006,900	96,997	9,816,700	316,668
April	13,851,450	7,790,250	21,641,700	721,390	2,668,600	88,953	9,758,600	325,287
May	13,356,000	7,205,250	20,561,250	663,266	2,563,300	82,687	10,840,400	349,690
June	20,365,425	9,489,000	29,854,425	995,148	4,521,500	150,717	16,286,600	542,887
For Year	180,390,750	93,585,000	273,975,750	750,618	34,346,500	94,100	72,474,460	346,768

TABLE 42

WATER SOLD TO KENT COUNTY WATER AUTHORITY
AND THE CITY OF EAST PROVIDENCE

YEAR ENDED JUNE 30, 1971

	KENT COUNTY WATER AUTHORITY				CITY OF EAST PROVIDENCE	
	S.S.58,985 Oaklawn Avenue Cranston 12" Tri-Crest Meter	S.S.75,430 Clinton Avenue Scituate 30" Flow Meter			S.S.76,257 Budlong Road Cranston 36"x12.6" Venturi Meter	
	Gallons per Month	Gallons per Month	Total Gallons per Month	Average Gallons per Day	Gallons per Month	Average Gallons per Day
July	12,612,750	39,672,000	52,284,750	1,686,605	24,213,000	781,065
August	11,330,250	32,494,000	43,824,250	1,413,685	21,056,000	679,226
September	9,040,500	16,734,000	25,774,500	859,150	5,942,000	198,067
October	6,493,500	12,114,000	18,607,500	600,242	3,623,000	116,871
November	8,195,250	11,624,000	19,819,250	660,642	110,338,000	3,677,933
December	7,044,750	19,032,800	26,077,550	841,211	166,984,400	5,386,594
January	7,443,750	16,407,000	23,850,750	769,379	149,309,736	4,816,443
February	7,332,000	18,416,700	25,748,700	919,596	132,069,100	4,716,754
March	8,539,500	22,869,000	31,408,500	1,013,177	146,242,900	4,717,513
April	6,531,750	14,662,300	21,194,050	706,468	142,989,900	4,766,330
May	6,482,250	21,416,100	27,898,350	899,947	157,090,300	5,067,429
June	12,518,250	56,064,900	68,583,150	2,286,105	214,656,100	7,155,203
For Year	103,564,500	281,506,800	385,071,300	1,054,990	1,274,514,436	3,491,820

NOTE: 54,834,000 gallons were sold to East Providence from July 1 to October 22 from S.S.75,429, Allens Avenue, Providence. This service was closed on October 22. 1,219,680,436 gallons were sold to East Providence from October 30, 1970 through June 30, 1971 from S.S.76,257, Budlong Road, Cranston.

TABLE 43

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	2.26	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	6.79	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	18.12	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	18.62	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 43 (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 43 (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 44

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	20.62	20.18	21.64	23.80	23.16	23.03	20.67	20.45	20.98	21.36

*Average for 6 months.

TABLE 44 (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 44 (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
1971	66.91	64.96	58.53	56.07	55.17	55.04	54.96	57.12	56.79	56.85	59.33	79.39	60.09

TABLE 45

FUEL OIL CONSUMPTION

YEAR ENDED JUNE 30, 1971

1970-1971	Administration and Operations Building Gallons Used No. 6	Raw Water Booster Pumping Station Gallons Used No. 2	Water Purification Plant Gallons Used No. 2	Water Purification Plant Gallons Used No. 6	Forestry and Maintenance Building Gallons Used No. 2	Neutaconkanut Pumping Station Gallons Used No. 2	Bath Street Pumping Station Gallons Used No. 2	Total Gallons Used No. 2	Total Gallons Used No. 6
July	556	0	1,600	0	0	0	0	1,600	556
August	413	0	1,715	0	71	0	0	1,786	413
September	937	0	1,330	108	609	0	0	1,939	1,045
October	2,629	0	584	3,122	1,109	0	125	1,818	5,751
November	4,015	1,861	0	6,375	1,512	500	200	4,073	10,390
December	6,681	1,679	0	10,013	2,272	500	405	4,857	16,694
January	7,258	2,043	0	10,181	3,121	1,000	400	6,564	17,439
February	5,685	2,134	0	8,625	2,350	500	375	5,359	14,310
March	6,505	1,785	0	8,186	2,374	0	200	4,359	14,691
April	4,144	1,475	0	6,231	1,465	0	0	2,940	10,375
May	2,007	506	0	4,918	1,022	0	0	1,528	6,925
June	625	0	1,560	0	425	0	0	1,985	625
Totals	41,455	11,483	6,789	57,759	16,330	2,500	1,706	38,808	99,214

TABLE 46

FINANCIAL STATEMENT

YEAR ENDED JUNE 30, 1971

Operating Revenues		
Sale of Water		$3,411,376.76
Hydrant Rental		112,693.00
Electric Power		2,505.08
Setting Meters		3,964.00
Repairing Meters		1,520.55
Repairs to Water Services		1,043.07
Repairs to Distribution Mains		7,103.50
Repairs to Hydrants		3,845.63
Installation of New Fire Supplies		6,600.00
Installation of New Water Services		73,965.00
Installation of New Water Mains		59,499.65
Water Meters-Revolving Fund		14,483.87
Sale of Pulpwood, Logs and Misc. Timber Products		3,257.34
Total Operating Revenue		$3,701,857.45
Operating Expenses		
Administrative	$233,908.47	
Source of Supply	446,275.69	
Transmission and Distribution	910,243.13	
Accounting and Commercial	255,184.74	
Taxes	689,813.68	
Employees Retirement System	80,298.00	
Social Security	51,752.96	
Total Operating Expense		*$2,667,476.67
Operating Income		$1,034,380.78
Add Non Operating Revenues		
Rental of Real Estate	$ 322.38	
Sale of Scrap Material	3,102.44	
Sale of Material	128.90	
Special Items	694.67	
Other	2,892.82	
Total Non-Operating Revenue		$ 7,141.21
Sub-Total		$1,041,521.99
Less Non-Operating Expenses		
Interest on Bonded Debt	$ 84,825.00	
Retirement-Serial Bonds	80,000.00	
Total Non-Operating Expense		$ 164,825.00
Net Income Payable to General Fund		$ 876,696.99

*See Table 47 for detailed account of Operating Expense.

TABLE 47

WATER SUPPLY BOARD OPERATING EXPENSES

YEAR ENDED JUNE 30, 1971

ADMINISTRATIVE

Salaries:				
001	Officials	$41,113.00		
	Clerical-Accounting	30,414.53		
	Engineering	99,036.82		
	Labor-General	12,544.32		
008	Sick Leave Payrolls	3,424.00		
009	Vacation Payrolls	8,563.75		
	Total		$195,096.42	
Services Other Than Personal:				
102	Expert Consultant and Other Service Fees	$ 7.00		
109	Fees Not Otherwise Classified	4,499.00		
111	Telephone and Telegraph	2,916.54		
112	Postage, Freight and Express	1,081.60		
115	Transportation of Persons-Conventions	373.00		
117	Travel Subsistence-Conventions	395.00		
118	Travel Subsistence-Other	10.00		
121	Printing and Binding	969.50		
131	Heat, Light and Power	1,630.72		
141	Repairs-Office Machinery	382.60		
142	Repairs-Automobiles	1,161.70		
150	Repairs-Building	288.87		
151	Maintenance and Servicing	82.80		
181	Laundry and Cleaning	684.00		
183	Dues and Subscriptions	272.80		
199	Miscellaneous Services	11,093.00		
	Total		$ 25,848.13	
Materials and Supplies:				
201	Stationery and Office Supplies	$ 1,012.82		
211	Motor Fuel	753.32		
213	Tires and Tubes	583.38		
214	Repair Parts and Supplies-Trucks and Autos	405.31		
241	Fuel	701.65		
244	Housekeeping Supplies and Minor Equipment	246.27		
268	Plumbing and Electrical Supplies	58.68		
299	Miscellaneous Materials and Supplies	79.16		
	Total		$ 3,840.59	
Special Items:				
331	Claims and Damages	$ 33.00		
350	Blue Cross and Physicians Services	7,498.55		
361	Expenses for Various Ceremonies	228.20		
	Total		$ 7,759.75	
Capital Outlay:				
502	Books, Maps and Charts	$ 176.49		
	Total		$ 176.49	
	Outstanding Commitments-Services Other than Personal		538.28	
	Outstanding Commitments-Materials and Supplies		648.81	
	Total Administrative			$233,908.47

SOURCE OF SUPPLY

Hydro-Electric Station:			
Salaries:			
001	Labor-Operation	$ 9,493.11	
	Labor-Care of Grounds	804.45	
	Repairs-Machinery and Equipment	599.40	
	Total		$ 10,896.96
Services Other Than Personal:			
111	Telephone and Telegraph	$ 343.79	
146	Repairs-Plant Equipment	1,644.82	
151	Maintenance and Servicing	79.55	
	Total		$ 2,068.16
Materials and Supplies:			
201	Stationery and Office Supplies	$ 909.00	
212	Lubricants	894.06	
241	Fuel	1,904.01	
268	Plumbing and Electrical Supplies	61.24	
	Total		$ 3,768.31
Water Purification Works:			
Salaries:			
001	Supervision	$13,616.70	
	Labor-Operation	68,997.95	
	Labor-Care of Grounds	5,835.34	
	Clerical	5,041.59	
	Technical	31,206.40	
	Total		$124,697.98
Services Other Than Personal:			
111	Telephone and Telegraph	$ 955.88	
112	Postage, Freight and Express	112.58	
115	Transportation of Persons-Conventions	40.00	
116	Transportation of Persons-Other	82.00	
117	Travel Subsistence-Conventions	140.00	
118	Travel Subsistence-Other	39.50	
131	Heat, Light and Power	81.29	
141	Repairs-Office Machinery	133.69	
142	Repairs-Trucks and Autos	32.25	
146	Repairs-Plant Equipment	2,292.86	
149	Repairs-Other Equipment	100.00	
150	Repairs-Buildings	47.60	
151	Maintenance and Servicing	109.32	
181	Laundry and Cleaning	1,821.00	
199	Miscellaneous Services	620.35	
	Total		$ 6,608.32
Materials and Supplies:			
201	Stationery and Office Supplies	$ 273.28	
202	Small Tools and Shop Supplies	155.53	
204	Wearing Apparel and Personal Supplies	198.90	
222	Repair Parts and Supplies - Plant Equipment	1,624.16	
229	Repair Parts and Supplies - Other Equipment	16.80	
231	Ferric Sulphate	59,136.90	
231	Lime	23,628.04	
231	Chlorine	5,560.00	
231	Sodium Silicofluoride	22,396.40	
231	Miscellaneous Laboratory Supplies	2,835.90	
241	Fuel	5,031.10	
244	Housekeeping and Minor Supplies	471.74	
268	Plumbing and Electrical Supplies	917.83	
272	Hydrants, Valves and Fittings	260.91	
273	Special Castings	143.75	
299	Miscellaneous Materials and Supplies	73.00	
	Total		$122,724.24

Special Items:			
302	Liability Insurance	$ 125.00	
	Total		$ 125.00
Capital Outlay:			
502	Books, Maps and Charts	$ 3.50	
512	Trucks and Tractors	4,644.00	
541	Laboratory Equipment	8,507.82	
	Total		$13,155.32
Scituate Reservoir:			
Salaries:			
001	Labor-Operation	$ 6,848.85	
	Labor-Care of Grounds	7,708.15	
	Total		$14,557.00
Services Other Than Personal:			
109	Fees Not Otherwise Classified	$ 7,491.65	
111	Telephone and Telegraph	268.80	
142	Repairs-Trucks and Autos	38.75	
	Total		$ 7,799.20
Materials and Supplies:			
214	Repair Parts and Supplies-Trucks and Autos	$ 58.22	
252	Seeds, Fertilizer, Trees and Shrubs	1,061.71	
266	Lumber and Hardware	498.00	
267	Paint and Painters' Supplies	106.75	
	Total		$ 1,724.68
Other Reservoirs:			
Salaries:			
001	Labor-Operation	$ 6,545.35	
	Labor-Care of Grounds	822.90	
	Total		$ 7,368.25
Services Other Than Personal:			
142	Repairs-Automobiles	$ 120.75	
149	Repairs-Other Equipment	10.00	
	Total		$ 130.75
Materials and Supplies:			
214	Repair Parts and Supplies-Trucks and Autos	$ 22.83	
261	Gravel, Sand and Stone	58.00	
	Total		$ 80.83
Forestry and Maintenance:			
Salaries:			
001	Supervision	$16,716.25	
	Labor-Operation	958.45	
	Labor-Care of Grounds	9,835.56	
	Total		$27,510.26
Services Other Than Personal:			
102	Expert Consultant and Other Service Fees	$ 111.00	
111	Telephone and Telegraph	217.59	
112	Postage, Freight and Express	38.44	
115	Transportation of Persons-Conventions	50.00	
117	Travel Subsistence-Conventions	286.50	
142	Repairs-Trucks and Autos	1,656.40	
149	Repairs-Other Equipment	217.45	

150	Repairs-Buildings	$ 450.00	
183	Dues and Subscriptions	32.50	
199	Miscellaneous Services	137.28	
	Total		$ 3,197.16
Materials and Supplies:			
202	Small Tools and Shop Supplies	$ 443.66	
204	Wearing Apparel and Personal Supplies	212.98	
212	Lubricants	96.04	
213	Tires and Tubes	2,074.41	
214	Repair Parts and Supplies-Trucks and Autos	1,272.46	
241	Fuel	2,960.55	
252	Seeds, Fertilizer, Trees and Shrubs	345.00	
259	Other Agricultural, Horticultural and Landscaping Supplies	1,249.44	
265	Fabricated Metal Products	265.00	
266	Lumber and Hardware	295.16	
267	Paint and Painters' Supplies	172.64	
	Total		$ 9,387.34
Capital Outlay:			
571	Agricultural and Landscaping Equipment	$ 1,247.00	
	Total		$ 1,247.00
General:			
Salaries:			
001	Clerical	$ 2,616.00	
	Labor-Operation	15,182.77	
	Labor-Care of Grounds	11,762.25	
	Repairs-Transmission Mains	178.40	
	Repairs-Care of Grounds-Rockland Cemetery	384.50	
008	Sick Leave Payrolls	6,056.60	
009	Vacation Payrolls	8,593.80	
025	Injured Employees Payrolls	1,380.40	
034	Holiday Payrolls	4,648.40	
	Total		$50,803.12
Services Other Than Personal:			
102	Expert Consultant and Other Service Fees	$ 84.00	
109	Fees Not Otherwise Classified	58.00	
131	Heat, Light and Power	10,936.93	
142	Repairs-Trucks and Autos	2,081.55	
151	Maintenance and Servicing	1,393.67	
181	Laundry and Cleaning	140.62	
199	Miscellaneous Services	315.00	
	Total		$15,009.77
Materials and Supplies:			
201	Stationery and Office Supplies	$ 91.47	
202	Small Tools and Shop Supplies	557.78	
204	Wearing Apparel and Personal Supplies	29.40	
211	Motor Fuel	3,251.16	
213	Tires and Tubes	207.15	
214	Repair Parts and Supplies-Trucks and Autos	241.24	
244	Housekeeping Supplies and Minor Equipment	113.60	
266	Lumber and Hardware	249.42	
267	Paint and Painters'Supplies	837.96	
269	Construction and Maintenance Materials Not Otherwise Classified	248.30	
291	Guns and Ammunition	20.75	
299	Miscellaneous Materials and Supplies	444.35	
	Total		$ 6,292.58

Special Items:				
350	Blue Cross and Physicians Service	$ 9,838.50		
	Total		$ 9,838.50	
	Outstanding Commitments-Services Other Than Personal		4,576.23	
	Outstanding Commitments-Materials and Supplies		2,002.73	
	Outstanding Commitments-Capital Outlay		706.00	
	Total - Source of Supply			$446,275.69

TRANSMISSION AND DISTRIBUTION

Pumping Stations:				
Salaries:				
001	Labor-Operation	$ 2,210.87		
	Total		$ 2,210.87	
Services Other Than Personal:				
111	Telephone and Telegraph	$ 1,943.32		
131	Heat, Light and Power	25,154.20		
146	Repairs-Plant Equipment	1,316.30		
150	Repairs-Buildings	605.00		
151	Maintenance and Servicing	308.74		
199	Miscellaneous Services	270.00		
	Total		$ 29,597.56	
Materials and Supplies:				
201	Stationery and Office Supplies	$ 430.00		
211	Motor Fuel	596.48		
222	Repair Parts and Supplies-Plant Equipment	319.45		
241	Fuel	944.94		
259	Other Agricultural, Horticultural and Landscaping Supplies	112.50		
268	Plumbing and Electrical Supplies	309.91		
	Total		$ 2,713.28	
Pipe Lines:				
Salaries:				
001	Clerical	$ 10,924.41		
	Labor-Operation	159,729.49		
	Repairs-Trucks and Autos	6,665.55		
	Repairs-Care of Grounds and Buildings	4,614.60		
	Repairs-Transmission Mains	5,363.74		
	Repairs-Distribution Mains	18,317.72		
	Repairs-Gates and Valves	28,939.29		
	Repairs-Hydrants	17,140.47		
	Repairs-Services	21,833.20		
	New Work-Distribution Mains	4,381.51		
	New Work-Gates and Valves	1,600.25		
	New Work-Hydrants	25,864.44		
	New Work-Services	48,516.03		
	Retirement Work-Distribution Mains	1,395.89		
	Retirement Work-Gates and Valves	127.95		
	Retirement Work-Hydrants	1,089.18		
	Retirement Work-Services	23,012.58		
	Total		$379,516.30	
Services Other Than Personal:				
102	Expert Consultant and Other Service Fees	$ 594.65		
111	Telephone and Telegraph	558.55		
112	Postage, Freight and Express	8.25		
131	Heat, Light and Power	426.47		

141	Repairs-Office Machinery	$ 74.95	
142	Repairs-Trucks and Autos	6,096.71	
143	Repairs-Construction and Other Automotive Equipment	351.20	
146	Repairs-Plant Equipment	543.20	
148	Repairs-Communication Equipment	1,481.49	
149	Repairs-Other Equipment	57.02	
150	Repairs-Buildings	142.52	
151	Maintenance and Servicing	50.00	
153	Repairs-Street Openings	20,458.98	
163	Rental-Other Equipment	1,314.00	
165	Rental of Land	273.00	
181	Laundry and Cleaning	723.00	
184	Hospitalization	10.00	
199	Miscellaneous Services	1,037.95	
	Total		$ 34,201.94
Materials and Supplies:			
201	Stationery and Office Supplies	$ 48.40	
202	Small Tools and Shop Supplies	2,457.17	
204	Wearing Apparel and Personal Supplies	330.28	
211	Motor Fuel	6,101.86	
212	Lubricants	372.84	
213	Tires and Tubes	844.34	
214	Repair Parts and Supplies-Trucks and Autos	5,066.74	
231	Medical Supplies	96.47	
241	Fuel	855.42	
244	Housekeeping Supplies and Minor Equipment	139.99	
261	Gravel, Sand and Stone	1,219.95	
262	Cement, Plaster and Related Products	592.35	
264	Fabricated Cement Products	114.00	
266	Lumber and Hardware	660.93	
267	Paint and Painters' Supplies	2,556.98	
268	Plumbing and Electrical Supplies	3,720.90	
271	Pipe-Asbestos Cement	4,339.07	
271	Pipe-Services	4,524.00	
272	Hydrants, Valves and Fittings	32,630.28	
272	Gates and Valves	14,439.50	
299	Miscellaneous Materials and Supplies	149.00	
	Total		$ 81,260.47
Special Items:			
331	Claims and Damages	$ 500.85	
	Total		$ 500.85
Capital Outlay:			
502	Books, Maps and Charts	$ 27.95	
521	Construction and Engineering Equipment	605.00	
	Total		$ 632.95
Other Structures and Improvements:			
721	New Main Extensions	$ 56,900.87	
	Total		$ 56,900.87
Distribution Reservoirs:			
Services Other Than Personal:			
111	Telephone and Telegraph	$ 395.42	
131	Heat, Light and Power	64.05	
	Total		$ 460.47

Materials and Supplies:			
222	Repair Parts and Supplies-Plant Equipment	$ 204.35	
252	Seeds, Fertilizer, Trees and Shrubs	1,185.21	
	Total		$ 1,389.56
Capital Outlay:			
561	Shop and Plant Equipment	$ 16,560.00	
	Total		$ 16,560.00
Metering:			
Salaries:			
001	Supervision	$ 9,393.48	
	Labor-Operation	11,982.18	
	Repairing Meters	5,795.28	
	Removing and Setting Meters	19,041.18	
	Installation-New Encoder Registers	16,346.35	
	Testing Meters	2,532.47	
	Inspection-Services	5,744.81	
	Total		$ 70,835.75
Services Other Than Personal:			
142	Repairs-Trucks and Autos	$ 33.75	
	Total		$ 33.75
Materials and Supplies:			
202	Small Tools and Shop Supplies	$ 1,093.54	
204	Wearing Apparel and Personal Supplies	175.70	
214	Repair Parts and Supplies-Trucks and Autos	3.70	
231	Medical, Chemical and Laboratory Supplies	38.75	
266	Lumber and Hardware	126.97	
268	Plumbing and Electrical Supplies	486.38	
274	Meter Parts	20,504.04	
	Total		$ 22,429.08
General:			
Salaries:			
001	Repairs-Trucks and Autos	$ 3,483.36	
	Collection-Overdue Accounts	4,877.95	
	Labor-Operation	111.60	
008	Sick Leave Payrolls	21,575.30	
009	Vacation Payrolls	18,815.20	
025	Injured Employees Payrolls	3,328.00	
034	Holiday Payrolls	13,451.20	
	Total		$ 65,642.61
Services Other Than Personal:			
109	Fees Not Otherwise Classified	$ 373.07	
146	Repairs-Plant Equipment	3,605.35	
150	Repairs-Buildings	674.70	
151	Maintenance and Servicing	381.51	
197	Shops Revolving Fund	101.93	
199	Miscellaneous Services	448.00	
	Total		$ 5,584.56
Materials and Supplies:			
201	Stationery and Office Supplies	$ 642.49	
202	Small Tools and Shop Supplies	666.50	
212	Lubricants	42.98	
222	Repair Parts and Supplies-Plant Equipment	63.00	
231	Medical, Chemical and Laboratory Supplies	342.45	
244	Housekeeping Supplies and Minor Equipment	506.48	

265	Fabricated Metal Products	$ 36.00		
266	Lumber and Hardware	79.80		
268	Plumbing and Electrical Supplies	53.24		
	Total		$ 2,432.94	
Special Items:				
350	Blue Cross and Physician Services	$ 23,682.20		
	Total		$ 23,682.20	
	Outstanding Commitments-Services Other Than Personal		3,165.77	
	Outstanding Commitments-Materials and Supplies		12,632.85	
	Outstanding Commitments-Capital Outlay		58,893.95	
	Outstanding Commitments-New Main Extensions		38,964.55	
	Total-Transmission and Distribution			$910,243.13

ACCOUNTING AND COMMERCIAL

Salaries:				
001	Supervision	$ 9,386.95		
	Clerical	96,769.06		
	Meter Reading	60,722.00		
	Labor-Operation	4,144.00		
008	Sick Leave Payroll	6,570.90		
009	Vacation Payroll	8,691.40		
025	Injured Employees Payrolls	312.00		
034	Holiday Payrolls	813.20		
	Total		$187,409.51	
Services Other Than Personal:				
102	Expert Consultant and Other Service Fees	$ 63.00		
109	Fees Not Otherwise Classified	6.00		
111	Telephone and Telegraph	2,745.87		
112	Postage, Freight and Express	1,080.15		
116	Transportation of Persons-Carfares	1,009.30		
131	Heat, Light and Power	1,630.78		
141	Repairs-Office Machinery and Equipment	1,406.64		
142	Repairs-Trucks and Autos	88.25		
161	Rental of Office Machinery and Equipment	442.65		
181	Laundry and Cleaning	1,687.44		
183	Dues and Subscriptions	12.00		
190	Data Processing	8,893.84		
199	Miscellaneous Services	33,971.15		
	Total		$ 53,037.07	
Materials and Supplies:				
201	Stationery and Office Supplies	$ 1,992.39		
203	Educational and Recreational Supplies	385.41		
211	Motor Fuel	760.54		
214	Repair Parts and Supplies-Trucks and Autos	303.43		
221	Repair Parts and Supplies-Office Machinery	27.90		
241	Fuel	2,086.32		
244	Housekeeping Supplies and Minor Equipment	99.84		
299	Miscellaneous Materials and Supplies	66.72		
	Total		$ 5,722.55	
Special Items:				
331	Claims and Damages	$ 250.00		
350	Blue Cross and Physicians Services	7,588.85		
	Total		$ 7,838.85	

Capital Outlay:			
501 Office Machinery, Furniture and Equipment	$ 400.00		
Total		$ 400.00	
Outstanding Commitments-Services Other Than Personal		519.22	
Outstanding Commitments-Materials and Supplies		257.54	
Total-Accounting and Commercial			$ 255,184.74
Taxes			689,813.68
Employees Retirement System			80,298.00
Social Security F.O.A.S.I.			51,752.96
Total Operating Expense			$2,667,476.67

TABLE 48

SUMMARY OF ANNUAL WATER WORKS REVENUES 1930-1971

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	1,409,269.47	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	1,491,910.63	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
1971	3,411,376.76	297,621.90	3,708,998.66

*October 1, 1969 - June 30, 1970.

TABLE 49

STATEMENT OF REVENUE - ESTIMATED AND ACTUAL

YEAR ENDED JUNE 30, 1971

Account	Estimated Revenue	Actual Revenue
Water Rents	$3,436,311.00	$3,411,376.76
Hydrant Rental	114,000.00	112,693.00
Electricity	15,000.00	2,505.08
Meter Revolving Fund	8,000.00	14,483.87
Repairing and Setting Meters	6,500.00	5,484.55
Fire Supplies, Gate Valves and Miscellaneous Repairs	23,200.00	18,592.20
New Service Installations	120,000.00	73,965.00
New Main Extensions	80,000.00	59,499.65
Rentals	383.00	322.38
Other Miscellaneous Receipts	19,617.00	10,076.17
Total	$3,823,011.00	$3,708,998.66

TABLE 50

STATEMENT OF WATER WORKS DEPRECIATION AND EXTENSION FUND

YEAR ENDED JUNE 30, 1971

	Investment	Cash	Due from Other Funds	Total
Balance - June 30, 1970	$1,850,000.00	$ 28,702.34	Nil	$1,878,702.34
Increase during Year Ended June 30, 1971	8,920,000.00	8,911,701.94		
Disbursements during Year Ended June 30, 1971	8,790,000.00	8,920,000.00		
Balance - June 30, 1971	$1,980,000.00	$ 20,404.28	Nil	$2,000,404.28

TABLE 51

STATEMENT OF SERIAL BONDS OUTSTANDING

YEAR ENDED JUNE 30, 1971

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	3¼	1962	1992	$25,000.00	$1,100,000.00	$ 915,000.00
New 40 Million Gallon Distribution Reservoir	3¼	1962	1992	55,000.00	2,050,000.00	1,655,000.00
Total Serial Bonds and Requirements				$80,000.00	$3,150,000.00	$2,570,000.00

TABLE 52

A SUMMARY OF INVENTORIES OF PERSONAL PROPERTY

YEAR ENDED JUNE 30, 1971

REMOVABLE PROPERTY INVENTORY:		$219,483.91
SOURCE OF SUPPLY:		
Purification Works	$29,371.71	
Laboratory	3,206.74	
Raw Water Pumping Station	1,139.25	
General and Reforestation	6,021.33	39,739.03
TRANSMISSION AND DISTRIBUTION:		
Pipe Lines	$164,032.58	
Pumping Stations	334.12	
Garage	9,534.94	173,901.64
METERING		71,994.82
SUPPLIES		2,005.76
Total Personal Property Inventory		$507,125.16

TABLE 53

STATEMENT OF METER REVOLVING FUND

YEAR ENDED JUNE 30, 1971

Cash Balance - June 30, 1970		$10,000.00
Outstanding Commitments - June 30, 1970		21,718.27
Receipts - July 1, 1970 to June 30, 1971		84,045.01
Total Available		$115,763.28
Disbursements - June 30, 1971	$38,324.67	
Outstanding Commitments - June 30, 1971	52,954.74	
Transferred as Income to General Fund - June 30, 1971	14,483.87	
Total Disbursements		$105,763.28
Cash Balance - June 30, 1971		$ 10,000.00

TABLE 54

STATEMENT OF WATER METER CONVERSION REVOLVING FUND

YEAR ENDED JUNE 30, 1971

Cash Balance - June 30, 1970		$29,130.91
Outstanding Commitments - June 30, 1970		17,179.75
Receipts - July 1, 1970 to June 30, 1971		38,934.15
Total Available		$85,244.81
Disbursements - July 1, 1970 to June 30, 1971	$48,351.00	
Outstanding Commitments - June 30, 1971	19,440.00	
Total Disbursements		$67,791.00
Cash Balance - June 30, 1971		$17,453.81

TABLE 55

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 - May 31, 1971	$8,892,616.19	
Transferred to Federal Program - July 29, 1970	100,000.00	
Transferred to Federal Program - August 25, 1970	375,000.00	
Transferred to Federal Program - February 19, 1971	350,000.00	
Total Disbursements		$ 9,717,616.19
Unexpended Balance of Authorized Bond Issue - June 30, 1971		$ 611,383.81

TABLE 56

CONSTRUCTION OF RAPID SAND FILTERS - PURIFICATION PLANT

Transferred from Tunnel and Aqueduct Account - April 12, 1967		$2,500,000.00
Disbursements - June 30, 1971	$1,111,383.81	
Total Disbursements		$1,111,383.81
Balance - June 30, 1971		$1,388,616.19

TABLE 57

FEDERAL PROGRAMS

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

	Adjusted Allotments	Encumbrances	Expenditures	Unencumbered Balance
Land Condemnation and Easements	$ 350,000.00	Nil	$ 208,756.74	$141,243.26
Construction	13,786,000.00	$ 6,063.00	13,788,478.66	-8,541.66
Architectural and Engineering	737,200.00	26,082.54	691,008.64	20,108.82
Legal and Administrative	5,240.00	Nil	5,025.00	215.00
Totals (EDA 01-1-00087)	$14,878,440.00	$32,145.54	$14,693,269.04	$153,025.42

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

Construction	$1,917,900.00		$1,913,511.10	$4,388.90
Architectural and Engineering	131,000.00		129,300.59	1,699.41
Totals (EDA 01-1-00088)	$2,048,900.00		$2,042,811.69	$6,088.31

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

Construction	$1,153,104.07	Nil	$1,153,104.07	Nil
Architectural and Engineering	57,377.06	Nil	57,377.06	Nil
Totals (EDA 01-1-00089)	$1,210,481.13		$1,210,481.13	

SUMMARY FEDERAL PROGRAMS (87)

Land Condemnation and Easements	$ 350,000.00	Nil	$ 208,756.74	$141,243.26
Construction	16,857,004.07	$ 6,063.00	16,855,093.83	-4,152.76
Architectural and Engineering	925,577.06	26,082.54	877,686.29	21,808.23
Legal and Administrative	5,240.00	Nil	5,025.00	215.00
Totals Summary (EDA 00087)	$18,137,821.13	$32,145.54	$17,946.561.86	$159,113.73

TABLE 58

TAXES PAID TO VARIOUS CITIES AND TOWNS

(JULY 1, 1970 TO JUNE 30, 1971)

Location of Property	Land Area (Acres)	ASSESSED VALUATIONS Land	Buildings and Improvements	Total	TAX Rate per $100	Amount Paid
City of Warwick	0.060	$ 160.00	$ 0	$ 160.00	$----	$ 7.18
City of Cranston	110.627	47,620.00	942,340.00	989,960.00	----	50,537.48
Town of Foster	1,994.280	198,930.00	3,000.00	201,930.00	5.60	11,308.08
Town of Glocester	73.300	14,980.00	0	14,980.00	5.50	823.90
Town of Johnston	103.130	42,163.00	321,937.00	364,100.00	4.95	18,022.95
Town of North Providence	8.529	29,880.00	185,100.00	214,980.00	5.18	11,135.96
Town of Scituate	13,149.030	1,112,500.00	9,250,000.00	*10,375,000.00	5.75	596,562.50
Town of West Warwick	8.940	34,740.00	0	34,740.00	3.90	1,354.86
Total Real Estate	15,447.896			$12,195,850.00		**$689,752.91

*Includes $12,500.00 Tangible Personal.
**In addition to this amount, $53.32 was paid to the West Glocester Fire District and $7.45 to the Harmony Fire District.

NOTE: Cranston was paid three installments totalling $36,678.04 @ $4.94 per $100 tax rate and one payment of $13,859.44 @ $5.60 per $100 tax rate.

TABLE 59

SUMMARY OF STATISTICS

PROVIDENCE WATER SUPPLY BOARD

YEAR ENDED JUNE 30, 1971

*PROVIDENCE (City or Town)	PROVIDENCE (County)	RHODE ISLAND (State)

GENERAL STATISTICS

Population of Providence (1970 Federal Census)	176,920
Estimated population supplied in suburbs	253,895
Total population supplied	430,815
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	81.8% by gravity; 18.2% by pumping

STATISTICS OF CONSUMPTION OF WATER

1.	Estimated population supplied	430,815
2.	Total raw water influent for the year, gallons	21,943,075,000
3.	Average daily raw water influent, gallons	60,118,000
4.	Raw water consumption per capita, gallons daily	145.1
5.	Total consumption for the year, gallons	21,933,227,000
6.	Total registration on customers' meters, gallons	19,804,927,500
7.	Percentage of consumption accounted for on customers' meters	90.3%
8.	Average daily consumption, gallons	60,091,000
9.	Per capita consumption, gallons daily	142.1
10.	Gallons per day to each tap	928

*Supplying Providence, Cranston, East Providence, and portions of Johnston, North Providence, Warwick, Smithfield, Greenville, Coventry, West Warwick and Scituate.

TABLE 59 (Continued)

SUMMARY OF STATISTICS

PROVIDENCE WATER SUPPLY BOARD

YEAR ENDED JUNE 30, 1971

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	22,161,606,000
6.	Average quantity filtered per day, gallons	60,717,000
7.	Total filtered water delivered to the distribution system during the year, gallons	21,927,807,000

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	14,416.77 feet
4.	Removed	4,954.93 feet
5.	Net Increase	9,461.84 feet
6.	Total now in use	813.18 miles
7.	Number of leaks per mile	0.14
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	146
11.	Number removed	128
12.	Net increase	18
13.	Number of hydrants now in use	4,964
14.	Number of stop gates installed	49
15.	Number removed	20
16.	Net increase	29
17.	Number of stop gates now in use	11,160

TABLE 59 (Continued)

SUMMARY OF STATISTICS

PROVIDENCE WATER SUPPLY BOARD

YEAR ENDED JUNE 30, 1971

STATISTICS RELATING TO THE DISTRIBUTION SYSTEM
(Continued)

18.	Kind of services	Lead, Copper and Cast Iron
19.	Sizes	½-inch to 30 inches
20.	Number of service taps installed	403
21.	Number removed	501
22.	Net decrease	98
23.	Number of services now in use	*64,769
24.	Number of meters installed	1,239
25.	Number removed or condemned	1,215
26.	Net increase	24
27.	Number of meters now in use	**65,111
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.

TABLE 60

YEAR ENDED JUNE 30, 1971

COMPARISON OF PROVIDENCE TAP WATER
CHARACTERISTICS WITH STANDARDS AND
QUALITY GOALS

	1962 U.S. Public Health Service Drinking Water Standards	American Water Works Association Potable Water Quality Goals	Providence Tap Water
Physical Characteristics:			
Color	15 units	less than 3 units	3
Turbidity	5 units	less than 0.1 unit	0.0
Odor	3	no odor	no odor
Taste	*	no taste objectionable	no taste
Chemical Characteristics (milligrams per liter):			
Arsenic	0.01	0.01	0.000
Barium	1.	1.	0.007
Cadmium	0.01	0.01	less than 0.002
Chromium	0.05	0.05	0.001
Copper	1.	less than 0.20	0.00
Fluoride	0.80-1.30	0.80-1.30	1.00
Iron	0.30	less than 0.05	less than 0.02
Lead	0.05	0.05	0.00
Manganese	0.05	less than 0.01	0.00
Mercury	**0.005	0.005	less than 0.0005
Methylene Blue Active Substances	0.5	less than 0.20	0.00
Nitrate (NO_3)	45.	45.	0.05
Phenols	0.001	0.001	0.000
Selenium	0.01	0.01	0.00
Silver	0.05	0.05	less than 0.02
Total Dissolved Solids	500.	200.	72.
Zinc	5.	less than 1.	0.0
Common chlorinated hydrocarbon pesticides			undetectable above screening level of 0.002

*"Drinking water should contain no impurity which would cause offense to the sense of sight, taste, or smell."

**Tentative standard.