

IN CITY COUNCIL

APR 21 1977

READ:

WHEREUPON IT IS ORDERED THAT
THE SAME BE RECEIVED.*James Leppla*
CLERK

CITY DOCUMENT



ANNUAL REPORT
of the
WATER SUPPLY BOARD
of the
CITY OF PROVIDENCE

For the Year Ended June 30, 1976

~~~~~ the cover ~~~~

*In this Bicentennial Year . . . the Scituate  
Oak, on Water Supply Board watershed  
property, estimated to have come into  
existence about the time our great nation  
was formed . . . .*

**ADMINISTRATIVE OFFICE**  
**Water Supply Board**  
**City of Providence**

July 1, 1976

To the Honorable Vincent A. Cianci, 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-sixth annual report of the Water Supply Board, for the year ended June 30, 1976.

On July 24, 1975, James A. Lombardi, who is also Administrative Assistant to the Chief Engineer, was appointed Secretary of the Water Supply Board to succeed Austin B. McManus, who retired during the previous fiscal year.

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*Ugo Riccio, husband of Rose Riccio and a member of the Providence Water Supply Board since March 18, 1948, died on October 17, 1975.*

*During his tenure, many improvements were made within the system and he favored us with his judgment in important matters that came before the Board involving the City of Providence water supply.*

*Mr. Riccio will be remembered for the distinguished and exemplary manner in which he served the Board for more than 27 years.*

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On October 22, 1975, Alfred T. Ciccone was appointed a member of the Board to fill the vacancy brought about by the death of Ugo Riccio.

The Board held regular semi-weekly meetings throughout the year at which careful consideration was given to the many problems arising in connection with maintenance and operating activities, the department's

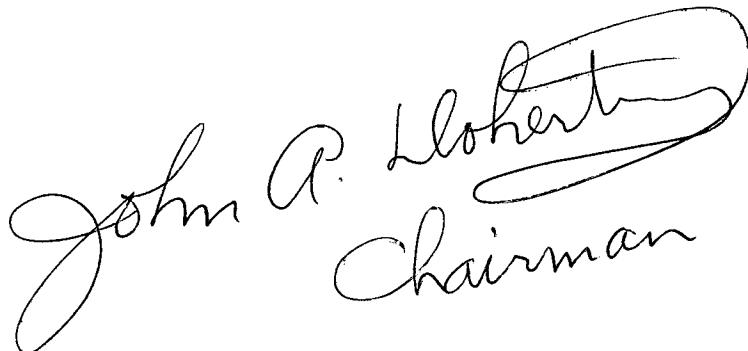
financial structure, matters relative to taxes levied on property owned in nearby communities, and other departmental duties which properly come before the Board. Special meetings were held as required throughout the year for consideration of particular problems.

The report of the Chief Engineer is appended hereto. It contains many important tables and statistical data, 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,

WATER SUPPLY BOARD

John A. Doherty, Chairman  
Earl H. Ashley  
Alfred T. Ciccone  
Robert F. Howard  
Vincent J. Cirelli  
Raymond Cola  
Vincent T. Izzo, Ex-Officio



A handwritten signature in cursive ink. The top line reads "John A. Doherty" and the bottom line reads "Chairman". The signature is written in a fluid, flowing style.

## REPORT OF THE CHIEF ENGINEER

Providence, R. I.  
July 1, 1976

### WATER SUPPLY BOARD CITY OF PROVIDENCE

Gentlemen:

The following is the report of the Providence Water System for the fiscal year ended June 30, 1976.

Precipitation on the 92.8 square mile drainage area this past year amounted to 57.79 inches; this was 10.61 inches more than the total of 47.18 for the 1975 year and 9.67 inches less than the maximum of record . . . . 67.46 inches which occurred during the year ended June 30, 1973. Runoff totaled 30.24 inches compared with 22.74 for the previous year and the 40.97 inches maximum of record recorded for fiscal 1956.

Consumption increased to 64,737,000 gallons per day, up 1,098,000 gallons per day from the figure of 63,639,000 for the year ended June 30, 1975. The maximum day's use was 117,980,000 gallons on June 24, 1976; this established a new record, exceeding by 8,177,000 gallons the previous high of 109,803,000 gallons set August 14, 1974. The maximum hourly rate of 162,912,000 gallons per day on June 24 marks a new high in the 60-year record.

Water sold to Kent County Water Authority, the City of Cranston (for distribution to its western section), Warwick, East Providence, East Smithfield Water Company, Smithfield Water Department and the Greenville Water District totaled 6,239,526,125 gallons, an average of 17,047,886 gallons per day. These seven wholesale customers accounted for 26.33% of the total consumption. Summaries relating to quantities metered to these users are shown in Tables 40, 41 & 42 of the Appendix.

A pitometer survey to determine the condition and adequacy of the Providence Water Supply Board transmission system was completed during the year, as well as final plans and specifications for the expansion of Longview Reservoir.

The department's two 16-millimeter sound films in color, entitled "Pipeline for Tomorrow" and "Pure Water - Lifeline of Providence", were shown to groups during visits to the Philip J. Holton Water Purification Works. The first of the two, a pictorial review of the Major Construction Projects completed in 1970, was viewed mainly by student and professional engineers. The other film also was screened for these people, in addition to showings for lay persons and those students having a general interest in water supply. It describes the source of supply, forestry operations, the collection, treatment, transmission, distribution and pumping of the water, together with engineering activities, maintenance and servicing, and metering and billing.

## SOURCE OF SUPPLY

**RAINFALL AND RUNOFF** The rainfall on the 92.8 square mile Scituate watershed above Gainer Memorial Dam was measured by rainfall gauges at Rocky Hill, Hopkins Mills, North Scituate, Westcott District and Gainer Dam. A total of 57.79 inches was recorded, which was 8.91 inches more than the 60-year (July 1916-June 1976) average of 48.88 inches, and 85.7% of the maximum, 67.46 inches, which occurred during the year ended June 30, 1973. The runoff totaled 30.24 inches; this was 5.40 inches more than the 60-year average of 24.84 inches, and 73.8% of the maximum, 40.97 inches, which occurred during the July 1955-June 1956 year.

**STORAGE, DRAFT AND YIELD** On July 1, 1975 the combined storage on the watershed, including Regulating, Westconnaug, Barden, Moswansicut, Ponaganset and Scituate Reservoirs, amounted to 39,322,000,000 gallons or 95.3% of combined capacity. At the end of the year the combined storage was 39,144,000,000 gallons or 94.9% of capacity.

The total draft from the Scituate watershed for the year was 48,950,370,000 gallons, an average of 133,740,000 gallons daily. The draft for water supply purposes was 24,016,920,000 gallons and the discharge into the north branch of the Pawtuxet River totaled 24,933,450,000 gallons.

The yield from the watershed for the year totaled 48,772,370,000 gallons, an average of 133,260,000 gallons per day. This was 23,580,000 gallons per day more than the 109,680,000 gallons average daily yield for the 60-year period July 1916-June 1976.

**WATERSHED MANAGEMENT - FORESTRY OPERATIONS** The Scituate Reservoir watershed lands are professionally managed in a manner to insure runoff of the highest quality. Woodlands adjacent to the Scituate and its five tributary reservoirs provide those natural environmental conditions conducive to optimum infiltration of precipitation.

The metropolitan nature of Rhode Island, and the importance of its potable water supply, demand that major emphasis be placed on protection of land and water resources. Pressures to develop privately owned property on the 92.8 square mile watershed increase each year. Scrutiny of not only new development but also existing housing sites is a necessary part of the watershed management program.

Trespass violations of watershed property are ever changing in scope and significance. Of the 665 violations recorded during the year, 264 were acts of vandalism. Costly vandalism occurred at Gainer Memorial Dam and Neutaconkanut Distribution Reservoir. Recent passage of a trespass law by the Rhode Island General Assembly and its acceptance by the courts has helped the enforcement program.

The Tunk Hill Fire Tower was manned on 34 high-hazard days during the fall of 1975 and spring of 1976. Seven fires occurred on departmental forestland but were quickly brought under control causing minimal damage. The department cooperates with the State Division of Forest Environment and local volunteer fire departments in prevention and suppression efforts.

Insect and disease infestations were at endemic levels. Mortality to hardwoods, predominantly white oak, as described in the 1975 **Annual Report**, is prevalent in forest stands which were defoliated in two or three successive years by gypsy moth (**Porthetria dispar**). Two red-pine plantations in the Peep toad and Elmdale forest blocks are incurring significant mortality. A species of bark beetle is suspected to be the causal agent. **Fomes annosus** root rot disease continues to be an important consideration in plantation management.

On June 17, 1976 the watershed forests were included in a Southern New England forestry press tour sponsored by the American Forest Institute. News media participants reviewed examples of a harvest operation in an upland hardwood stand, mortality caused by gypsy-moth defoliation, white-pine management, plantation culture, and ecological succession in a 50-year old pine plantation.

Forest-culture practices included release of planted conifers, aesthetic improvement of roadside forest stands, thinning of plantations, and reforestation. Major timber-stand improvement work occurred adjacent to the Gainer Dam access road. Hardwood growth was removed from forest stands adjacent to the coagulation basins. Contractual and departmental woods operations resulted in the harvest of an estimated 580,600 board feet consisting of sawlogs, pulpwood, and fuelwood.

Turfed areas at the Purification Works, Gainer Dam, distribution reservoirs, aqueducts, and other facilities received necessary maintenance. Herbicidal brush control was applied to forest access roads, roadside fencing, aqueducts, rights-of-way and other miscellaneous sites. Additions to the forest access road system were made in the Westconnaug and Peep toad forest blocks. Other operations included repair of vandalized facilities; installation, maintenance, and repair of fencing and gates; and routine maintenance of pipelines, firelanes, and grounds.

**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 approximately 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 1975-June 1976) amounted to 96,176. Based on a 35-hour week, the water was receiving one test or another every 68 seconds.

Chemists carried out coagulation tests on the raw water with various amounts of chemicals, simulating all the 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. E.P.A. Interim Primary Drinking Water Regulations. The actual number of bacteriological samples collected from our distribution system amounted to 3,177, an average of 265 per month.

In addition, laboratory personnel cooperated with the E.P.A. in a carefully planned corrosion control study which consisted of three early morning samplings at 15 locations throughout the system, all private homes. Elements of interest were copper, lead, iron and zinc. It may be reported that the results, which have been made available to the department but not publicly released to date by the E.P.A., our's being but one part of a multi-city survey, are favorable. Included also were determinations for hardness, alkalinity, pH, specific conductance, sulfate, chloride and sodium on treatment plant raw and finished water.

From March 1 through April 3, 1976, Phase I of an intended four-phase E.P.A. National Organics Monitoring Survey took place. Phases II, III and IV are scheduled at three-month intervals and will include up to 15 cities each time. Again, laboratory technicians assisted federal representatives in setting up the 48-hours continuous monitoring and sampling device, disassembled it at the end of the time period, obtained additional specimens for other analyses, and shipped the equipment and containers to designated governmental facilities. This study should conclude in late spring of 1977 after which a compilation of the accumulated data is to be published by the E.P.A.

**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 centralized control system. Power loss is minimized and almost nil, due to the availability of three sources . . . . . public, hydro-generated and auxiliary diesel generator.

All chemical feeding machines are automatically controlled in direct proportion to the volume of water being treated. They are installed in multiple units, providing standby machines that may be placed in service in case of mechanical failure. Ferri-Floc and quicklime are stored in large silos and are transferred pneumatically, by remote control, to hoppers located above each feeder. Sodium silicofluoride is received in 400-pound drums and is conveyed pneumatically to collectors above the fluoridizers. Chlorine is handled in one-ton containers which are stored in a room directly above the chlorinizers.

The treatment process consists of influent aeration, mixing, coagulation and finally, filtration. Chemicals employed include Ferri-Floc (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 1975-June 1976): 2,837,452 pounds of Ferri-Floc before influent aeration, 2,531,763 pounds of quicklime after influent aeration and before mixing, 114,869 pounds of chlorine prior to filtration, and 282,625 pounds of sodium silicofluoride after filtration . . . . . a grand total of 5,766,709 pounds.

During the year, 23,694.06 million gallons were delivered into the distribution system, an average of 64.74 million gallons daily. The maximum hourly demand in the system was at the rate of 162.91 million gallons daily; consumption during the maximum day, June 24, 1976, amounted to 117.98 million gallons. The difference between plant production and system demands was provided from storage reservoirs on our distribution system.

## DISTRIBUTION

At the end of the year the Water Supply Board distribution system in Providence, Cranston, Johnston and North Providence contained 4,409,623.89 feet (835.16 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 66,129 services, 16,628 valves and 5,096 hydrants in use on June 30, 1976. The amount of pipe laid during the year totaled 28,112.12 feet; 4,644.40 feet were removed, resulting in a net increase to the system of 23,467.72 feet. Services installed and removed were 396 and 272, respectively, a gain of 124. There was an increase of 47 valves, 65 having been installed and 18 removed, and a gain of 54 hydrants . . . . 105 installed and 51 removed. The number of meters on active services totaled 66,700.

Total water distribution was 23,693.60 million gallons, or 64.74 million gallons per day. The low service, a gravity supply, consumed 77.5%; 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 22.5%. Registration on customers' meters totaled 20,766.75 million gallons, accounting for 87.7% of the amount distributed.

Leaks in the transmission and distribution mains totaled 68 during the year, 27 occurring at joints and 41 as a result of ruptured mains. Leaks at joints averaged one for every 31 miles of pipe and total leaks averaged one for every 12 miles of main. Of the 68 leaks, 22 were caused by various contractors excavating while performing unrelated work.

## **ENGINEERING**

The engineering staff has been engaged in the preparation of various specifications and estimates, plans for extensions of the distribution system into real estate developments, and problems related to the operation and maintenance of water works structures and equipment. 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. Services included computations of quantities and preparation of monthly estimates for periodic payments on all outstanding contracts.

Inspections within commercial establishments for potential backflow and cross-connection hazards were intensified. Where changes were ordered, follow up visits were made.

A pitometer survey of the Water Supply Transmission and Distribution System, started during the fiscal year ended June 30, 1975, was completed and a final report submitted with the recommendation to construct a new high service force main from Neutaconkanut Pumping Station, an addition to Longview high service reservoir and interconnection of high service and low service systems with a pressure reducing valve near Hope and Barnes Streets. The pitometer study indicated mains and valves are in good condition with low coefficients of friction. It similarly revealed that the Supplemental Tunnel and Aqueduct project completed in 1970 had produced a marked general improvement in the system. During the year, CE Maguire, Inc. completed plans and specifications for the additional Longview Reservoir construction, an improvement needed to meet the growing demands on the system in the high service area.

## **COMMERCIAL AND ACCOUNTING**

At the end of the fiscal year the Water Supply Board had 66,129 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 the division also were carried out during the year such as reading meters, 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.

Conversion of installed meters to a remote reading system has progressed satisfactorily. During the year 2,087 installations were made, bringing the total to 27,815 since the program was initiated in May 1968.

## FINANCIAL

The gross income for the year totaled \$5,328,355.33. Revenue from the sale of water alone amounted to \$4,855,378.47. The remaining income of \$472,976.86 was received from other sources, including hydrant rentals, installation of services and fire supplies, and miscellaneous items. At the end of the year unpaid water bills totaled \$791,010.54, or 15.7% of the total net billing.

Expenses for the year, including principal payments of \$280,000.00 on serial bonds outstanding and \$687,085.00 in interest charges, amounted to \$5,049,979.41 . . . up \$86,689.48 from the previous year. Bonded debt at the close of the year was \$12,295,000.00. It is anticipated that for the year ending June 30, 1977 expenses will again rise substantially due to higher material costs, higher wages and fringe benefits, and higher energy costs.

Financial accounts of the department, together with other statistical data for the year ended June 30, 1976, are appended to this report.

Respectfully submitted,



John E. Rogers, P.E.  
Chief Engineer

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TABLE 1  
MONTHLY RAINFALL IN INCHES ON SCITUATE WATERSHED  
YEAR ENDED JUNE 30, 1976

| STATIONS ON WATERSHED |            |               |                |          |            |         |
|-----------------------|------------|---------------|----------------|----------|------------|---------|
| 1975-1976             | Rocky Hill | Hopkins Mills | North Scituate | Westcott | Gainer Dam | Average |
| July                  | 4.02       | 4.21          | 2.68           | 2.91     | 2.12       | 3.19    |
| August                | 4.44       | 3.51          | 3.87           | 4.27     | 3.66       | 3.95    |
| September             | 8.38       | 8.48          | 7.09           | 6.75     | 7.18       | 7.58    |
| October               | 7.64       | 6.92          | 6.97           | 6.26     | 6.33       | 6.82    |
| November              | 7.23       | 6.81          | 6.87           | 6.79     | 6.76       | 6.89    |
| December              | 7.11       | 5.32          | 6.04           | 5.65     | 5.69       | 5.96    |
| January               | 8.05       | 7.89          | 7.60           | 7.44     | 7.09       | 7.61    |
| February              | 3.95       | 3.22          | 3.35           | 3.49     | 3.13       | 3.43    |
| March                 | 4.05       | 3.64          | 3.49           | 2.98     | 3.51       | 3.53    |
| April                 | 2.71       | 2.87          | 2.33           | 2.33     | 1.91       | 2.43    |
| May                   | 3.29       | 3.73          | 2.76           | 3.20     | 3.05       | 3.21    |
| June                  | 3.63       | 3.75          | 3.57           | 2.83     | 2.15       | 3.19    |
| Total                 | 64.50      | 60.35         | 56.62          | 54.90    | 52.58      | *57.79  |
| Monthly Average       | 5.38       | 5.03          | 4.72           | 4.58     | 4.38       | 4.82    |

\*Total of Averages

TABLE 2  
MONTHLY AND YEARLY RAINFALL IN INCHES ON SCITUATE WATERSHED

| Year      | BASIS:-YEARS ENDED SEPTEMBER 30 |      |      |      |      |      |      |      |      |       |       |       | Jan. Dec. |      |       |
|-----------|---------------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-----------|------|-------|
|           | Oct.                            | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May  | June | July  | Aug.  | Sept. | Total     | Year | Total |
| 1915-1916 | 2.75(e)                         | 2.88 | 5.86 | 1.88 | 5.88 | 2.46 | 3.60 | 4.83 | 5.71 | 7.38  | 1.33  | 1.24  | 45.80     | 1916 | 42.56 |
| 1916-1917 | 2.61                            | 2.34 | 3.30 | 3.96 | 2.18 | 4.91 | 2.70 | 4.15 | 4.54 | 1.51  | 6.13  | 2.66  | 40.99     | 1917 | 43.16 |
| 1917-1918 | 6.71                            | 0.48 | 3.23 | 3.56 | 3.73 | 2.15 | 4.56 | 3.12 | 4.49 | 5.13  | 4.14  | 8.79  | 50.09     | 1918 | 47.09 |
| 1918-1919 | 1.07                            | 2.60 | 3.75 | 4.89 | 3.42 | 6.05 | 4.31 | 5.99 | 3.65 | 5.47  | 6.65  | 6.07  | 53.92     | 1919 | 56.42 |
| 1919-1920 | 2.29                            | 5.05 | 2.58 | 3.03 | 6.10 | 4.90 | 6.28 | 3.95 | 7.93 | 4.44  | 3.86  | 3.04  | 53.45     | 1920 | 55.81 |
| 1920-1921 | 1.34                            | 5.85 | 5.09 | 3.46 | 3.06 | 3.72 | 5.45 | 3.73 | 4.30 | 6.80  | 2.97  | 2.53  | 48.30     | 1921 | 47.84 |
| 1921-1922 | 1.26                            | 8.02 | 2.54 | 1.91 | 2.67 | 6.40 | 1.98 | 5.22 | 6.34 | 8.36  | 9.09  | 5.35  | 59.14     | 1922 | 54.76 |
| 1922-1923 | 2.92                            | 1.41 | 3.11 | 6.78 | 1.82 | 3.73 | 5.92 | 1.48 | 4.93 | 2.78  | 2.35  | 2.15  | 39.38     | 1923 | 48.39 |
| 1923-1924 | 5.67                            | 5.68 | 5.10 | 4.49 | 2.92 | 2.80 | 6.12 | 3.66 | 1.49 | 1.72  | 5.85  | 5.28  | 50.78     | 1924 | 39.15 |
| 1924-1925 | 0.21                            | 2.23 | 2.38 | 4.41 | 2.22 | 4.76 | 2.85 | 2.72 | 2.36 | 6.14  | 1.70  | 2.96  | 34.94     | 1925 | 44.45 |
| 1925-1926 | 4.32                            | 4.83 | 5.18 | 3.26 | 6.10 | 3.73 | 2.46 | 2.27 | 1.74 | 3.80  | 3.94  | 1.89  | 43.52     | 1926 | 43.33 |
| 1926-1927 | 5.04                            | 5.55 | 3.55 | 2.98 | 3.31 | 1.59 | 2.56 | 3.41 | 3.36 | 3.99  | 8.55  | 2.61  | 46.50     | 1927 | 52.45 |
| 1927-1928 | 5.24                            | 9.22 | 5.63 | 2.72 | 4.32 | 2.70 | 5.43 | 1.45 | 3.91 | 5.06  | 5.50  | 4.80  | 55.98     | 1928 | 45.59 |
| 1928-1929 | 3.99                            | 2.50 | 3.21 | 5.20 | 4.89 | 3.92 | 7.56 | 3.47 | 2.27 | 2.06  | 2.93  | 1.35  | 43.35     | 1929 | 43.95 |
| 1929-1930 | 3.09                            | 3.06 | 4.15 | 2.86 | 2.88 | 3.23 | 2.03 | 2.74 | 3.05 | 3.33  | 3.00  | 1.35  | 34.77     | 1930 | 35.58 |
| 1930-1931 | 3.36                            | 4.65 | 3.10 | 3.55 | 2.57 | 6.37 | 3.36 | 4.19 | 6.31 | 3.74  | 5.96  | 1.97  | 49.13     | 1931 | 44.43 |
| 1931-1932 | 2.22                            | 1.03 | 3.16 | 6.16 | 2.38 | 6.16 | 1.97 | 2.57 | 2.75 | 2.57  | 6.44  | 11.75 | 49.16     | 1932 | 58.60 |
| 1932-1933 | 6.63                            | 7.13 | 2.09 | 2.02 | 3.81 | 6.55 | 6.18 | 3.76 | 4.04 | 2.00  | 3.60  | 7.56  | 55.37     | 1933 | 48.13 |
| 1933-1934 | 3.41                            | 1.48 | 3.72 | 3.87 | 4.53 | 4.03 | 5.24 | 3.98 | 4.79 | 2.20  | 3.89  | 7.37  | 48.51     | 1934 | 51.14 |
| 1934-1935 | 3.25                            | 4.44 | 3.55 | 7.24 | 3.09 | 1.93 | 4.76 | 2.27 | 5.12 | 4.10  | 1.42  | 3.59  | 44.76     | 1935 | 41.30 |
| 1935-1936 | 1.04                            | 5.86 | 0.88 | 8.81 | 4.16 | 9.31 | 3.80 | 1.98 | 2.98 | 2.63  | 3.28  | 7.72  | 52.45     | 1936 | 57.75 |
| 1936-1937 | 2.00                            | 1.25 | 9.83 | 5.02 | 2.45 | 4.09 | 5.42 | 3.05 | 3.40 | 1.58  | 6.47  | 4.19  | 48.75     | 1937 | 50.58 |
| 1937-1938 | 3.92                            | 8.10 | 2.89 | 5.29 | 2.91 | 2.70 | 2.60 | 4.17 | 8.62 | 11.49 | 3.10  | 6.76  | 62.55     | 1938 | 57.83 |
| 1938-1939 | 2.64                            | 3.91 | 3.64 | 3.08 | 5.06 | 5.86 | 4.53 | 0.94 | 2.95 | 1.20  | 6.52  | 3.47  | 43.80     | 1939 | 44.17 |
| 1939-1940 | 5.76                            | 1.40 | 3.40 | 2.82 | 5.97 | 4.04 | 6.00 | 5.76 | 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.<br>Year | Total  |
|------------------|-------|------|------|------|------|------|------|------|------|-------|-------|-------|--------|-------------------|--------|
| 1950-1951        | 2.23  | 7.21 | 4.57 | 4.95 | 4.48 | 5.91 | 3.97 | 5.20 | 2.71 | 3.36  | 3.08  | 2.41  | 50.08  | 1951              | 55.38  |
| 1951-1952        | 4.14  | 9.64 | 5.53 | 4.88 | 4.81 | 4.13 | 4.41 | 3.97 | 3.16 | 1.20  | 7.33  | 2.21  | 55.41  | 1952              | 45.26  |
| 1952-1953        | 1.94  | 3.02 | 4.20 | 7.38 | 4.64 | 9.33 | 7.54 | 3.24 | 1.67 | 4.27  | 2.94  | 2.74  | 52.91  | 1953              | 61.10  |
| 1953-1954        | 5.57  | 6.22 | 5.56 | 2.91 | 3.16 | 4.36 | 5.37 | 4.91 | 1.55 | 2.76  | 9.10  | 7.63  | 59.10  | 1954              | 57.44  |
| 1954-1955        | 3.13  | 5.65 | 6.91 | 1.00 | 4.96 | 4.17 | 4.16 | 1.78 | 4.53 | 2.43  | 12.75 | 4.53  | 56.00  | 1955              | 57.74  |
| 1955-1956        | 11.48 | 5.23 | 0.72 | 5.39 | 4.39 | 7.91 | 3.84 | 2.42 | 2.10 | 4.13  | 1.56  | 3.98  | 53.15  | 1956              | 49.06  |
| 1956-1957        | 2.96  | 4.92 | 5.46 | 2.90 | 2.46 | 3.33 | 5.01 | 1.55 | 0.72 | 0.96  | 1.58  | 1.58  | 33.43  | 1957              | 36.13  |
| 1957-1958        | 3.07  | 5.50 | 7.47 | 8.46 | 4.50 | 5.46 | 7.55 | 3.84 | 2.69 | 7.04  | 4.58  | 6.12  | 66.28  | 1958              | 58.88  |
| 1958-1959        | 3.83  | 3.03 | 1.78 | 2.56 | 4.12 | 7.13 | 4.41 | 1.15 | 5.55 | 6.74  | 2.27  | 0.57  | 43.14  | 1959              | 53.82  |
| 1959-1960        | 8.37  | 5.35 | 5.60 | 3.59 | 5.65 | 3.27 | 3.06 | 4.49 | 1.15 | 4.86  | 2.55  | 8.10  | 56.04  | 1960              | 47.42  |
| 1960-1961        | 3.58  | 2.86 | 4.26 | 3.24 | 3.48 | 4.27 | 5.92 | 5.65 | 2.25 | 3.01  | 4.02  | 9.43  | 51.97  | 1961              | 50.52  |
| 1961-1962        | 2.60  | 3.18 | 3.47 | 4.55 | 6.15 | 3.67 | 2.16 | 2.05 | 4.68 | 1.33  | 3.37  | 3.49  | 40.70  | 1962              | 47.58  |
| 1962-1963        | 8.95  | 4.20 | 2.98 | 3.23 | 3.41 | 3.71 | 2.03 | 3.06 | 3.36 | 3.59  | 1.65  | 4.41  | 44.58  | 1963              | 40.63  |
| 1963-1964        | 1.59  | 7.82 | 2.77 | 6.32 | 5.36 | 2.63 | 5.65 | 1.15 | 1.98 | 3.86  | 2.14  | 3.56  | 44.83  | 1964              | 45.58  |
| 1964-1965        | 2.84  | 3.81 | 6.28 | 4.13 | 4.51 | 2.13 | 2.54 | 2.03 | 2.71 | 2.61  | 2.58  | 1.96  | 38.13  | 1965              | 33.21  |
| 1965-1966        | 3.58  | 2.48 | 1.95 | 5.93 | 5.09 | 1.59 | 1.95 | 3.57 | 2.40 | 3.71  | 3.10  | 5.28  | 40.63  | 1966              | 45.45  |
| 1966-1967        | 3.65  | 5.41 | 3.77 | 2.10 | 4.00 | 6.15 | 4.81 | 8.33 | 3.12 | 6.71  | 4.50  | 3.86  | 56.41  | 1967              | 57.49  |
| 1967-1968        | 2.24  | 3.45 | 8.22 | 4.28 | 2.12 | 8.07 | 1.65 | 4.01 | 6.21 | 1.27  | 2.77  | 2.90  | 47.19  | 1968              | 50.30  |
| 1968-1969        | 2.46  | 7.00 | 7.56 | 1.73 | 6.88 | 3.65 | 5.82 | 4.22 | 1.37 | 5.01  | 2.57  | 4.02  | 52.29  | 1969              | 54.51  |
| 54 Years Average | 3.54  | 4.67 | 4.14 | 4.10 | 3.90 | 4.39 | 4.13 | 3.57 | 3.55 | 3.81  | 4.25  | 4.07  | *48.12 | Avg.              | *48.25 |
| 54 Years Maximum | 11.48 | 9.64 | 9.83 | 8.81 | 6.88 | 9.33 | 7.56 | 9.36 | 8.62 | 11.49 | 12.75 | 11.75 | 66.28  | Max.              | 61.10  |
| 54 Years Minimum | 0.21  | 0.48 | 0.72 | 1.00 | 1.82 | 1.42 | 0.89 | 0.94 | 0.10 | 0.96  | 1.33  | 0.20  | 33.43  | Min.              | 33.21  |

\*Total of Monthly Averages.

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.<br>Year | Total |
|-----------|-------|-------|-------|------|------|------|------|------|------|------|------|------|-------|-------------------|-------|
| 1916-1917 | 7.38  | 1.33  | 1.24  | 2.61 | 2.34 | 3.30 | 3.96 | 2.18 | 4.91 | 2.70 | 4.15 | 4.54 | 40.64 | 1917              | 43.16 |
| 1917-1918 | 1.51  | 6.13  | 2.66  | 6.71 | 0.48 | 3.23 | 3.56 | 3.73 | 2.15 | 4.56 | 3.12 | 4.49 | 42.33 | 1918              | 47.09 |
| 1918-1919 | 5.13  | 4.14  | 8.79  | 1.07 | 2.60 | 3.75 | 4.89 | 3.42 | 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.<br>Year | Jan.-Dec.<br>Total |
|-----------|------|-------|-------|-------|-------|-------|------|------|------|------|------|------|-------|-------------------|--------------------|
| 1950-1951 | 1.62 | 5.04  | 2.03  | 2.23  | 7.21  | 4.57  | 4.95 | 4.48 | 5.91 | 3.97 | 5.20 | 2.71 | 49.92 | 1951              | 55.38              |
| 1951-1952 | 3.36 | 3.08  | 2.41  | 4.14  | 9.64  | 5.53  | 4.88 | 4.81 | 4.13 | 4.41 | 3.97 | 3.16 | 53.52 | 1952              | 45.26              |
| 1952-1953 | 1.20 | 7.33  | 2.21  | 1.94  | 3.02  | 4.20  | 7.38 | 4.64 | 9.33 | 7.54 | 3.24 | 1.67 | 53.70 | 1953              | 61.10              |
| 1953-1954 | 4.27 | 2.94  | 2.74  | 5.57  | 6.22  | 5.56  | 2.91 | 3.16 | 4.36 | 5.37 | 4.91 | 1.55 | 49.56 | 1954              | 57.44              |
| 1954-1955 | 2.76 | 9.10  | 7.63  | 3.13  | 5.65  | 6.91  | 1.00 | 4.96 | 4.17 | 4.16 | 1.78 | 4.53 | 55.78 | 1955              | 57.74              |
| 1955-1956 | 2.43 | 12.75 | 4.53  | 11.48 | 5.23  | 0.72  | 5.39 | 4.39 | 7.91 | 3.84 | 2.42 | 2.10 | 63.19 | 1956              | 49.06              |
| 1956-1957 | 4.13 | 1.56  | 3.98  | 2.96  | 4.92  | 5.46  | 2.90 | 2.46 | 3.33 | 5.01 | 1.55 | 0.72 | 38.98 | 1957              | 36.13              |
| 1957-1958 | 0.96 | 1.58  | 1.58  | 3.07  | 5.50  | 7.47  | 8.46 | 4.50 | 5.46 | 7.55 | 3.84 | 2.69 | 52.66 | 1958              | 58.88              |
| 1958-1959 | 7.04 | 4.58  | 6.12  | 3.83  | 3.03  | 1.78  | 2.56 | 4.12 | 7.13 | 4.41 | 1.15 | 5.55 | 51.30 | 1959              | 53.82              |
| 1959-1960 | 6.74 | 2.27  | 0.57  | 8.37  | 5.35  | 5.60  | 3.59 | 5.65 | 3.27 | 3.06 | 4.49 | 1.15 | 50.11 | 1960              | 47.42              |
| 1960-1961 | 4.86 | 2.55  | 8.10  | 3.58  | 2.86  | 4.26  | 3.24 | 3.48 | 4.27 | 5.92 | 5.65 | 2.25 | 51.02 | 1961              | 50.52              |
| 1961-1962 | 3.01 | 4.02  | 9.43  | 2.60  | 3.18  | 3.47  | 4.55 | 6.15 | 3.67 | 2.16 | 2.05 | 4.68 | 48.97 | 1962              | 47.58              |
| 1962-1963 | 1.33 | 3.37  | 3.49  | 8.95  | 4.20  | 2.98  | 3.23 | 3.41 | 3.71 | 2.03 | 3.06 | 3.36 | 43.12 | 1963              | 40.63              |
| 1963-1964 | 3.59 | 1.65  | 4.41  | 1.59  | 7.82  | 2.77  | 6.32 | 5.36 | 2.63 | 5.65 | 1.15 | 1.98 | 44.92 | 1964              | 45.58              |
| 1964-1965 | 3.86 | 2.14  | 3.56  | 2.84  | 3.81  | 6.28  | 4.13 | 4.51 | 2.13 | 2.54 | 2.03 | 2.71 | 40.54 | 1965              | 33.21              |
| 1965-1966 | 2.61 | 2.58  | 1.96  | 3.58  | 2.48  | 1.95  | 5.93 | 5.09 | 1.59 | 1.95 | 3.57 | 2.40 | 35.69 | 1966              | 45.45              |
| 1966-1967 | 3.71 | 3.10  | 5.28  | 3.65  | 5.41  | 3.77  | 2.10 | 4.00 | 6.15 | 4.81 | 8.33 | 3.12 | 53.43 | 1967              | 57.49              |
| 1967-1968 | 6.71 | 4.50  | 3.86  | 2.24  | 3.45  | 8.22  | 4.28 | 2.12 | 8.07 | 1.65 | 4.01 | 6.21 | 55.32 | 1968              | 50.30              |
| 1968-1969 | 1.27 | 2.77  | 2.90  | 2.46  | 7.00  | 7.56  | 1.73 | 6.88 | 3.65 | 5.82 | 4.22 | 1.37 | 47.63 | 1969              | 54.51              |
| 1969-1970 | 5.01 | 2.57  | 4.02  | 1.96  | 6.35  | 10.93 | 0.74 | 6.51 | 4.91 | 4.13 | 3.46 | 3.39 | 53.98 | 1970              | 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              | 42.76              |
| 1971-1972 | 3.40 | 2.27  | 3.30  | 4.44  | 5.15  | 3.09  | 2.51 | 6.49 | 8.35 | 3.71 | 7.72 | 6.57 | 57.00 | 1972              | 75.24              |
| 1972-1973 | 6.49 | 2.67  | 5.99  | 5.19  | 10.48 | 9.07  | 2.93 | 3.68 | 3.20 | 7.53 | 4.46 | 5.77 | 67.46 | 1973              | 56.73              |
| 1973-1974 | 3.13 | 4.59  | 5.04  | 4.19  | 2.25  | 9.96  | 4.83 | 3.39 | 5.83 | 3.74 | 3.37 | 2.78 | 53.10 | 1974              | 48.80              |
| 1974-1975 | 1.29 | 3.95  | 7.44  | 3.68  | 1.98  | 6.52  | 5.76 | 3.43 | 3.84 | 3.36 | 2.16 | 3.77 | 47.18 | 1975              | 56.71              |

TABLE 3 (Continued)

## MONTHLY AND YEARLY RAINFALL IN INCHES ON SCITUATE WATERSHED

| Year             | BASIS:- YEARS ENDED JUNE 30. (FISCAL YEAR CHANGED 1969-1970 FROM FORMER OCT.-SEPT. TO JULY-JUNE PERIOD.) |       |       |       |       |       |      |      |      |      |      |      | Jan.-Dec.<br>Year Total |      |        |
|------------------|----------------------------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|-------------------------|------|--------|
|                  | July                                                                                                     | Aug.  | Sept. | Oct.  | Nov.  | Dec.  | Jan. | Feb. | Mar. | Apr. | May  | June | Total                   | Year | Total  |
| 1975-1976        | 3.19                                                                                                     | 3.95  | 7.58  | 6.82  | 6.89  | 5.96  | 7.61 | 3.43 | 3.53 | 2.43 | 3.21 | 3.19 | 57.79                   | 1976 | -----  |
| 60 Years Average | 3.74                                                                                                     | 4.20  | 4.19  | 3.64  | 4.80  | 4.48  | 4.11 | 3.95 | 4.46 | 4.13 | 3.61 | 3.57 | *48.88                  | Avg. | *48.89 |
| 60 Years Maximum | 11.49                                                                                                    | 12.75 | 11.75 | 11.48 | 10.48 | 10.93 | 8.81 | 6.88 | 9.33 | 7.56 | 9.36 | 8.62 | 67.46                   | Max. | 75.24  |
| 60 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.

NOTE: The 60-Year calendar year average is for the years 1916-1975.

TABLE 4

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

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

(e) Estimated

TABLE 4 (Continued)

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

BASIS:-YEARS ENDED SEPTEMBER 30

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

\*Total of Monthly Averages.

TABLE 5

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

| Year      | BASIS:- YEARS ENDED JUNE 30. (FISCAL YEAR CHANGED 1969-1970 FROM FORMER OCT.-SEPT. TO JULY-JUNE PERIOD.) |       |       |       |      |      |      |      |       |      |      |       | Jan.-Dec. |      |       |
|-----------|----------------------------------------------------------------------------------------------------------|-------|-------|-------|------|------|------|------|-------|------|------|-------|-----------|------|-------|
|           | July                                                                                                     | Aug.  | Sept. | Oct.  | Nov. | Dec. | Jan. | Feb. | Mar.  | Apr. | May  | June  | Total     | Year | Total |
| 1916-1917 | 2.74                                                                                                     | 1.09  | 0.42  | 0.51  | 0.58 | 0.97 | 1.91 | 1.30 | 4.29  | 3.05 | 2.79 | 2.18  | 21.83     | 1917 | 22.41 |
| 1917-1918 | 0.79                                                                                                     | 0.71  | 0.63  | 1.79  | 1.59 | 1.38 | 1.83 | 4.04 | 3.17  | 3.40 | 2.24 | 1.24  | 22.81     | 1918 | 23.75 |
| 1918-1919 | 0.47                                                                                                     | 0.82  | 1.81  | 1.02  | 1.34 | 2.37 | 3.81 | 2.27 | 5.01  | 4.43 | 3.86 | 1.27  | 28.48     | 1919 | 32.65 |
| 1919-1920 | 1.35                                                                                                     | 0.91  | 3.33  | 1.45  | 2.25 | 2.71 | 1.19 | 1.69 | 9.60  | 5.10 | 3.73 | 4.15  | 37.46     | 1920 | 33.29 |
| 1920-1921 | 1.38                                                                                                     | 0.79  | 0.34  | 0.37  | 1.73 | 3.22 | 2.79 | 1.69 | 4.19  | 3.68 | 2.85 | 0.95  | 23.98     | 1921 | 24.52 |
| 1921-1922 | 2.56                                                                                                     | 0.93  | 0.31  | 0.24  | 1.65 | 2.68 | 1.13 | 1.80 | 4.81  | 3.92 | 3.50 | 2.39  | 25.92     | 1922 | 33.32 |
| 1922-1923 | 3.50                                                                                                     | 3.59  | 4.39  | 1.66  | 1.26 | 1.37 | 4.16 | 2.46 | 6.10  | 4.06 | 2.68 | 1.15  | 36.38     | 1923 | 29.75 |
| 1923-1924 | 0.64                                                                                                     | 0.40  | 0.25  | 1.27  | 2.01 | 4.57 | 4.52 | 1.88 | 3.43  | 5.70 | 3.38 | 1.05  | 29.10     | 1924 | 23.31 |
| 1924-1925 | 0.20                                                                                                     | 0.56  | 0.68  | 0.49  | 0.45 | 0.97 | 0.91 | 3.65 | 3.41  | 2.46 | 1.46 | 0.52  | 15.76     | 1925 | 19.04 |
| 1925-1926 | 0.58                                                                                                     | 0.39  | 0.32  | 0.61  | 1.48 | 3.25 | 2.23 | 3.11 | 4.38  | 3.00 | 1.70 | 0.62  | 21.67     | 1926 | 21.03 |
| 1926-1927 | 0.40                                                                                                     | 0.42  | 0.17  | 0.76  | 2.15 | 2.09 | 3.34 | 2.64 | 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      |       |       |       |       |      |      |      |      |      |      |      |       | Jan.-Dec. |      |       |
|-----------|-------|-------|-------|-------|------|------|------|------|------|------|------|-------|-----------|------|-------|
|           | July  | Aug.  | Sept. | Oct.  | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May  | June  | Total     | Year | Total |
| 1950-1951 | -0.11 | 0.22  | -0.02 | 0.04  | 1.85 | 2.59 | 3.24 | 4.95 | 4.36 | 4.30 | 2.70 | 1.21  | 25.33     | 1951 | 30.16 |
| 1951-1952 | 0.14  | 0.07  | -0.07 | 0.34  | 4.62 | 4.30 | 4.24 | 3.30 | 5.02 | 2.97 | 2.46 | 0.98  | 28.37     | 1952 | 20.27 |
| 1952-1953 | -0.35 | 0.53  | -0.20 | -0.20 | 0.37 | 1.15 | 4.61 | 4.35 | 7.24 | 6.36 | 3.20 | 0.20  | 27.26     | 1953 | 32.41 |
| 1953-1954 | 0.07  | -0.05 | -0.13 | 0.38  | 1.86 | 4.32 | 2.12 | 2.66 | 3.56 | 4.01 | 3.71 | 0.33  | 22.84     | 1954 | 32.15 |
| 1954-1955 | -0.01 | 0.93  | 3.96  | 1.33  | 3.65 | 5.90 | 2.46 | 3.61 | 4.26 | 2.76 | 1.62 | 0.89  | 31.36     | 1955 | 35.13 |
| 1955-1956 | 0.02  | 4.04  | 1.19  | 7.22  | 5.56 | 1.50 | 3.27 | 4.09 | 4.57 | 6.57 | 1.98 | 0.96  | 40.97     | 1956 | 25.87 |
| 1956-1957 | 0.37  | -0.22 | 0.05  | 0.23  | 1.10 | 2.90 | 2.41 | 2.10 | 2.78 | 4.54 | 0.58 | -0.18 | 16.66     | 1957 | 14.20 |
| 1957-1958 | -0.41 | -0.38 | -0.22 | 0.06  | 0.52 | 2.40 | 6.59 | 2.69 | 6.03 | 6.89 | 3.88 | 0.83  | 28.88     | 1958 | 35.66 |
| 1958-1959 | 0.85  | 0.86  | 1.31  | 2.05  | 1.85 | 1.83 | 1.65 | 2.58 | 5.86 | 4.52 | 1.45 | 1.23  | 26.04     | 1959 | 26.97 |
| 1959-1960 | 2.09  | 0.07  | -0.23 | 1.17  | 2.18 | 4.40 | 3.29 | 5.09 | 3.15 | 4.01 | 2.19 | 0.35  | 27.76     | 1960 | 25.51 |
| 1960-1961 | 0.38  | 0.00  | 1.54  | 0.98  | 2.11 | 2.42 | 2.21 | 3.68 | 4.97 | 4.75 | 3.63 | 1.30  | 27.97     | 1961 | 27.93 |
| 1961-1962 | 0.25  | 0.20  | 2.30  | 1.28  | 1.53 | 1.83 | 4.32 | 1.66 | 5.24 | 3.61 | 1.53 | 0.98  | 24.73     | 1962 | 24.34 |
| 1962-1963 | -0.09 | 0.04  | 0.07  | 1.89  | 2.97 | 2.12 | 1.81 | 1.88 | 4.47 | 1.69 | 1.88 | 0.54  | 19.27     | 1963 | 15.25 |
| 1963-1964 | 0.10  | -0.25 | -0.02 | -0.11 | 1.59 | 1.67 | 4.68 | 2.82 | 3.47 | 4.61 | 0.87 | 0.01  | 19.44     | 1964 | 19.30 |
| 1964-1965 | 0.03  | -0.14 | -0.11 | 0.11  | 0.47 | 2.48 | 1.68 | 3.43 | 3.02 | 1.89 | 1.04 | 0.44  | 14.34     | 1965 | 11.89 |
| 1965-1966 | -0.10 | -0.14 | -0.06 | 0.04  | 0.21 | 0.44 | 0.70 | 2.26 | 3.11 | 1.10 | 1.68 | 0.73  | 9.97      | 1966 | 13.88 |
| 1966-1967 | 0.11  | 0.09  | 0.36  | 0.50  | 1.87 | 1.37 | 2.25 | 1.60 | 4.52 | 4.92 | 4.94 | 1.61  | 24.14     | 1967 | 30.51 |
| 1967-1968 | 1.67  | 1.58  | 0.61  | 0.80  | 1.50 | 4.51 | 2.91 | 2.76 | 7.53 | 2.00 | 1.78 | 2.26  | 29.91     | 1968 | 24.79 |
| 1968-1969 | 0.27  | 0.03  | 0.11  | 0.00  | 1.61 | 3.53 | 1.72 | 1.40 | 5.38 | 5.72 | 2.74 | 0.70  | 23.21     | 1969 | 25.97 |
| 1969-1970 | 0.41  | 0.22  | 0.23  | 0.21  | 2.14 | 5.10 | 1.85 | 5.49 | 3.15 | 3.81 | 1.81 | 1.23  | 25.65     | 1970 | 20.56 |
| 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 | 19.20 |
| 1971-1972 | -0.04 | -0.26 | 0.10  | 0.35  | 1.05 | 1.81 | 2.45 | 2.86 | 9.14 | 3.05 | 4.18 | 3.71  | 28.40     | 1972 | 43.96 |
| 1972-1973 | 2.12  | 0.66  | 1.05  | 1.87  | 6.75 | 6.12 | 4.08 | 4.23 | 3.07 | 4.91 | 3.00 | 1.35  | 39.21     | 1973 | 31.76 |
| 1973-1974 | 0.93  | 0.86  | 0.71  | 0.77  | 1.25 | 6.60 | 4.85 | 3.62 | 4.44 | 4.14 | 2.16 | 0.72  | 31.05     | 1974 | 26.11 |
| 1974-1975 | -0.12 | -0.04 | 0.70  | 1.03  | 1.01 | 3.60 | 4.77 | 3.03 | 3.61 | 3.01 | 1.23 | 0.91  | 22.74     | 1975 | 28.74 |

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             |       |       |       |       |      |      |      |      |       |      |      |       | Jan.-Dec. |      |        |
|------------------|-------|-------|-------|-------|------|------|------|------|-------|------|------|-------|-----------|------|--------|
|                  | July  | Aug.  | Sept. | Oct.  | Nov. | Dec. | Jan. | Feb. | Mar.  | Apr. | May  | June  | Total     | Year | Total  |
| 1975-1976        | 0.04  | -0.04 | 0.84  | 2.35  | 4.44 | 4.55 | 6.77 | 4.39 | 3.16  | 1.87 | 1.62 | 0.25  | 30.24     | 1976 | -----  |
| 60 Years Average | 0.60  | 0.47  | 0.65  | 0.83  | 1.92 | 2.67 | 2.90 | 2.85 | 4.69  | 3.74 | 2.38 | 1.14  | *24.84    | Avg. | *24.89 |
| 60 Years Maximum | 6.93  | 4.04  | 4.39  | 7.22  | 6.75 | 6.60 | 6.77 | 5.49 | 11.51 | 6.89 | 5.25 | 4.15  | 40.97     | Max. | 43.96  |
| 60 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 60-year calendar year average is for the years 1916-1975.  
A new maximum of record was recorded for January.

TABLE 6

## MONTHLY AND YEARLY PERCENT OF RAINFALL COLLECTED ON SCITUATE WATERSHED

| Year      | BASIS:-YEARS ENDED SEPTEMBER 30 |         |         |       |       |       |       |       |       |       |       |        | Jan.-Dec. |      |       |
|-----------|---------------------------------|---------|---------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-----------|------|-------|
|           | Oct.                            | Nov.    | Dec.    | Jan.  | Feb.  | Mar.  | Apr.  | May   | June  | July  | Aug.  | Sept.  | Total     | Year | Total |
| 1915-1916 | 27.3(e)                         | 43.0(e) | 51.7(e) | 133.0 | 62.9  | 162.2 | 128.9 | 76.4  | 59.9  | 37.1  | 82.0  | 33.9   | 68.1      | 1916 | 66.4  |
| 1916-1917 | 19.5                            | 24.8    | 29.4    | 48.2  | 59.6  | 87.4  | 113.0 | 67.2  | 48.0  | 52.3  | 11.6  | 23.7   | 48.1      | 1917 | 51.9  |
| 1917-1918 | 26.7                            | 331.2   | 42.7    | 51.4  | 108.3 | 147.4 | 74.6  | 71.8  | 27.6  | 9.2   | 19.8  | 20.6   | 47.5      | 1918 | 50.4  |
| 1918-1919 | 95.3                            | 51.5    | 63.2    | 77.9  | 66.4  | 82.8  | 102.8 | 64.4  | 34.8  | 24.7  | 13.7  | 54.8   | 57.4      | 1919 | 57.9  |
| 1919-1920 | 63.3                            | 44.6    | 105.0   | 39.3  | 27.7  | 195.9 | 81.2  | 94.4  | 52.3  | 31.1  | 20.5  | 11.2   | 64.3      | 1920 | 59.6  |
| 1920-1921 | 27.6                            | 29.6    | 63.3    | 80.6  | 55.2  | 112.6 | 67.5  | 76.4  | 22.1  | 37.6  | 31.3  | 12.2   | 52.3      | 1921 | 51.2  |
| 1921-1922 | 19.0                            | 20.6    | 105.5   | 59.2  | 67.4  | 75.2  | 198.0 | 67.0  | 37.7  | 41.9  | 39.5  | 82.0   | 56.8      | 1922 | 60.8  |
| 1922-1923 | 56.8                            | 89.4    | 44.0    | 61.4  | 135.2 | 163.5 | 68.6  | 181.1 | 23.3  | 23.0  | 17.0  | 11.6   | 66.5      | 1923 | 61.5  |
| 1923-1924 | 22.4                            | 35.4    | 89.6    | 100.7 | 64.4  | 122.5 | 93.1  | 92.3  | 70.5  | 11.6  | 9.6   | 12.9   | 57.6      | 1924 | 59.5  |
| 1924-1925 | 233.3                           | 20.2    | 40.8    | 20.6  | 164.4 | 71.6  | 86.3  | 53.7  | 22.0  | 9.4   | 22.9  | 10.8   | 44.7      | 1925 | 42.8  |
| 1925-1926 | 14.1                            | 30.6    | 62.7    | 68.4  | 51.0  | 117.4 | 122.0 | 74.9  | 35.6  | 10.5  | 10.6  | 9.0    | 49.1      | 1926 | 48.5  |
| 1926-1927 | 15.1                            | 38.7    | 58.9    | 112.1 | 79.8  | 191.8 | 66.8  | 59.5  | 42.8  | 8.0   | 18.6  | 24.5   | 46.8      | 1927 | 57.5  |
| 1927-1928 | 37.2                            | 73.0    | 83.5    | 96.3  | 87.0  | 105.9 | 58.6  | 141.4 | 29.4  | 21.3  | 21.3  | 16.7   | 57.2      | 1928 | 50.5  |
| 1928-1929 | 30.3                            | 46.4    | 62.0    | 77.3  | 74.6  | 141.8 | 80.6  | 102.6 | 21.1  | 2.9   | 2.4   | -6.7   | 64.0      | 1929 | 57.3  |
| 1929-1930 | 2.3                             | 17.3    | 28.4    | 68.5  | 82.6  | 84.8  | 90.6  | 32.1  | 13.8  | 2.7   | 1.3   | -8.1   | 34.6      | 1930 | 33.2  |
| 1930-1931 | 3.6                             | 13.5    | 26.8    | 43.9  | 82.1  | 93.4  | 95.5  | 74.0  | 47.1  | 18.4  | 14.3  | 5.1    | 45.0      | 1931 | 48.8  |
| 1931-1932 | 3.2                             | 14.6    | 28.8    | 54.4  | 90.8  | 66.6  | 156.3 | 52.5  | 14.2  | 2.7   | 5.4   | 27.8   | 39.2      | 1932 | 51.4  |
| 1932-1933 | 52.5                            | 88.2    | 108.1   | 110.9 | 70.9  | 95.9  | 111.3 | 51.3  | 38.9  | 8.5   | 6.9   | 20.1   | 64.2      | 1933 | 56.4  |
| 1933-1934 | 27.9                            | 55.4    | 48.9    | 97.7  | 26.0  | 136.0 | 116.0 | 72.4  | 30.7  | 3.6   | 3.6   | 19.0   | 53.8      | 1934 | 56.6  |
| 1934-1935 | 40.9                            | 43.0    | 90.4    | 66.0  | 91.6  | 218.6 | 85.1  | 75.3  | 34.8  | 15.1  | -9.8  | 7.2    | 59.3      | 1935 | 52.8  |
| 1935-1936 | -12.5                           | 18.6    | 85.2    | 44.7  | 46.4  | 123.6 | 117.1 | 80.3  | 14.8  | 1.1   | -0.6  | 10.6   | 50.3      | 1936 | 54.8  |
| 1936-1937 | 23.0                            | 34.4    | 61.6    | 91.4  | 113.1 | 81.7  | 69.9  | 82.6  | 22.0  | 1.3   | 9.3   | 13.6   | 53.1      | 1937 | 53.7  |
| 1937-1938 | 20.2                            | 51.5    | 112.5   | 78.4  | 102.7 | 110.7 | 88.1  | 44.1  | 33.1  | 60.3  | 42.6  | 24.6   | 56.3      | 1938 | 58.4  |
| 1938-1939 | 46.2                            | 48.6    | 99.4    | 68.5  | 81.4  | 89.4  | 108.2 | 114.9 | 10.5  | -20.0 | 3.4   | 2.6    | 56.1      | 1939 | 48.3  |
| 1939-1940 | 10.9                            | 96.4    | 45.3    | 72.0  | 25.3  | 120.3 | 114.8 | 55.0  | 67.3  | 19.0  | -7.0  | -1.5   | 52.1      | 1940 | 50.8  |
| 1940-1941 | -3.5                            | 23.9    | 72.4    | 49.0  | 87.4  | 81.5  | 121.3 | 36.7  | 27.0  | 9.2   | 2.5   | -205.0 | 35.9      | 1941 | 32.8  |
| 1941-1942 | -8.6                            | 15.5    | 22.8    | 37.8  | 77.0  | 85.5  | 196.6 | 37.8  | 15.2  | 16.0  | 6.0   | -8.8   | 38.3      | 1942 | 43.8  |
| 1942-1943 | 10.6                            | 33.7    | 71.4    | 68.8  | 177.4 | 119.6 | 68.7  | 77.8  | 18.1  | 0.6   | -7.4  | -16.9  | 54.5      | 1943 | 48.8  |
| 1943-1944 | 9.4                             | 27.7    | 34.4    | 40.8  | 49.2  | 64.2  | 85.9  | 80.0  | 11.5  | -14.9 | -15.4 | 15.7   | 30.1      | 1944 | 38.1  |
| 1944-1945 | 18.4                            | 37.4    | 82.0    | 84.3  | 44.6  | 263.4 | 64.0  | 63.4  | 24.4  | 5.5   | -3.9  | -5.3   | 50.5      | 1945 | 46.0  |
| 1945-1946 | 2.7                             | 20.8    | 60.6    | 102.9 | 78.2  | 260.6 | 60.3  | 50.8  | 49.8  | 0     | 20.5  | 15.2   | 45.7      | 1946 | 49.0  |
| 1946-1947 | 102.1                           | 22.7    | 30.5    | 72.5  | 58.5  | 104.2 | 61.3  | 84.9  | 26.6  | 10.9  | 4.1   | 7.7    | 45.0      | 1947 | 42.9  |
| 1947-1948 | 7.0                             | 45.8    | 35.5    | 21.7  | 122.6 | 168.1 | 94.7  | 56.1  | 74.3  | 15.0  | 4.8   | -13.2  | 54.2      | 1948 | 52.2  |
| 1948-1949 | 7.2                             | 30.1    | 58.0    | 81.5  | 89.0  | 118.2 | 68.8  | 44.2  | -20.0 | -21.0 | 0.3   | 2.6    | 41.7      | 1949 | 42.5  |
| 1949-1950 | 2.2                             | 16.4    | 45.2    | 55.2  | 52.4  | 104.3 | 81.8  | 62.7  | 34.1  | -6.8  | 4.4   | -1.0   | 42.4      | 1950 | 43.0  |

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

TABLE 7

## MONTHLY AND YEARLY PERCENT OF RAINFALL COLLECTED ON SCITUATE WATERSHED

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

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

TABLE 7 (Continued)

## MONTHLY AND YEARLY PERCENT OF RAINFALL COLLECTED ON SCITUATE WATERSHED

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

| Year      | July  | Aug.  | Sept. | Oct.  | Nov.  | Dec.  | Jan.  | Feb.  | Mar.  | Apr.  | May   | June  | Total | Jan.-Dec. |       |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|
|           |       |       |       |       |       |       |       |       |       |       |       |       |       | Year      | Total |
| 1950-1951 | -6.8  | 4.4   | -1.0  | 1.8   | 25.6  | 56.7  | 65.4  | 110.5 | 73.8  | 108.3 | 51.9  | 44.6  | 50.7  | 1951      | 54.5  |
| 1951-1952 | 4.2   | 2.3   | -2.9  | 8.2   | 47.9  | 77.8  | 86.9  | 68.6  | 121.5 | 67.3  | 61.7  | 31.0  | 53.0  | 1952      | 44.8  |
| 1952-1953 | -29.2 | 7.2   | -9.0  | -10.3 | 12.2  | 27.4  | 62.5  | 93.8  | 77.6  | 84.4  | 98.8  | 12.0  | 50.8  | 1953      | 53.0  |
| 1953-1954 | 1.6   | -1.7  | -4.7  | 6.8   | 29.9  | 77.7  | 72.8  | 84.2  | 81.6  | 74.7  | 75.6  | 21.3  | 46.1  | 1954      | 56.0  |
| 1954-1955 | -0.4  | 10.2  | 51.9  | 42.5  | 64.6  | 85.4  | 246.0 | 72.8  | 102.2 | 66.3  | 91.0  | 19.6  | 56.2  | 1955      | 60.8  |
| 1955-1956 | 0.8   | 32.7  | 26.3  | 62.9  | 122.7 | 208.3 | 60.7  | 93.2  | 57.8  | 171.1 | 81.8  | 45.7  | 64.8  | 1956      | 52.7  |
| 1956-1957 | 8.9   | -14.1 | 1.2   | 7.8   | 22.4  | 53.1  | 83.1  | 85.4  | 83.5  | 90.6  | 37.4  | -25.0 | 42.7  | 1957      | 39.3  |
| 1957-1958 | -42.7 | -24.1 | -13.9 | 2.0   | 9.5   | 32.1  | 77.9  | 59.8  | 110.4 | 91.3  | 101.0 | 30.9  | 54.8  | 1958      | 60.6  |
| 1958-1959 | 12.1  | 18.8  | 21.4  | 53.5  | 61.1  | 102.8 | 64.5  | 62.6  | 82.2  | 102.5 | 126.1 | 22.2  | 50.8  | 1959      | 50.1  |
| 1959-1960 | 31.0  | 3.1   | -40.4 | 14.0  | 40.7  | 78.6  | 91.6  | 90.1  | 96.3  | 131.0 | 48.8  | 30.4  | 55.4  | 1960      | 53.8  |
| 1960-1961 | 7.8   | -0.1  | 19.0  | 27.4  | 73.8  | 56.8  | 68.2  | 105.7 | 116.4 | 80.2  | 64.2  | 57.8  | 54.8  | 1961      | 55.3  |
| 1961-1962 | 8.3   | 5.0   | 24.4  | 49.2  | 48.1  | 52.7  | 94.9  | 27.0  | 142.8 | 167.1 | 74.6  | 20.9  | 50.5  | 1962      | 51.1  |
| 1962-1963 | -6.8  | 1.2   | 2.0   | 21.1  | 70.7  | 71.1  | 56.0  | 55.1  | 120.5 | 83.3  | 61.4  | 16.1  | 44.7  | 1963      | 37.5  |
| 1963-1964 | 2.8   | -15.2 | -0.5  | -6.8  | 20.3  | 60.3  | 74.1  | 52.6  | 131.9 | 81.6  | 75.7  | 0.5   | 43.3  | 1964      | 42.3  |
| 1964-1965 | 0.8   | -6.5  | -3.1  | 3.9   | 12.3  | 39.5  | 40.7  | 76.1  | 141.8 | 74.4  | 51.2  | 16.2  | 35.4  | 1965      | 35.8  |
| 1965-1966 | -3.8  | -5.4  | -3.1  | 1.1   | 8.5   | 22.6  | 11.8  | 44.4  | 195.6 | 56.4  | 47.1  | 30.4  | 27.9  | 1966      | 30.5  |
| 1966-1967 | 3.0   | 2.9   | 6.8   | 1.4   | 34.6  | 36.3  | 107.1 | 40.0  | 73.5  | 102.3 | 59.3  | 51.6  | 45.2  | 1967      | 53.1  |
| 1967-1968 | 2.5   | 3.5   | 1.6   | 35.7  | 43.5  | 54.9  | 68.0  | 130.2 | 93.3  | 121.2 | 44.4  | 36.4  | 54.1  | 1968      | 49.3  |
| 1968-1969 | 21.3  | 1.1   | 3.8   | 0.0   | 23.0  | 46.7  | 99.4  | 20.3  | 147.4 | 98.3  | 64.9  | 51.1  | 48.7  | 1969      | 47.6  |
| 1969-1970 | 8.2   | 8.6   | 5.7   | 10.7  | 33.7  | 46.7  | 250.0 | 84.3  | 64.2  | 92.3  | 52.3  | 36.3  | 47.5  | 1970      | 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      | 44.9  |
| 1971-1972 | -1.2  | -11.5 | 3.0   | 7.9   | 20.4  | 58.6  | 97.6  | 44.1  | 109.5 | 82.2  | 54.1  | 56.5  | 49.8  | 1972      | 58.4  |
| 1972-1973 | 32.7  | 24.7  | 17.5  | 36.0  | 64.4  | 67.5  | 139.2 | 114.9 | 95.9  | 65.2  | 67.3  | 23.4  | 58.1  | 1973      | 56.0  |
| 1973-1974 | 29.7  | 18.7  | 14.1  | 18.4  | 55.6  | 66.3  | 100.4 | 106.8 | 76.2  | 110.7 | 64.1  | 25.9  | 58.5  | 1974      | 53.5  |
| 1974-1975 | -9.3  | -1.0  | 9.4   | 28.0  | 51.0  | 55.2  | 82.8  | 88.3  | 94.0  | 89.6  | 56.9  | 24.1  | 48.2  | 1975      | 50.7  |

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.<br>Year | Total |
|------------------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------|-------|
| 1975-1976        | 1.3   | -1.0  | 11.1   | 34.5  | 64.4  | 76.3  | 89.0  | 128.0 | 89.5  | 77.0  | 50.5  | 7.8   | 52.3  | 1976              | ----  |
| 60 Years Average | 16.0  | 11.2  | 15.5   | 22.8  | 40.0  | 59.6  | 70.6  | 72.2  | 105.2 | 90.6  | 65.9  | 31.9  | 50.8  | Avg.              | 50.9  |
| 60 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  |
| 60 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 60-Year calendar year average is for the years 1916-1975.

TABLE 8

## SCITUATE WATERSHED

(92.8 Square Miles)

STATISTICS OF STORAGE - YEAR ENDED JUNE 30, 1976

| 1975-1976                        | 1<br>Regulating Reservoir |                            | 2<br>Westconnaug Reservoir |                                       | 3<br>Barden Reservoir |      | 4<br>Moswansicut Reservoir |      | 5<br>Ponaganset Reservoir  |      | Total 1-5          |        | 6<br>Scituate Reservoir |        | Total 1-6                  |                  |
|----------------------------------|---------------------------|----------------------------|----------------------------|---------------------------------------|-----------------------|------|----------------------------|------|----------------------------|------|--------------------|--------|-------------------------|--------|----------------------------|------------------|
|                                  | Avail. Storage            |                            | Avail. Storage             |                                       | Avail. Storage        |      | Avail. Storage             |      | Avail. Storage             |      | % of Storage *Tot. |        | Avail. Storage          |        | Avail. Storage % of **Tot. |                  |
|                                  | Elev.                     | M.G.                       | Elev.                      | M.G.                                  | Elev.                 | M.G. | Elev.                      | M.G. | Elev.                      | M.G. | Storage            | Avail. | Elev.                   | M.G.   | Elev.                      | M.G.             |
| July                             | 285.30                    | 405                        | 454.25                     | 458                                   | 345.17                | 859  | 301.80                     | 705  | 633.13                     | 699  | 3,126              | 99.7   | 282.20                  | 34,674 | 37,800                     | 95.1             |
| August                           | 284.91                    | 375                        | 454.01                     | 444                                   | 345.13                | 855  | 301.86                     | 711  | 632.87                     | 680  | 3,065              | 97.8   | 279.77                  | 32,136 | 35,201                     | 88.6             |
| September                        | 283.97                    | 308                        | 453.65                     | 423                                   | 345.03                | 847  | 301.67                     | 692  | 632.56                     | 657  | 2,927              | 93.4   | 277.30                  | 29,600 | 32,527                     | 81.8             |
| October                          | 285.55                    | 425                        | 454.15                     | 452                                   | 345.30                | 869  | 302.12                     | 737  | 632.80                     | 675  | 3,158              | 100.7  | 276.16                  | 28,460 | 31,618                     | 79.6             |
| November                         | 285.61                    | 430                        | 454.41                     | 466                                   | 345.40                | 877  | 302.04                     | 729  | 633.47                     | 725  | 3,227              | 102.9  | 277.67                  | 29,970 | 33,197                     | 83.5             |
| December                         | 285.68                    | 436                        | 454.68                     | 482                                   | 345.63                | 895  | 302.10                     | 735  | 633.82                     | 752  | 3,300              | 105.3  | 281.34                  | 33,754 | 37,054                     | 93.2             |
| January                          | 285.79                    | 445                        | 454.77                     | 487                                   | 345.79                | 908  | 302.20                     | 746  | 633.93                     | 761  | 3,347              | 106.8  | 280.27                  | 32,653 | 36,000                     | 90.6             |
| February                         | 285.70                    | 437                        | 454.85                     | 492                                   | 345.65                | 897  | 302.11                     | 736  | 634.12                     | 775  | 3,337              | 106.4  | 282.72                  | 35,230 | 38,567                     | 97.0             |
| March                            | 285.62                    | 431                        | 454.53                     | 473                                   | 345.47                | 883  | 302.03                     | 728  | 633.60                     | 735  | 3,250              | 103.7  | 282.07                  | 34,535 | 37,785                     | 95.1             |
| April                            | 285.64                    | 432                        | 454.57                     | 476                                   | 345.46                | 882  | 302.08                     | 733  | 633.56                     | 732  | 3,255              | 103.8  | 283.17                  | 35,712 | 38,967                     | 98.0             |
| May                              | 285.60                    | 429                        | 454.44                     | 468                                   | 345.40                | 877  | 302.01                     | 726  | 633.47                     | 725  | 3,225              | 102.9  | 283.94                  | 36,536 | 39,761                     | 100.0            |
| June                             | 285.54                    | 424                        | 454.33                     | 462                                   | 345.27                | 867  | 301.95                     | 720  | 633.32                     | 714  | 3,187              | 101.7  | 284.22                  | 36,846 | 40,033                     | 100.7            |
| Maximum for Year                 | Oct. 18<br>285.93         | 456                        | Dec. 27<br>454.95          | 497                                   | Oct. 18<br>346.28     | 948  | Oct. 18<br>302.35          | 761  | Jan. 31 & Feb. 1<br>634.12 | 775  | 3,383              | 107.9  | Dec. 27<br>284.58       | 37,250 | May 22, 23 & 24<br>40,463  | May 22<br>101.8  |
| Minimum for Year                 | Sept. 20<br>283.05        | 246                        | Sept. 20<br>453.40         | 409                                   | Aug. 23<br>344.96     | 842  | Sept. 20<br>301.60         | 685  | Sept. 20<br>632.31         | 539  | 2,822              | 90.0   | Oct. 17<br>275.49       | 28,180 | Sept. 20<br>30,867         | Sept. 20<br>77.7 |
| 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 | 284.60 | 283.61 | 282.80 | 282.86 | 284.23 | 284.16 | 283.09 |
| 1933-1934 | 282.68 | 280.42 | 278.39 | 278.26 | 277.64 | 276.86 | 277.58 | 280.96 | 280.38 | 285.04 | 284.14 | 284.09 |
| 1934-1935 | 283.14 | 280.72 | 278.62 | 278.55 | 278.20 | 278.73 | 281.17 | 283.23 | 281.23 | 281.20 | 284.37 | 283.14 |
| 1935-1936 | 283.50 | 281.93 | 279.32 | 277.32 | 275.01 | 274.30 | 273.13 | 277.33 | 278.48 | 285.48 | 283.95 | 282.22 |
| 1936-1937 | 280.91 | 279.07 | 277.06 | 275.97 | 274.43 | 273.12 | 280.27 | 280.85 | 279.18 | 281.83 | 284.30 | 285.19 |
| 1937-1938 | 284.06 | 282.09 | 281.43 | 279.80 | 278.13 | 280.96 | 279.49 | 279.19 | 279.73 | 280.86 | 282.48 | 283.04 |
| 1938-1939 | 284.87 | 285.14 | 280.58 | 281.12 | 279.83 | 278.23 | 280.01 | 279.17 | 281.31 | 282.72 | 283.74 | 282.57 |
| 1939-1940 | 280.86 | 278.48 | 276.67 | 274.62 | 272.85 | 273.10 | 273.18 | 274.28 | 274.70 | 280.08 | 284.55 | 285.11 |
| 1940-1941 | 283.53 | 282.87 | 280.63 | 278.35 | 275.88 | 276.19 | 276.21 | 276.22 | 278.63 | 279.70 | 280.39 | 280.01 |
| 1941-1942 | 280.07 | 278.99 | 277.15 | 274.75 | 272.38 | 270.88 | 270.02 | 270.95 | 273.39 | 282.29 | 281.65 | 281.25 |
| 1942-1943 | 280.34 | 279.81 | 278.31 | 276.16 | 274.55 | 275.40 | 280.05 | 279.69 | 280.00 | 280.98 | 281.53 | 283.91 |
| 1943-1944 | 282.46 | 280.43 | 278.21 | 275.93 | 274.41 | 273.57 | 271.84 | 270.65 | 270.52 | 273.95 | 277.75 | 277.50 |
| 1944-1945 | 276.20 | 273.86 | 271.20 | 271.68 | 270.27 | 273.47 | 277.37 | 279.19 | 279.43 | 283.76 | 283.73 | 283.88 |
| 1945-1946 | 283.76 | 282.03 | 279.81 | 277.63 | 275.45 | 275.88 | 280.85 | 281.92 | 282.59 | 283.71 | 283.56 | 284.67 |
| 1946-1947 | 283.41 | 281.23 | 282.51 | 281.16 | 279.95 | 278.30 | 277.97 | 279.17 | 279.62 | 283.18 | 283.87 | 284.50 |
| 1947-1948 | 283.91 | 282.73 | 280.97 | 279.29 | 277.37 | 279.63 | 279.66 | 277.97 | 280.01 | 285.22 | 284.61 | 285.56 |
| 1948-1949 | 284.69 | 282.83 | 281.01 | 278.73 | 277.01 | 278.12 | 279.00 | 281.61 | 281.56 | 282.64 | 284.16 | 284.66 |
| 1949-1950 | 282.50 | 280.17 | 278.10 | 276.05 | 273.94 | 272.40 | 272.07 | 273.29 | 275.58 | 280.13 | 282.78 | 284.07 |
| 1950-1951 | 283.58 | 281.33 | 279.64 | 277.64 | 275.63 | 275.99 | 277.74 | 279.77 | 282.17 | 283.41 | 284.46 | 285.08 |
| 1951-1952 | 284.19 | 282.41 | 280.57 | 278.54 | 276.71 | 281.24 | 283.40 | 282.84 | 281.44 | 283.39 | 284.31 | 285.10 |
| 1952-1953 | 283.92 | 281.34 | 280.02 | 277.76 | 275.37 | 273.52 | 272.74 | 278.12 | 282.29 | 285.13 | 284.68 | 284.49 |
| 1953-1954 | 282.38 | 280.50 | 278.36 | 276.08 | 274.38 | 274.86 | 279.60 | 280.19 | 281.50 | 283.75 | 284.92 | 284.48 |
| 1954-1955 | 283.05 | 281.11 | 280.22 | 282.61 | 281.65 | 282.94 | 284.57 | 281.49 | 282.33 | 282.66 | 284.05 | 284.35 |

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 |
| 1971-1972        | 283.42 | 280.96 | 278.39 | 276.39 | 274.87 | 274.19 | 275.15 | 277.06 | 279.58 | 285.00 | 284.48 | 284.47 |
| 1972-1973        | 284.73 | 284.04 | 282.85 | 282.06 | 281.95 | 285.16 | 285.65 | 283.80 | 282.83 | 280.67 | 284.31 | 283.71 |
| 1973-1974        | 282.86 | 282.05 | 280.53 | 279.10 | 277.85 | 277.82 | 284.69 | 283.94 | 282.12 | 284.44 | 283.35 | 283.05 |
| 1974-1975        | 281.94 | 279.25 | 276.35 | 274.93 | 274.37 | 273.81 | 277.47 | 282.00 | 282.26 | 282.68 | 283.71 | 282.96 |
| 1975-1976        | 282.20 | 279.77 | 277.30 | 276.16 | 277.67 | 281.34 | 280.27 | 282.72 | 282.07 | 283.17 | 283.94 | 284.22 |
| 48 Years Average | 282.54 | 280.77 | 278.89 | 277.47 | 276.29 | 276.49 | 277.59 | 278.59 | 279.47 | 282.29 | 283.33 | 283.38 |
| 48 Years Maximum | 285.05 | 285.14 | 283.08 | 282.87 | 285.21 | 285.16 | 285.65 | 284.00 | 284.32 | 285.48 | 285.62 | 285.56 |
| 48 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, 1976

| 1975-1976 | DRAFT FROM SCITUATE RESERVOIR<br>Million Gallons |                    |           |                             | WATERSHED YIELD<br>Million Gallons |                 |                              |                                     |
|-----------|--------------------------------------------------|--------------------|-----------|-----------------------------|------------------------------------|-----------------|------------------------------|-------------------------------------|
|           | To River Below Gainer Dam<br>Over Spill-way      | Through Gate-house | Total     | To Water Purification Works | Total For Month                    | Average per Day | Average per Day<br>For Month | 60-Year Mean<br>1975-1976 1917-1976 |
| July      | 0                                                | 229.84             | 229.84    | 2,441.20                    | 2,671.04                           | 86.16           | 72.04                        | 2.32 31.21                          |
| August    | 0                                                | 218.79             | 218.79    | 2,383.01                    | 2,601.80                           | 83.93           | -72.20                       | -2.33 24.45                         |
| September | 0                                                | 219.31             | 219.31    | 2,042.78                    | 2,262.09                           | 75.40           | 1,353.09                     | 45.10 34.94                         |
| October   | 0                                                | 224.84             | 224.84    | 1,987.72                    | 2,212.56                           | 71.37           | 3,791.56                     | 122.31 43.18                        |
| November  | 0                                                | 1,517.23           | 1,517.23  | 1,793.79                    | 3,311.02                           | 110.37          | 7,168.02                     | 238.93 103.22                       |
| December  | 0                                                | 6,639.59           | 6,639.59  | 1,745.88                    | 8,385.47                           | 270.50          | 7,331.47                     | 236.50 138.90                       |
| January   | 0                                                | 6,594.10           | 6,594.10  | 1,764.62                    | 8,358.72                           | 269.64          | 10,925.72                    | 352.44 150.87                       |
| February  | 0                                                | 6,209.72           | 6,209.72  | 1,653.77                    | 7,863.49                           | 271.15          | 7,081.49                     | 244.19 162.70                       |
| March     | 0                                                | 2,112.15           | 2,112.15  | 1,806.85                    | 3,919.00                           | 126.42          | 5,101.00                     | 164.55 243.99                       |
| April     | 0                                                | 395.24             | 395.24    | 1,823.21                    | 2,218.45                           | 73.95           | 3,012.45                     | 100.42 201.06                       |
| May       | 102.92                                           | 232.95             | 335.87    | 2,000.22                    | 2,336.09                           | 75.36           | 2,608.09                     | 84.13 123.82                        |
| June      | 5.39                                             | 231.38             | 236.77    | 2,573.87                    | 2,810.64                           | 93.69           | 399.64                       | 13.32 61.28                         |
| For Year  | *108.31                                          | 24,825.14          | 24,933.45 | 24,016.92                   | 48,950.37                          | 133.74          | 48,772.37                    | 133.26 109.68                       |

\*Includes Flashboard Leakage.

TABLE 11

## SCITUATE WATERSHED - REFORESTATION

NUMBER AND KINDS OF TREES PLANTED IN VARIOUS YEARS

| Planted During<br>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<br>Calendar Year |            |            |           |            |             |               |             |           |              |               |         |        | Total Number<br>Planted<br>Yearly |
|---------------------------------|------------|------------|-----------|------------|-------------|---------------|-------------|-----------|--------------|---------------|---------|--------|-----------------------------------|
|                                 | Fraser Fir | Balsam Fir | Red Pine  | White Pine | Douglas Fir | Austrian Pine | Scotch Pine | Jack Pine | White Spruce | Norway Spruce | Hemlock | Larch  |                                   |
| 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                          |
| 1972                            | 0          | 0          | 0         | 2,000      | 500         | 0             | 0           | 0         | 0            | 500           | 2,000   | 0      | ****7,000                         |
| 1973                            | 0          | 0          | 0         | 1,500      | 500         | 0             | 0           | 0         | 0            | 500           | 2,000   | 500    | *****7,000                        |
| 1974                            | 0          | 0          | 0         | 1,500      | 500         | 0             | 0           | 0         | 0            | 500           | 2,500   | 0      | 5,000                             |
| 1975                            | 0          | 0          | 0         | 4,500      | 500         | 0             | 0           | 0         | 0            | 0             | 0       | 0      | 5,000                             |
| 1976                            | 0          | 0          | 0         | 3,750      | 500         | 0             | 0           | 0         | 0            | 500           | 3,000   | 0      | 7,750                             |
| Totals                          | 1,000      | 4,140      | 2,638,427 | 2,852,215  | 19,428      | 101,221       | 136,000     | 121,750   | 821,781      | 223,049       | 78,500  | 48,961 | 7,050,812                         |

\*Includes 200 Black Walnut.

\*\*Includes 100 Chestnut.

\*\*\*Includes 40 Chestnut.

\*\*\*\*Includes 1,400 White Ash and 600 Black Cherry.

\*\*\*\*\*Includes 1,000 White Ash and 1,000 Tulip Poplar.

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                                             | 1,606,100                                  | 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         |
| July 1971-June 1972       | 3,404,000                   | 856,694                                             | 2,795,200                                  | 15,638.00        |
| July 1972-June 1973       | 6,807,400                   | 847,110                                             | 5,764,800                                  | 32,786.38        |
| July 1973-June 1974       | 4,736,400                   | 1,030,660                                           | 3,884,800                                  | 21,539.46        |
| July 1974-June 1975       | 2,094,100                   | 1,015,400                                           | 1,372,800                                  | 6,504.60         |
| July 1975-June 1976       | 4,288,100                   | 1,065,070                                           | 3,528,000                                  | 19,998.90        |

\*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, 1976

| 1975-<br>1976 | Influent<br>Aerator | Plant Influent<br>Mil. Gals. | Water Filtered<br>Mil. Gals. |           |                    | Wash Water<br>Mil. Gals. |                    |       | Plant Effluent<br>Mil. Gals. | Plant<br>Effluent<br>Flow | Number of Filters<br>in Operation |       |      |      |
|---------------|---------------------|------------------------------|------------------------------|-----------|--------------------|--------------------------|--------------------|-------|------------------------------|---------------------------|-----------------------------------|-------|------|------|
|               | Hours<br>Operated   | Total                        | Average<br>per Day           | Total     | Average<br>per Day | Total                    | Average<br>per Day | Filt. | Total                        | Average<br>per Day        | Hours                             | Max.  | Min. | Avg. |
| July          | 744.0               | 2,441.201                    | 78.748                       | 2,409.703 | 77.732             | 20.581                   | 0.664              | 0.9   | 2,389.122                    | 77.068                    | 744.0                             | 16    | 4    | 11.2 |
| August        | 744.0               | 2,383.010                    | 76.871                       | 2,327.516 | 75.081             | 22.148                   | 0.714              | 1.0   | 2,305.368                    | 74.367                    | 744.0                             | 18    | 4    | 10.8 |
| September     | 720.0               | 2,042.783                    | 68.093                       | 1,968.649 | 65.622             | 16.806                   | 0.560              | 0.9   | 1,951.843                    | 65.061                    | 720.0                             | 15    | 3    | 9.5  |
| October       | 742.5               | 1,987.719                    | 64.120                       | 1,887.090 | 60.874             | 21.703                   | 0.700              | 1.2   | 1,865.387                    | 60.174                    | 745.0                             | 17    | 6    | 12.2 |
| November      | 720.0               | 1,793.793                    | 59.793                       | 1,780.714 | 59.357             | 27.913                   | 0.930              | 1.6   | 1,752.801                    | 58.427                    | 720.0                             | 16    | 4    | 11.9 |
| December      | 744.0               | 1,745.880                    | 56.319                       | 1,803.808 | 58.187             | 18.867                   | 0.609              | 1.0   | 1,784.941                    | 57.579                    | 744.0                             | 16    | 5    | 11.7 |
| January       | 744.0               | 1,764.616                    | 56.923                       | 1,799.016 | 58.033             | 18.189                   | 0.587              | 1.0   | 1,780.827                    | 57.446                    | 744.0                             | 16    | 5    | 11.7 |
| February      | 696.0               | 1,653.768                    | 57.026                       | 1,682.137 | 58.005             | 15.381                   | 0.530              | 0.9   | 1,666.756                    | 57.474                    | 696.0                             | 15    | 4    | 11.6 |
| March         | 744.0               | 1,806.853                    | 58.286                       | 1,831.583 | 59.083             | 14.155                   | 0.457              | 0.8   | 1,817.428                    | 58.627                    | 744.0                             | 16    | 7    | 11.8 |
| April         | 715.5               | 1,823.205                    | 60.774                       | 1,883.689 | 62.790             | 19.512                   | 0.650              | 1.0   | 1,864.177                    | 62.139                    | 719.0                             | 18    | 5    | 12.6 |
| May           | 741.5               | 2,000.223                    | 64.523                       | 2,000.972 | 64.547             | 22.532                   | 0.727              | 1.1   | 1,978.440                    | 63.821                    | 744.0                             | 18    | 7    | 13.0 |
| June          | 720.0               | 2,573.867                    | 85.796                       | 2,566.174 | 85.539             | 29.203                   | 0.973              | 1.2   | 2,536.971                    | 84.566                    | 720.0                             | 18    | 4    | 13.0 |
| Totals        |                     | 8,775.5                      | 24,016.918                   |           | 23,941.051         |                          | 246.990            |       | 23,694.061                   |                           | 8,784.0                           |       |      |      |
| Average       |                     | 731.3                        |                              | 65.620    |                    | 65.413                   |                    | 0.675 | 1.0                          |                           | 64.738                            | 732.0 |      | 11.8 |

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, 1976

| 1975-1976 | Number of Filters Washed              |       |                          |        | Ferri-Floc Used |              |              | Quicklime Used |              |              | Chlorine Used |                    |                | Sodium Silicofluoride Used |                    |                 |  |
|-----------|---------------------------------------|-------|--------------------------|--------|-----------------|--------------|--------------|----------------|--------------|--------------|---------------|--------------------|----------------|----------------------------|--------------------|-----------------|--|
|           | Average Rate of Filtration per Filter |       | Average Filter Run Hours |        | Lbs.            | Avg. per Day | Gr. per Gal. | Lbs.           | Avg. per Day | Gr. per Gal. | Lbs.          | Avg. Parts per Day | Parts per Mil. | Lbs.                       | Avg. Parts per Day | Parts per Mil.* |  |
|           | M.G.D.                                | Total | Avg. per Day             | Hours  |                 |              |              |                |              |              |               |                    |                |                            |                    |                 |  |
| July      | 6.94                                  | 118   | 3.8                      | 73.77  | 256,222         | 8,265        | 0.73         | 254,679        | 8,215        | 0.73         | 13,078        | 422                | 0.65           | 30,152                     | 973                | 0.90            |  |
| August    | 6.95                                  | 127   | 4.1                      | 68.29  | 246,993         | 7,968        | 0.73         | 254,456        | 8,208        | 0.75         | 12,549        | 405                | 0.65           | 29,257                     | 944                | 0.90            |  |
| September | 6.89                                  | 97    | 3.2                      | 70.33  | 212,768         | 7,092        | 0.73         | 219,620        | 7,321        | 0.75         | 10,071        | 336                | 0.61           | 23,695                     | 790                | 0.87            |  |
| October   | 4.97                                  | 126   | 4.1                      | 76.84  | 206,179         | 6,651        | 0.73         | 187,831        | 6,059        | 0.66         | 6,752         | 218                | 0.43           | 21,839                     | 704                | 0.83            |  |
| November  | 4.98                                  | 161   | 5.4                      | 56.79  | 231,080         | 7,703        | 0.90         | 178,694        | 5,956        | 0.70         | 8,742         | 291                | 0.59           | 20,486                     | 683                | 0.83            |  |
| December  | 4.99                                  | 109   | 3.5                      | 87.56  | 210,132         | 6,778        | 0.84         | 169,886        | 5,480        | 0.68         | 7,783         | 251                | 0.52           | 20,813                     | 671                | 0.83            |  |
| January   | 4.98                                  | 106   | 3.4                      | 85.84  | 229,945         | 7,418        | 0.91         | 190,238        | 6,137        | 0.75         | 7,719         | 249                | 0.51           | 20,853                     | 673                | 0.83            |  |
| February  | 4.99                                  | 90    | 3.1                      | 94.73  | 243,468         | 8,395        | 1.03         | 193,603        | 6,676        | 0.82         | 7,214         | 249                | 0.51           | 19,610                     | 676                | 0.84            |  |
| March     | 5.00                                  | 83    | 2.7                      | 105.51 | 269,343         | 8,688        | 1.04         | 213,496        | 6,887        | 0.83         | 7,839         | 253                | 0.51           | 21,274                     | 686                | 0.83            |  |
| April     | 5.00                                  | 112   | 3.7                      | 89.66  | 237,485         | 7,916        | 0.91         | 196,987        | 6,566        | 0.76         | 9,830         | 328                | 0.63           | 22,031                     | 734                | 0.84            |  |
| May       | 4.95                                  | 127   | 4.1                      | 80.90  | 232,617         | 7,504        | 0.81         | 211,223        | 6,814        | 0.74         | 10,831        | 349                | 0.65           | 23,098                     | 745                | 0.83            |  |
| June      | 6.60                                  | 159   | 5.3                      | 62.47  | 261,220         | 8,707        | 0.71         | 261,050        | 8,702        | 0.71         | 12,461        | 415                | 0.58           | 29,517                     | 984                | 0.83            |  |
| Totals    |                                       | 1,415 |                          |        | 2,837,452       |              |              | 2,531,763      |              |              | 114,869       |                    |                | 282,625                    |                    |                 |  |
| Average   | 5.57                                  | 3.9   | 77.23                    |        |                 | 7,753        | 0.83         |                | 6,917        | 0.74         |               | 314                | 0.58           |                            | 772                | 0.85            |  |

Total filter hours for year, 103,222.27; average per day, 282.03.

Average quantity of water filtered per filter per run, 17.92 m.g.

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

TABLE 14  
WATER PURIFICATION WORKS  
CHEMICALS USED - YEAR ENDED JUNE 30, 1976

|                       | Pounds of Chemicals Used<br>Total | Lbs. per Day<br>(Average) | Total<br>Gallons<br>of Water<br>Treated | Cost of<br>Chemicals | Pounds of<br>Chemicals<br>Used per<br>1,000,000<br>Gals. of<br>Water Treated<br>(Average) | Cost of<br>Chemicals<br>per<br>1,000,000<br>Gals.<br>of Water<br>Treated |
|-----------------------|-----------------------------------|---------------------------|-----------------------------------------|----------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Ferri-Floc            | 2,837,452                         | 7,753                     | 24,016,918,000                          | \$126,752.49         | 118.14                                                                                    | \$5.28                                                                   |
| Quicklime             | 2,531,763                         | 6,917                     | 24,016,918,000                          | 54,413.75            | 105.42                                                                                    | 2.27                                                                     |
| Chlorine              | 114,869                           | 314                       | 23,941,051,000                          | 12,635.59            | 4.80                                                                                      | 0.53                                                                     |
| Sodium Silicofluoride | 282,625                           | 772                       | 23,663,388,000                          | 32,261.20            | 11.94                                                                                     | 1.36                                                                     |
| Totals                | 5,766,709                         |                           |                                         | \$226,063.03         |                                                                                           | \$9.44                                                                   |

Price of Ferri-Floc--From July 1 to July 31, 1975--\$82.60 per ton; from Aug. 1, 1975 to Feb. 10, 1976--\$89.60 per ton; from Feb. 11 to Mar. 8, 1976--\$90.60 per ton; from Mar. 9 to June 30, 1976--\$93.40 per ton.

Price of Quicklime--From July 1 to Oct. 16, 1975--\$41.90 per ton; from Oct. 17, 1975 to June 30, 1976--\$43.90 per ton.

Price of Chlorine--From July 1, 1975 to June 30, 1976--\$220.00 per ton.

Price of Sodium Silicofluoride--From July 1 to Oct. 2, 1975--\$235.00 per ton; from Oct. 3, 1975 to June 30, 1976--\$226.60 per ton.

TABLE 15  
WATER PURIFICATION WORKS  
\*CHEMICAL AND PHYSICAL CHARACTERISTICS OF WATER IN PROCESS OF FILTRATION

YEAR ENDED JUNE 30, 1976

|                            | Monthly Averages |      |       |      |      |      |      |      |      |      |      |      | Avg. for Year |
|----------------------------|------------------|------|-------|------|------|------|------|------|------|------|------|------|---------------|
|                            | July             | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May  | June |               |
| pH                         |                  |      |       |      |      |      |      |      |      |      |      |      |               |
| Raw                        | 5.9              | 5.7  | 5.8   | 6.0  | 6.3  | 6.3  | 6.2  | 6.1  | 6.1  | 6.2  | 6.0  | 5.9  | 6.0           |
| Aerated Influent           | 4.2              | 4.1  | 4.2   | 4.1  | 4.1  | 4.2  | 4.1  | 4.1  | 4.0  | 4.1  | 4.1  | 4.2  | 4.1           |
| Treated                    | 10.3             | 10.2 | 10.2  | 10.1 | 10.2 | 10.3 | 10.3 | 10.3 | 10.4 | 10.3 | 10.3 | 10.2 | 10.3          |
| Settled                    | 10.2             | 10.1 | 10.1  | 10.0 | 10.1 | 10.1 | 10.2 | 10.2 | 10.2 | 10.2 | 10.1 | 10.1 | 10.1          |
| Filtered                   | 10.2             | 10.1 | 10.1  | 10.0 | 10.1 | 10.1 | 10.2 | 10.2 | 10.2 | 10.2 | 10.1 | 10.1 | 10.1          |
| **Effluent                 | 10.2             | 10.1 | 10.1  | 10.0 | 10.1 | 10.1 | 10.2 | 10.2 | 10.2 | 10.2 | 10.1 | 10.1 | 10.1          |
| Tap                        | 10.1             | 10.0 | 9.9   | 9.9  | 10.0 | 10.0 | 10.2 | 10.1 | 10.1 | 10.1 | 10.0 | 10.0 | 10.0          |
| Acidity                    |                  |      |       |      |      |      |      |      |      |      |      |      |               |
| Raw                        | 3.8              | 5.9  | 7.0   | 3.7  | 1.7  | 1.5  | 2.1  | 2.2  | 1.9  | 2.0  | 2.3  | 3.6  | 3.1           |
| Aerated Influent           | 8.6              | 9.8  | 9.2   | 8.3  | 8.6  | 8.1  | 8.9  | 10.4 | 10.7 | 10.1 | 9.0  | 8.3  | 9.2           |
| Phenolphthalein Alkalinity |                  |      |       |      |      |      |      |      |      |      |      |      |               |
| Treated                    | 10.6             | 11.3 | 10.9  | 10.4 | 9.0  | 8.6  | 9.5  | 9.5  | 9.9  | 8.9  | 9.5  | 9.9  | 9.8           |
| Settled                    | 8.8              | 9.5  | 9.5   | 9.1  | 7.7  | 7.2  | 8.3  | 7.8  | 8.1  | 7.5  | 7.7  | 8.5  | 8.3           |
| Filtered                   | 8.8              | 9.4  | 9.3   | 9.0  | 7.6  | 7.0  | 8.1  | 7.7  | 8.0  | 7.3  | 7.7  | 8.4  | 8.2           |
| **Effluent                 | 8.9              | 9.4  | 9.4   | 9.0  | 7.7  | 7.1  | 8.2  | 7.7  | 8.0  | 7.4  | 7.8  | 8.5  | 8.3           |
| Tap                        | 7.1              | 7.6  | 7.7   | 7.5  | 6.3  | 5.3  | 6.5  | 5.9  | 6.4  | 5.8  | 6.3  | 7.0  | 6.6           |
| Methyl Orange Alkalinity   |                  |      |       |      |      |      |      |      |      |      |      |      |               |
| Raw                        | 4.0              | 4.4  | 5.4   | 5.3  | 3.2  | 3.1  | 3.2  | 2.9  | 3.3  | 2.7  | 2.9  | 3.1  | 3.6           |
| Treated                    | 17.3             | 18.8 | 19.6  | 17.4 | 13.4 | 13.3 | 14.6 | 14.7 | 15.6 | 14.0 | 14.8 | 15.8 | 15.8          |
| Settled                    | 15.8             | 17.1 | 18.1  | 16.3 | 12.4 | 11.8 | 13.2 | 13.0 | 13.6 | 12.0 | 13.2 | 14.2 | 14.2          |
| Filtered                   | 15.6             | 17.0 | 17.9  | 16.1 | 12.1 | 11.6 | 13.0 | 12.7 | 13.4 | 12.2 | 13.1 | 14.1 | 14.1          |
| **Effluent                 | 15.6             | 17.0 | 17.9  | 16.2 | 12.1 | 11.7 | 13.0 | 12.8 | 13.4 | 12.2 | 13.2 | 14.1 | 14.1          |
| Tap                        | 14.2             | 15.5 | 16.5  | 15.1 | 11.0 | 10.4 | 11.6 | 11.5 | 12.3 | 11.0 | 12.0 | 13.1 | 12.9          |
| Color                      |                  |      |       |      |      |      |      |      |      |      |      |      |               |
| Raw                        | 7                | 7    | 12    | 10   | 10   | 12   | 13   | 14   | 13   | 12   | 9    | 8    | 11            |
| Settled                    | 7                | 8    | 9     | 8    | 10   | 11   | 13   | 12   | 12   | 12   | 8    | 11   | 10            |
| **Effluent                 | 2                | 2    | 2     | 2    | 3    | 2    | 3    | 4    | 4    | 4    | 3    | 3    | 3             |
| Tap                        | 2                | 2    | 2     | 2    | 4    | 3    | 3    | 4    | 4    | 4    | 4    | 4    | 3             |
| Turbidity                  |                  |      |       |      |      |      |      |      |      |      |      |      |               |
| Raw                        | 0.1              | 0.1  | 0.3   | 0.3  | 0.1  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.1  | 0.1  | 0.2           |
| Settled                    | .1               | .1   | .1    | .1   | .2   | .1   | .2   | .2   | .2   | .2   | .1   | .2   | .2            |
| **Effluent                 | .0               | .0   | .0    | .0   | .0   | .0   | .1   | .1   | .0   | .1   | .0   | .0   | .0            |
| Hardness                   |                  |      |       |      |      |      |      |      |      |      |      |      |               |
| Raw                        | 11               | 11   | 12    | 12   | 11   | 12   | 11   | 11   | 11   | 11   | 10   | 10   | 11            |
| **Effluent                 | 30               | 30   | 31    | 29   | 28   | 28   | 28   | 29   | 30   | 29   | 28   | 27   | 29            |
| Tap                        | 30               | 30   | 32    | 30   | 29   | 28   | 29   | 30   | 30   | 29   | 29   | 28   | 30            |
| Iron                       |                  |      |       |      |      |      |      |      |      |      |      |      |               |
| Raw                        | 0.03             | 0.03 | 0.12  | 0.11 | 0.07 | 0.08 | 0.09 | 0.08 | 0.08 | 0.05 | 0.04 | 0.05 | 0.07          |
| Settled                    | .34              | .23  | .13   | .18  | .47  | .46  | .61  | .52  | .52  | .56  | .36  | .45  | .40           |
| **Effluent                 | .00              | .00  | .00   | .00  | .01  | .01  | .02  | .02  | .01  | .01  | .00  | .00  | .01           |
| Tap                        | .01              | .01  | .01   | .02  | .03  | .03  | .03  | .03  | .03  | .03  | .04  | .03  | .03           |
| Manganese                  |                  |      |       |      |      |      |      |      |      |      |      |      |               |
| Raw                        | 0.02             | 0.04 | 0.18  | 0.13 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.02 | 0.04          |
| Settled                    | .00              | .00  | .02   | .02  | .01  | .00  | .01  | .00  | .00  | .00  | .00  | .00  | .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             | 0.16 | 0.15  | 0.17 | 0.16 | 0.16 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15          |
| **Effluent                 | .15              | .15  | .15   | .17  | .16  | .16  | .15  | .15  | .15  | .15  | .15  | .15  | .15           |
| Tap                        | 1.00             | 1.01 | 0.97  | 1.00 | 0.95 | 0.95 | 0.97 | 0.97 | 0.97 | 0.96 | 0.94 | 0.92 | 0.97          |
| Chlorine Residual          |                  |      |       |      |      |      |      |      |      |      |      |      |               |
| Filtered                   | 0.21             | 0.20 | 0.27  | 0.16 | 0.20 | 0.13 | 0.12 | 0.12 | 0.10 | 0.17 | 0.17 | 0.16 | 0.17          |
| **Effluent                 | .18              | .19  | .26   | .15  | .18  | .11  | .12  | .12  | .09  | .15  | .16  | .15  | .16           |
| ***301 Pontiac Ave. (C)    | .03              | .04  | .09   | .08  | .04  | .04  | .03  | .03  | .01  | .01  | .02  | .03  | .04           |
| Neut. Reservoir            | .02              | .02  | .04   | .06  | .01  | .02  | .02  | .02  | .01  | .01  | .01  | .02  | .02           |
| Tap                        | .02              | .03  | .06   | .05  | .02  | .02  | .02  | .02  | .01  | .01  | .01  | .01  | .02           |
| Temperatures               |                  |      |       |      |      |      |      |      |      |      |      |      |               |
| Raw                        | 49               | 50   | 53    | 58   | 52   | 42   | 35   | 35   | 38   | 44   | 51   | 54   | 47            |
| Tap                        | 59               | 59   | 59    | 60   | 58   | 46   | 39   | 40   | 42   | 48   | 55   | 60   | 52            |

\*Parts per million, except pH.

\*\*Before treatment with sodium silicofluoride.

\*\*\*Changed to 160 Sockanosset Crossroad on Oct. 20, 1975.

TABLE 16

## WATER PURIFICATION WORKS

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

YEAR ENDED JUNE 30, 1976

| Monthly Analyses      | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | Avg. for Year |
|-----------------------|------|------|-------|------|------|------|------|------|------|------|-----|------|---------------|
| Color                 |      |      |       |      |      |      |      |      |      |      |     |      |               |
| Ponaganset Reservoir  | 4    | 8    | 6     | 11   | 7    | 6    | 13   | 4    | 4    | 2    | 2   | --   | 6             |
| Coventry Brook        | 23   | 14   | 23    | 70   | 24   | 17   | 8    | 12   | 13   | 17   | 32  | 23   | 23            |
| Wilbur Brook          | 85   | 9    | 40    | 65   | 60   | 30   | 23   | 14   | 25   | 45   | 55  | --   | 41            |
| Westconnaug Reservoir | 13   | 6    | 9     | 40   | 6    | 14   | 12   | 6    | 9    | 14   | 9   | 12   | 13            |
| Barden Reservoir      | 18   | 45   | 13    | 40   | 30   | 29   | 19   | 9    | 13   | 12   | 17  | 11   | 21            |
| Cork Brook            | 18   | **   | **    | 58   | 23   | 16   | 9    | 8    | 12   | 12   | 17  | 12   | 19            |
| Rush Brook            | 25   | 9    | 14    | 56   | 21   | 24   | 18   | 9    | 14   | 11   | 26  | --   | 21            |
| Huntinghouse Brook    | 19   | **   | 12    | 60   | 23   | 15   | 11   | 9    | 10   | 19   | 27  | --   | 21            |
| Harrisdale Brook      | 18   | 9    | 12    | 68   | 18   | 12   | 12   | 8    | 11   | 12   | 12  | 14   | 17            |
| Blanchard Brook       | 160  | **   | **    | 300  | 85   | 60   | 45   | 38   | 45   | 110  | 140 | --   | 109           |
| Moswansicut Pond      | 12   | 12   | 8     | 13   | 16   | 16   | 17   | 15   | 13   | 13   | 12  | 13   | 13            |
| Regulating Reservoir  | 8    | 27   | 12    | 12   | 30   | 18   | 13   | 8    | 9    | 8    | 11  | 8    | 14            |
| Quonopaug Brook       | 170  | 75   | 28    | 300  | 113  | 55   | 34   | 23   | 36   | 115  | 105 | 110  | 97            |
| Hemlock Brook         | 18   | 12   | 13    | 190  | 55   | 45   | 23   | 13   | 24   | 32   | 26  | 13   | 39            |
| Betty Pond Stream     | 13   | 21   | 22    | 30   | 29   | 13   | 9    | 4    | 17   | 8    | 8   | --   | 16            |
| Spruce Brook          | 56   | 22   | 17    | 90   | 60   | 30   | 18   | 13   | 22   | 24   | 37  | --   | 35            |
| Brandy Brook          | 39   | 40   | 22    | 115  | 90   | 62   | 34   | 28   | 36   | 48   | 38  | --   | 50            |
| Moswansicut-South     | 80   | 56   | 60    | 75   | 20   | 12   | 6    | 9    | 10   | 45   | 32  | --   | 37            |
| Windsor Brook         | 20   | **   | 11    | 7    | 23   | 14   | 14   | 8    | 13   | 13   | 24  | --   | 15            |
| Paine Pond            | 27   | **   | **    | 110  | 60   | 23   | 19   | 13   | 13   | 22   | 34  | 56   | 38            |
| Unnamed Brook-A       | **   | **   | **    | 110  | 63   | 34   | 22   | 18   | 23   | 25   | 63  | **   | 45            |
| Unnamed Brook-B       | 28   | 29   | 12    | 105  | 46   | 19   | 12   | 12   | 13   | 15   | 23  | 40   | 30            |
| Turbidity             |      |      |       |      |      |      |      |      |      |      |     |      |               |
| Ponaganset Reservoir  | 0.2  | 0.2  | 0.5   | 0.8  | 0.6  | 0.3  | 0.2  | 0.2  | 0.3  | 0.1  | 0.1 | 0.1  | 0.3           |
| Coventry Brook        | .2   | .1   | .5    | .2   | .1   | .1   | .1   | .1   | .1   | .1   | .1  | .3   | .2            |
| Wilbur Brook          | .5   | .4   | .7    | .2   | .2   | .2   | .1   | .2   | .2   | .3   | .3  | 1.6  | .4            |
| Westconnaug Reservoir | .2   | .2   | .1    | .1   | .1   | .2   | .1   | .1   | .2   | .2   | .2  | .4   | .2            |
| Barden Reservoir      | .2   | .5   | .2    | .1   | .2   | .2   | .2   | .2   | .2   | .2   | .1  | .6   | .2            |
| Cork Brook            | .1   | **   | **    | .2   | .1   | .1   | .3   | .1   | .1   | .1   | .1  | .2   | .1            |
| Rush Brook            | .2   | .2   | .4    | .1   | .2   | .3   | .2   | .2   | .1   | .2   | .2  | 1.1  | .3            |
| Huntinghouse Brook    | .5   | **   | .1    | .1   | .1   | .1   | .1   | .1   | .1   | .1   | .2  | .4   | .2            |
| Harrisdale Brook      | .6   | .1   | .2    | .3   | .2   | .3   | .2   | .1   | .1   | .3   | .1  | .4   | .2            |
| Blanchard Brook       | 1.0  | **   | **    | .2   | .2   | .2   | .1   | .1   | .1   | .3   | .2  | .6   | .3            |
| Moswansicut Pond      | .1   | .3   | .4    | .5   | .3   | .2   | .3   | .2   | .3   | .3   | .4  | .2   | .3            |
| Regulating Reservoir  | .2   | .2   | .4    | .1   | .1   | .2   | .2   | .1   | .1   | .4   | .1  | .3   | .2            |
| Quonopaug Brook       | 2.3  | 1.5  | .2    | .2   | .5   | .2   | .2   | .1   | .1   | .2   | .3  | 1.6  | .6            |
| Hemlock Brook         | .3   | .1   | .1    | .3   | .3   | .2   | .2   | .1   | .1   | .3   | .1  | .2   | .2            |
| Betty Pond Stream     | .4   | .5   | .3    | .2   | .4   | .1   | .1   | .1   | .1   | .2   | .1  | 1.2  | .3            |
| Spruce Brook          | .3   | .1   | .1    | .5   | .2   | .1   | .1   | .1   | .1   | .1   | .2  | .4   | .2            |
| Brandy Brook          | .3   | .4   | .2    | .2   | 1.0  | .6   | .2   | .3   | .7   | .7   | 1.2 | .2   | .5            |
| Moswansicut-South     | 3.1  | 2.6  | 2.4   | .9   | .5   | .5   | .2   | .3   | .7   | 3.2  | 2.0 | 2.6  | 1.6           |
| Windsor Brook         | .1   | **   | .1    | .4   | .1   | .1   | .1   | .1   | .1   | .2   | .1  | .2   | .1            |
| Paine Pond            | .3   | **   | **    | .7   | .5   | .2   | .3   | .2   | .3   | .2   | .3  | .7   | .4            |
| Unnamed Brook-A       | **   | **   | **    | .4   | .6   | .3   | .2   | .2   | .4   | .3   | 1.2 | **   | .5            |
| Unnamed Brook-B       | .2   | .3   | .2    | .2   | .3   | .2   | .3   | .1   | .2   | .2   | .2  | .2   | .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, 1976

| Monthly Analyses      | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May  | June | Avg. for Year |
|-----------------------|------|------|-------|------|------|------|------|------|------|------|------|------|---------------|
| Iron                  |      |      |       |      |      |      |      |      |      |      |      |      |               |
| Ponaganset Reservoir  | 0.14 | 0.09 | 0.06  | 0.20 | 0.14 | 0.14 | 0.10 | 0.07 | 0.09 | 0.02 | 0.03 | 0.09 | 0.10          |
| Coventry Brook        | .14  | .03  | .04   | .28  | .05  | .07  | .02  | .03  | .03  | .05  | .08  | .14  | .08           |
| Wilbur Brook          | .75  | .20  | .15   | .60  | .14  | .18  | .06  | .04  | .10  | .18  | .27  | .48  | .26           |
| Westconnaug Reservoir | .28  | .05  | .04   | .16  | .04  | .08  | .04  | .08  | .05  | .13  | .13  | .17  | .10           |
| Barden Reservoir      | .13  | 1.00 | .13   | .28  | .15  | .18  | .05  | .15  | .04  | .07  | .08  | .13  | .20           |
| Cork Brook            | .13  | **   | **    | .10  | .04  | .07  | .02  | .12  | .02  | .04  | .08  | .07  | .07           |
| Rush Brook            | .22  | .24  | .23   | .20  | .17  | .20  | .09  | .08  | .10  | .20  | .42  | .34  | .21           |
| Huntinghouse Brook    | .20  | **   | .03   | .15  | .06  | .05  | .03  | .03  | .02  | .08  | .13  | .14  | .08           |
| Harrisdale Brook      | .32  | .04  | .05   | .22  | .08  | .12  | .04  | .05  | .04  | .18  | .10  | .17  | .12           |
| Blanchard Brook       | 2.00 | **   | **    | .75  | .18  | .19  | .08  | .04  | .10  | .30  | .50  | 1.90 | .60           |
| Moswansicut Pond      | .12  | .14  | .03   | .05  | .07  | .09  | .09  | .05  | .06  | .03  | .04  | .05  | .07           |
| Regulating Reservoir  | .02  | .22  | .12   | .21  | .09  | .24  | .04  | .06  | .04  | .03  | .10  | .05  | .10           |
| Quonopaug Brook       | .70  | .70  | .04   | 1.00 | .16  | .07  | .07  | .07  | .07  | .22  | .50  | .80  | .37           |
| Hemlock Brook         | .05  | .08  | .12   | .35  | .24  | .24  | .07  | .05  | .08  | .02  | .14  | .15  | .13           |
| Betty Pond Stream     | .02  | .10  | .04   | .09  | .17  | .14  | .02  | .02  | .02  | .05  | .08  | .48  | .10           |
| Spruce Brook          | .15  | .12  | .03   | .15  | .04  | .04  | .04  | .04  | .08  | .14  | .14  | .26  | .10           |
| Brandy Brook          | .18  | .14  | .05   | .35  | .20  | .10  | .14  | .22  | .17  | .18  | .50  | .14  | .20           |
| Moswansicut-South     | 1.00 | 1.25 | .48   | .16  | .30  | .26  | .14  | .14  | .70  | .03  | .70  | .70  | .49           |
| Windsor Brook         | .04  | **   | .02   | .08  | .05  | .05  | .03  | .03  | .02  | .07  | .09  | .18  | .06           |
| Paine Pond            | .38  | **   | **    | .14  | .25  | .12  | .08  | .09  | .04  | .05  | .22  | .80  | .22           |
| Unnamed Brook-A       | **   | **   | **    | .20  | .25  | .15  | .10  | .08  | .10  | .50  | .76  | **   | .27           |
| Unnamed Brook-B       | .54  | .17  | .06   | .18  | .12  | .10  | .08  | .05  | .08  | .10  | .10  | .56  | .18           |
| Manganese             |      |      |       |      |      |      |      |      |      |      |      |      |               |
| Ponaganset Reservoir  | 0.04 | 0.04 | 0.06  | 0.06 | 0.04 | 0.04 | 0.04 | 0.05 | 0.04 | 0.05 | 0.07 | ---  | 0.05          |
| Coventry Brook        | .00  | 0.00 | .03   | .02  | .00  | .01  | .01  | .00  | .00  | .00  | .00  | 0.00 | .01           |
| Wilbur Brook          | .01  | ---  | .02   | .05  | .00  | .02  | .02  | .01  | .01  | .01  | .03  | .04  | .02           |
| Westconnaug Reservoir | .02  | ---  | .01   | .01  | .00  | .01  | .02  | .00  | .02  | .01  | .01  | .02  | .01           |
| Barden Reservoir      | .01  | **   | .01   | .01  | .02  | .02  | .04  | .02  | .04  | .02  | .02  | .04  | .02           |
| Cork Brook            | .02  | ---  | **    | .04  | .03  | .02  | .02  | .00  | .02  | .01  | .01  | .00  | .02           |
| Rush Brook            | .04  | ---  | .19   | .03  | .02  | .02  | .04  | .02  | .03  | .01  | .02  | .00  | .04           |
| Huntinghouse Brook    | .01  | **   | .00   | .04  | .01  | .00  | .02  | .01  | .00  | .01  | .01  | .02  | .01           |
| Harrisdale Brook      | .04  | ---  | .02   | .03  | .00  | .00  | .02  | .00  | .01  | .02  | .00  | .00  | .01           |
| Blanchard Brook       | .02  | ---  | **    | .03  | .04  | .02  | .02  | .02  | .02  | .00  | .00  | .02  | .02           |
| Mowsansicut Pond      | .02  | ---  | .04   | .03  | .00  | .02  | .02  | .00  | .02  | .00  | .01  | .04  | .02           |
| Regulating Reservoir  | .01  | ---  | .04   | .00  | .01  | .00  | .04  | .03  | .02  | .01  | .00  | .00  | .01           |
| Quonopaug Brook       | .02  | ---  | .04   | .04  | .01  | .00  | .01  | .00  | .00  | .00  | .04  | .04  | .02           |
| Hemlock Brook         | .00  | ---  | .00   | .06  | .04  | .04  | .04  | .00  | .04  | .02  | .02  | .01  | .02           |
| Betty Pond Stream     | .01  | ---  | .01   | .00  | .01  | .00  | .01  | .01  | .00  | .00  | .01  | .03  | .01           |
| Spruce Brook          | .00  | ---  | .00   | .06  | .02  | .02  | .01  | .00  | .02  | .00  | .00  | .01  | .01           |
| Brandy Brook          | .08  | ---  | .00   | .01  | .03  | .02  | .04  | .02  | .02  | .03  | .04  | .02  | .03           |
| Moswansicut-South     | .16  | ---  | .04   | .02  | .04  | .02  | .02  | .02  | .03  | .04  | .07  | .13  | .05           |
| Windsor Brook         | .00  | **   | .00   | .14  | .00  | .03  | .01  | .00  | .00  | .00  | .01  | .01  | .02           |
| Paine Pond            | .01  | **   | **    | .05  | .04  | .03  | .03  | .00  | .01  | .00  | .02  | .04  | .02           |
| Unnamed Brook-A       | **   | **   | **    | .02  | .01  | .00  | .02  | .00  | .00  | .02  | .02  | **   | .01           |
| Unnamed Brook-B       | .00  | .03  | .02   | .06  | .02  | .05  | .04  | .04  | .03  | .04  | .04  | ---  | .03           |

\*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, 1976

| Monthly Analyses      | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | Avg. for Year |
|-----------------------|------|------|-------|------|------|------|------|------|------|------|-----|------|---------------|
| <b>pH</b>             |      |      |       |      |      |      |      |      |      |      |     |      |               |
| Ponaganset Reservoir  | 5.0  | 4.9  | 4.9   | 4.9  | 4.9  | 4.9  | 4.7  | 4.7  | 4.8  | 4.7  | 4.9 | 4.8  | 4.8           |
| Coventry Brook        | 6.2  | 6.3  | 6.1   | 5.4  | 6.0  | 6.0  | 5.7  | 5.6  | 5.4  | 6.3  | 6.0 | 6.0  | 5.9           |
| Wilbur Brook          | 6.3  | 6.4  | 6.2   | 5.0  | 5.5  | 5.7  | 5.4  | 5.8  | 5.4  | 6.3  | 6.1 | 6.2  | 5.9           |
| Westconnaug Reservoir | 6.7  | 6.7  | 6.6   | 5.9  | 5.7  | 5.8  | 5.5  | 5.7  | 5.6  | 6.2  | 6.2 | 6.5  | 6.1           |
| Barden Reservoir      | 6.3  | 5.9  | 6.4   | 5.4  | 5.2  | 5.5  | 5.3  | 5.3  | 5.5  | 5.9  | 6.2 | 6.2  | 5.8           |
| Cork Brook            | 6.1  | **   | **    | 4.9  | 5.3  | 5.6  | 5.2  | 5.6  | 5.3  | 6.0  | 6.0 | 6.1  | 5.6           |
| Rush Brook            | 6.3  | 5.9  | 5.9   | 5.4  | 5.8  | 6.0  | 5.9  | 6.3  | 5.7  | 6.5  | 6.2 | 6.4  | 6.0           |
| Huntinghouse Brook    | 6.7  | **   | 6.5   | 5.2  | 5.6  | 5.9  | 5.8  | 6.2  | 5.7  | 6.5  | 6.4 | 6.5  | 6.1           |
| Harrisdale Brook      | 6.8  | 7.0  | 6.9   | 5.7  | 5.9  | 6.2  | 5.9  | 6.3  | 6.0  | 6.6  | 6.8 | 6.6  | 6.4           |
| Blanchard Brook       | 5.7  | **   | **    | 5.1  | 5.1  | 5.4  | 5.2  | 5.6  | 5.5  | 6.1  | 6.0 | 5.6  | 5.5           |
| Moswansicut Pond      | 6.6  | 6.5  | 6.5   | 6.3  | 6.3  | 6.3  | 6.3  | 6.3  | 6.1  | 6.6  | 6.5 | 6.5  | 6.4           |
| Regulating Reservoir  | 7.1  | 7.0  | 6.8   | 6.4  | 5.9  | 6.4  | 5.6  | 6.2  | 6.2  | 6.6  | 6.6 | 6.5  | 6.4           |
| Quonopaug Brook       | 6.2  | 6.1  | 6.0   | 4.9  | 5.3  | 5.6  | 5.1  | 5.5  | 5.6  | 6.1  | 6.1 | 6.3  | 5.7           |
| Hemlock Brook         | 6.3  | 6.3  | 6.2   | 4.5  | 4.8  | 5.1  | 4.9  | 5.3  | 5.1  | 5.6  | 5.9 | 6.2  | 5.5           |
| Betty Pond Stream     | 5.8  | 5.8  | 5.8   | 6.0  | 5.5  | 5.9  | 5.4  | 5.5  | 5.8  | 6.0  | 6.1 | 5.7  | 5.8           |
| Spruce Brook          | 6.2  | 6.3  | 6.1   | 5.0  | 5.2  | 5.6  | 5.2  | 5.8  | 5.3  | 5.9  | 5.9 | 6.0  | 5.7           |
| Brandy Brook          | 7.0  | 6.8  | 6.9   | 6.4  | 5.1  | 6.5  | 6.2  | 6.4  | 6.2  | 6.5  | 6.5 | 6.4  | 6.4           |
| Moswansicut-South     | 6.4  | 6.3  | 6.2   | 6.3  | 6.4  | 6.3  | 6.0  | 7.0  | 6.3  | 6.7  | 6.5 | 6.3  | 6.4           |
| Windsor Brook         | 6.4  | **   | 6.6   | 5.2  | 6.3  | 5.8  | 5.3  | 6.0  | 6.0  | 6.3  | 6.5 | 6.4  | 6.1           |
| Paine Pond            | 6.0  | **   | **    | 5.3  | 5.5  | 5.6  | 5.2  | 5.8  | 5.7  | 6.5  | 5.9 | 6.0  | 5.8           |
| Unnamed Brook-A       | **   | **   | **    | 6.1  | 6.3  | 6.3  | 5.8  | 6.5  | 6.0  | 6.6  | 6.5 | **   | 6.3           |
| Unnamed Brook-B       | 5.2  | 5.8  | 5.1   | 4.4  | 4.7  | 4.9  | 4.6  | 4.8  | 4.7  | 5.0  | 5.1 | 4.9  | 4.9           |
| <b>Acidity</b>        |      |      |       |      |      |      |      |      |      |      |     |      |               |
| Ponaganset Reservoir  | 2.5  | 2.0  | 1.0   | 3.0  | 3.0  | 3.5  | 6.5  | 6.0  | 4.5  | 2.5  | 2.5 | 2.5  | 3.3           |
| Coventry Brook        | 2.0  | 3.0  | 3.0   | 6.5  | 4.0  | 5.0  | 5.5  | 2.5  | 3.0  | 2.0  | 3.0 | 3.5  | 3.6           |
| Wilbur Brook          | 7.0  | 6.0  | 4.0   | 11.0 | 5.0  | 6.0  | 7.0  | 2.5  | 3.5  | 4.0  | 4.0 | 6.0  | 5.5           |
| Westconnaug Reservoir | 2.5  | 2.5  | 2.0   | 3.0  | 3.0  | 3.0  | 3.5  | 2.5  | 2.5  | 2.0  | 3.0 | 3.0  | 2.7           |
| Barden Reservoir      | 2.0  | 7.0  | 2.0   | 4.0  | 5.5  | 3.5  | 3.5  | 2.5  | 3.0  | 2.0  | 2.0 | 5.0  | 3.5           |
| Cork Brook            | 4.5  | **   | **    | 7.0  | 3.5  | 4.0  | 4.5  | 2.0  | 3.5  | 2.0  | 2.0 | 3.5  | 3.7           |
| Rush Brook            | 7.5  | 13.0 | 8.0   | 5.5  | 5.0  | 4.5  | 5.0  | 1.5  | 3.0  | 2.0  | 4.0 | 5.0  | 5.3           |
| Huntinghouse Brook    | 3.5  | **   | 3.5   | 6.5  | 3.5  | 4.5  | 5.0  | 2.5  | 2.5  | 3.0  | 3.0 | 4.5  | 3.8           |
| Harrisdale Brook      | 3.0  | 2.5  | 2.5   | 6.5  | 5.0  | 5.5  | 5.0  | 3.5  | 3.5  | 4.0  | 2.0 | 5.5  | 4.0           |
| Blanchard Brook       | 19.0 | **   | **    | 15.0 | 11.5 | 9.5  | 13.0 | 5.0  | 4.5  | 4.5  | 2.0 | 17.5 | 10.2          |
| Moswansicut Pond      | 2.5  | 3.5  | 3.5   | 2.5  | 2.0  | 2.5  | 3.5  | 3.0  | 2.5  | 3.0  | 1.5 | 4.0  | 2.8           |
| Regulating Reservoir  | 1.5  | 1.5  | 1.5   | 2.5  | 3.5  | 3.0  | 3.5  | 2.5  | 2.0  | 1.0  | 7.0 | 2.0  | 2.6           |
| Quonopaug Brook       | 5.0  | 9.0  | 3.0   | 16.0 | 4.5  | 8.0  | 13.5 | 8.5  | 2.0  | 6.0  | 4.0 | 5.5  | 7.1           |
| Hemlock Brook         | 2.0  | 2.0  | 2.0   | 10.5 | 4.5  | 6.5  | 5.5  | 3.5  | 3.5  | 5.5  | 3.0 | 2.5  | 4.3           |
| Betty Pond Stream     | 4.5  | 3.5  | 6.0   | 3.0  | 4.5  | 7.5  | 8.5  | 9.0  | 2.5  | 4.0  | 3.5 | 10.0 | 5.5           |
| Spruce Brook          | 2.5  | 3.0  | 3.0   | 9.0  | 5.5  | 6.5  | 5.5  | 2.5  | 4.5  | 2.5  | 3.0 | 4.0  | 4.3           |
| Brandy Brook          | 3.5  | 2.5  | 2.5   | 5.0  | 4.5  | 4.5  | 4.0  | 2.0  | 4.5  | 2.0  | 3.5 | 5.0  | 3.6           |
| Moswansicut-South     | 3.5  | 12.5 | 9.5   | 8.0  | 2.5  | 8.5  | 7.5  | 1.0  | 3.5  | 2.5  | 2.5 | 8.5  | 5.8           |
| Windsor Brook         | 3.0  | **   | 2.0   | 5.2  | 4.0  | 4.5  | 3.5  | 2.0  | 2.0  | 2.0  | 2.0 | 3.0  | 3.0           |
| Paine Pond            | 8.0  | **   | **    | 5.3  | 11.0 | 8.0  | 10.0 | 5.0  | 4.0  | 3.5  | 4.5 | 11.5 | 7.1           |
| Unnamed Brook-A       | **   | **   | **    | 6.1  | 8.5  | 7.0  | 13.5 | 6.0  | 5.5  | 5.0  | 5.5 | **   | 7.1           |
| Unnamed Brook-B       | 4.5  | 3.5  | 3.0   | 4.4  | 6.0  | 5.0  | 6.5  | 4.5  | 5.0  | 3.0  | 3.0 | 6.0  | 4.5           |

\*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, 1976

| Monthly Analyses      | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May  | June | Avg. for Year |
|-----------------------|------|------|-------|------|------|------|------|------|------|------|------|------|---------------|
| Alkalinity            |      |      |       |      |      |      |      |      |      |      |      |      |               |
| Ponaganset Reservoir  | 2.0  | 3.0  | 3.0   | 3.0  | 1.0  | 1.0  | 1.5  | 1.0  | 2.0  | 2.0  | 1.5  | 2.0  | 1.9           |
| Coventry Brook        | 7.5  | 9.0  | 7.0   | 5.0  | 3.0  | 3.0  | 3.0  | 3.0  | 4.0  | 4.0  | 4.5  | 5.0  | 4.8           |
| Wilbur Brook          | 10.0 | 10.5 | 7.5   | 4.5  | 3.0  | 2.5  | 2.5  | 2.5  | 4.0  | 5.0  | 6.0  | 8.5  | 5.5           |
| Westconnaug Reservoir | 8.0  | 8.0  | 8.0   | 6.0  | 2.5  | 2.5  | 2.0  | 3.0  | 3.5  | 4.0  | 4.0  | 6.5  | 4.8           |
| Barden Reservoir      | 5.5  | 6.5  | 5.0   | 4.5  | 2.0  | 2.0  | 2.0  | 2.5  | 3.0  | 3.5  | 3.5  | 3.5  | 3.6           |
| Cork Brook            | 5.5  | **   | **    | 4.0  | 2.0  | 2.0  | 2.0  | 3.0  | 2.5  | 3.5  | 3.5  | 5.0  | 3.3           |
| Rush Brook            | 11.0 | 10.0 | 8.5   | 5.0  | 3.5  | 4.0  | 5.5  | 4.5  | 3.5  | 6.5  | 7.0  | 11.5 | 6.7           |
| Huntinghouse Brook    | 13.0 | **   | 11.5  | 4.0  | 3.0  | 3.0  | 3.0  | 3.5  | 3.5  | 5.5  | 6.5  | 10.5 | 6.1           |
| Harrisdale Brook      | 14.5 | 12.5 | 12.0  | 6.0  | 4.0  | 5.0  | 5.0  | 6.0  | 5.5  | 8.0  | 8.0  | 13.0 | 8.3           |
| Blanchard Brook       | 8.5  | **   | **    | 5.5  | 2.5  | 2.5  | 2.5  | 3.5  | 6.0  | 4.5  | 5.5  | 6.0  | 4.7           |
| Moswansicut Pond      | 8.5  | 8.5  | 9.5   | 8.0  | 5.5  | 5.5  | 5.0  | 5.5  | 6.0  | 4.5  | 6.0  | 7.0  | 6.6           |
| Regulating Reservoir  | 12.0 | 12.0 | 11.0  | 8.0  | 3.0  | 5.0  | 3.5  | 4.0  | 5.0  | 5.5  | 6.0  | 8.5  | 7.0           |
| Quonopaug Brook       | 17.0 | 13.0 | 7.5   | 4.0  | 3.0  | 4.0  | 2.5  | 3.0  | 3.0  | 6.0  | 7.0  | 11.5 | 6.8           |
| Hemlock Brook         | 5.0  | 5.0  | 5.5   | 2.5  | 1.0  | 1.5  | 1.5  | 2.0  | 2.5  | 2.5  | 3.5  | 3.5  | 3.0           |
| Betty Pond Stream     | 5.5  | 4.0  | 5.0   | 6.0  | 3.5  | 3.0  | 4.0  | 3.5  | 4.0  | 4.5  | 4.0  | 5.0  | 4.3           |
| Spruce Brook          | 5.0  | 6.0  | 6.0   | 4.0  | 2.0  | 8.0  | 2.0  | 2.5  | 3.0  | 3.0  | 3.5  | 4.5  | 4.1           |
| Brandy Brook          | 13.5 | 12.0 | 12.5  | 9.5  | 8.5  | 1.5  | 6.5  | 7.0  | 8.5  | 9.0  | 10.5 | 6.5  | 8.8           |
| Moswansicut-South     | 27.0 | 20.0 | 15.5  | 14.5 | 11.0 | 10.0 | 7.5  | 8.0  | 8.5  | 9.5  | 13.0 | 16.0 | 13.4          |
| Windsor Brook         | 5.5  | **   | 7.5   | 4.0  | 2.0  | 2.0  | 2.5  | 2.0  | 3.0  | 3.0  | 3.5  | 5.5  | 3.7           |
| Paine Pond            | 8.0  | **   | **    | 5.5  | 3.5  | 3.5  | 3.0  | 4.0  | 4.0  | 6.0  | 5.0  | 8.0  | 5.1           |
| Unnamed Brook-A       | **   | **   | **    | 13.5 | 10.5 | 9.0  | 11.0 | 8.0  | 8.0  | 7.5  | 15.0 | **   | 10.3          |
| Unnamed Brook-B       | 3.5  | 4.0  | 3.5   | 2.0  | 1.0  | 1.5  | 1.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.5  | 2.3           |

\*Parts per million.

\*\*No sample obtained--Dry.

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

TABLE 17  
WATER PURIFICATION WORKS  
CHEMICAL AND PHYSICAL CHARACTERISTICS OF WATER  
IN VARIOUS PARTS OF THE DISTRIBUTION SYSTEM

YEAR ENDED JUNE 30, 1976

|                              | Monthly Averages |      |       |      |      |      |      |      |      |      |      |      | Avg. for Year |
|------------------------------|------------------|------|-------|------|------|------|------|------|------|------|------|------|---------------|
|                              | July             | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May  | June |               |
| <b>pH</b>                    |                  |      |       |      |      |      |      |      |      |      |      |      |               |
| Neutacconkanut Reservoir     | 10.1             | 10.0 | 9.9   | 9.9  | 9.9  | 10.0 | 10.2 | 10.1 | 10.1 | 10.1 | 10.0 | 10.0 | 10.0          |
| *301 Pontiac Ave., Cranston  | 10.1             | 10.0 | 9.9   | 9.9  | 10.1 | 10.1 | 10.2 | 10.1 | 10.2 | 10.2 | 10.1 | 10.1 | 10.1          |
| 630 Atwells Ave.             | 10.1             | 10.0 | 9.9   | 9.9  | 10.0 | 10.1 | 10.2 | 10.1 | 10.1 | 10.1 | 10.0 | 10.0 | 10.0          |
| 1384 Cranston St., Cranston  | 10.1             | 10.0 | 9.9   | 9.9  | 10.0 | 10.1 | 10.2 | 10.1 | 10.1 | 10.1 | 10.0 | 10.0 | 10.0          |
| 750 Reservoir Ave., Cranston | 10.1             | 10.0 | 9.9   | 9.9  | 10.0 | 10.1 | 10.2 | 10.1 | 10.1 | 10.1 | 10.0 | 10.0 | 10.0          |
| 1520 Atwood Ave., Johnston   | 10.1             | 10.0 | 9.9   | 9.9  | 10.0 | 10.1 | 10.2 | 10.1 | 10.1 | 10.1 | 10.0 | 10.0 | 10.0          |
| 774 Allens Ave.              | 10.1             | 10.0 | 10.0  | 10.0 | 10.0 | 10.1 | 10.2 | 10.1 | 10.1 | 10.1 | 10.0 | 10.0 | 10.0          |
| Dexter Manor                 | 10.1             | 10.0 | 9.9   | 9.9  | 10.0 | 10.1 | 10.2 | 10.1 | 10.1 | 10.1 | 10.1 | 10.0 | 10.1          |
| State Office Building        | 10.1             | 10.0 | 9.9   | 9.9  | 10.0 | 10.1 | 10.2 | 10.1 | 10.1 | 10.1 | 10.0 | 10.0 | 10.0          |
| 426 Admiral St.              | 10.1             | 10.0 | 9.9   | 9.9  | 10.0 | 10.1 | 10.2 | 10.1 | 10.1 | 10.1 | 10.0 | 10.0 | 10.0          |
| 238 Brook St.                | 10.1             | 10.0 | 9.9   | 9.9  | 10.0 | 10.1 | 10.2 | 10.1 | 10.1 | 10.1 | 10.0 | 10.0 | 10.0          |
| Phenolphthalein Alkalinity   |                  |      |       |      |      |      |      |      |      |      |      |      |               |
| Neutacconkanut Reservoir     | 6.7              | 7.3  | 7.3   | 7.3  | 6.2  | 5.1  | 6.0  | 5.9  | 6.0  | 5.7  | 5.9  | 6.4  | 6.3           |
| *301 Pontiac Ave., Cranston  | 7.0              | 7.6  | 7.6   | 7.8  | 7.2  | 6.0  | 7.2  | 6.5  | 6.9  | 6.6  | 7.3  | 7.9  | 7.1           |
| 630 Atwells Ave.             | 7.0              | 7.7  | 7.7   | 7.6  | 6.2  | 5.3  | 6.6  | 5.9  | 6.5  | 5.9  | 6.3  | 6.9  | 6.6           |
| 1384 Cranston St., Cranston  | 7.1              | 7.7  | 7.8   | 7.5  | 6.4  | 5.4  | 6.7  | 6.1  | 6.6  | 5.9  | 6.4  | 7.0  | 6.7           |
| 750 Reservoir Ave., Cranston | 7.1              | 7.6  | 7.7   | 7.6  | 6.3  | 5.4  | 6.6  | 6.1  | 6.5  | 5.8  | 6.3  | 6.9  | 6.7           |
| 1520 Atwood Ave., Johnston   | 7.1              | 7.6  | 7.8   | 7.6  | 6.4  | 5.4  | 6.6  | 6.1  | 6.4  | 5.9  | 6.2  | 6.9  | 6.7           |
| 774 Allens Ave.              | 7.4              | 7.9  | 8.3   | 8.0  | 6.9  | 5.7  | 6.9  | 6.4  | 7.0  | 6.3  | 6.9  | 7.3  | 7.1           |
| Dexter Manor                 | 7.2              | 7.7  | 7.8   | 7.6  | 6.3  | 5.2  | 6.6  | 6.2  | 6.6  | 5.9  | 6.3  | 6.9  | 6.7           |
| State Office Building        | 7.1              | 7.7  | 7.7   | 7.5  | 6.4  | 5.2  | 6.5  | 6.0  | 6.5  | 5.9  | 6.3  | 6.8  | 6.6           |
| 426 Admiral St.              | 7.2              | 7.6  | 7.7   | 7.6  | 6.4  | 5.3  | 6.6  | 6.2  | 6.5  | 5.8  | 6.3  | 6.9  | 6.7           |
| 238 Brook St.                | 7.2              | 7.7  | 7.8   | 7.6  | 6.4  | 5.4  | 6.6  | 6.1  | 6.7  | 5.9  | 6.3  | 6.9  | 6.7           |
| Methyl Orange Alkalinity     |                  |      |       |      |      |      |      |      |      |      |      |      |               |
| Neutacconkanut Reservoir     | 13.9             | 15.4 | 16.2  | 15.7 | 11.5 | 10.7 | 11.4 | 11.5 | 12.2 | 11.1 | 11.5 | 12.8 | 12.8          |
| *301 Pontiac Ave., Cranston  | 14.2             | 15.6 | 16.4  | 15.5 | 12.2 | 11.4 | 12.4 | 12.1 | 12.6 | 11.9 | 13.1 | 14.2 | 13.5          |
| 630 Atwells Ave.             | 14.2             | 15.7 | 16.4  | 15.1 | 11.0 | 10.4 | 11.6 | 11.4 | 12.4 | 11.1 | 12.0 | 13.2 | 12.9          |
| 1384 Cranston St., Cranston  | 14.3             | 15.7 | 16.6  | 15.2 | 11.1 | 10.4 | 11.8 | 11.4 | 12.4 | 11.0 | 12.0 | 13.2 | 12.9          |
| 750 Reservoir Ave., Cranston | 14.3             | 15.6 | 16.5  | 15.1 | 11.0 | 10.4 | 11.6 | 11.5 | 12.3 | 11.0 | 11.9 | 13.2 | 12.9          |
| 1520 Atwood Ave., Johnston   | 14.4             | 15.7 | 16.6  | 15.3 | 11.5 | 10.5 | 11.6 | 11.5 | 12.2 | 11.1 | 11.9 | 13.2 | 13.0          |
| 774 Allens Ave.              | 14.6             | 16.0 | 17.2  | 15.9 | 11.8 | 10.9 | 11.9 | 11.7 | 12.8 | 11.5 | 12.7 | 13.5 | 13.4          |
| Dexter Manor                 | 14.4             | 15.8 | 16.6  | 15.2 | 11.1 | 10.3 | 11.6 | 11.6 | 12.3 | 11.2 | 12.1 | 13.3 | 13.0          |
| State Office Building        | 14.4             | 15.8 | 16.5  | 15.4 | 11.1 | 10.4 | 11.6 | 11.4 | 12.3 | 11.1 | 12.1 | 13.1 | 12.9          |
| 426 Admiral St.              | 14.4             | 15.7 | 16.7  | 15.3 | 11.3 | 10.6 | 11.7 | 11.6 | 12.3 | 11.2 | 12.1 | 13.2 | 13.0          |
| 238 Brook St.                | 14.5             | 15.8 | 16.6  | 15.4 | 11.4 | 10.6 | 11.7 | 11.7 | 12.5 | 11.3 | 12.2 | 13.2 | 13.1          |
| Color                        |                  |      |       |      |      |      |      |      |      |      |      |      |               |
| Neutacconkanut Reservoir     | 2                | 2    | 2     | 2    | 3    | 2    | 3    | 4    | 4    | 4    | 3    | 3    | 3             |
| *301 Pontiac Ave., Cranston  | 2                | 2    | 2     | 2    | 3    | 3    | 3    | 4    | 4    | 4    | 3    | 4    | 3             |
| 630 Atwells Ave.             | 2                | 2    | 2     | 2    | 3    | 2    | 3    | 4    | 4    | 4    | 3    | 4    | 3             |
| 1384 Cranston St., Cranston  | 2                | 2    | 2     | 2    | 3    | 2    | 3    | 4    | 4    | 4    | 3    | 3    | 3             |
| 750 Reservoir Ave., Cranston | 2                | 2    | 2     | 2    | 3    | 2    | 3    | 4    | 4    | 4    | 3    | 4    | 3             |
| 1520 Atwood Ave., Johnston   | 2                | 2    | 2     | 2    | 3    | 2    | 3    | 4    | 4    | 4    | 3    | 4    | 3             |
| 774 Allens Ave.              | 2                | 2    | 2     | 2    | 3    | 2    | 3    | 4    | 4    | 4    | 3    | 3    | 3             |
| Dexter Manor                 | 2                | 2    | 2     | 2    | 3    | 2    | 3    | 4    | 4    | 4    | 3    | 4    | 3             |
| State Office Building        | 2                | 2    | 2     | 2    | 3    | 3    | 3    | 4    | 4    | 4    | 3    | 4    | 3             |
| 426 Admiral St.              | 3                | 2    | 2     | 2    | 4    | 3    | 3    | 4    | 4    | 4    | 4    | 5    | 3             |
| 238 Brook St.                | 3                | 3    | 3     | 3    | 4    | 3    | 4    | 5    | 5    | 5    | 4    | 5    | 4             |
| Iron                         |                  |      |       |      |      |      |      |      |      |      |      |      |               |
| Neutacconkanut Reservoir     | 0.01             | 0.01 | 0.01  | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01          |
| *301 Pontiac Ave., Cranston  | 0.01             | 0.01 | 0.01  | 0.01 | 0.02 | 0.03 | 0.04 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.03          |
| 630 Atwells Ave.             | 0.01             | 0.01 | 0.01  | 0.01 | 0.01 | 0.02 | 0.03 | 0.03 | 0.02 | 0.02 | 0.01 | 0.02 | 0.02          |
| 1384 Cranston St., Cranston  | 0.01             | 0.01 | 0.01  | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.02 | 0.01          |
| 750 Reservoir Ave., Cranston | 0.01             | 0.01 | 0.01  | 0.01 | 0.01 | 0.02 | 0.03 | 0.03 | 0.03 | 0.02 | 0.01 | 0.02 | 0.02          |
| 1520 Atwood Ave., Johnston   | 0.01             | 0.01 | 0.01  | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.02 | 0.01          |
| 774 Allens Ave.              | 0.01             | 0.01 | 0.01  | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02          |
| Dexter Manor                 | 0.01             | 0.01 | 0.01  | 0.01 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02          |
| State Office Building        | 0.01             | 0.01 | 0.01  | 0.01 | 0.01 | 0.02 | 0.03 | 0.04 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02          |
| 426 Admiral St.              | 0.04             | 0.02 | 0.02  | 0.03 | 0.03 | 0.04 | 0.04 | 0.03 | 0.03 | 0.04 | 0.04 | 0.05 | 0.04          |
| 238 Brook St.                | 0.03             | 0.03 | 0.02  | 0.03 | 0.03 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | 0.07 | 0.04          |

\*Sample location changed to 160 Sockanosset Crossroad, Cranston on October 20, 1975.

TABLE 17 (Continued)

WATER PURIFICATION WORKS

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

YEAR ENDED JUNE 30, 1976

|                              | Monthly Averages |       |       |       |       |       |       |       |       |       |       |       | Avg. for Year |
|------------------------------|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|
|                              | July             | Aug.  | Sept. | Oct.  | Nov.  | Dec.  | Jan.  | Feb.  | Mar.  | Apr.  | May   | June  |               |
| <b>Chlorides</b>             |                  |       |       |       |       |       |       |       |       |       |       |       |               |
| Neutaconkanut Reservoir      | 13.0             | 13.1  | 13.0  | 13.3  | 13.5  | 13.1  | 12.6  | 12.5  | 12.3  | 12.2  | 12.6  | 12.8  | 12.8          |
| *301 Pontiac Ave., Cranston  | 13.0             | 13.1  | 13.0  | 13.3  | 13.5  | 13.0  | 12.5  | 12.4  | 12.4  | 12.2  | 12.6  | 12.8  | 12.8          |
| 630 Atwells Ave.             | 13.0             | 13.0  | 13.0  | 13.3  | 13.6  | 13.1  | 12.5  | 12.3  | 12.4  | 12.2  | 12.7  | 12.9  | 12.8          |
| 1384 Cranston St., Cranston  | 13.0             | 13.0  | 13.0  | 13.4  | 13.5  | 13.1  | 12.5  | 12.3  | 12.4  | 12.2  | 12.7  | 12.9  | 12.8          |
| 750 Reservoir Ave., Cranston | 13.0             | 13.1  | 13.0  | 13.4  | 13.6  | 13.1  | 12.5  | 12.3  | 12.4  | 12.2  | 12.8  | 13.0  | 12.9          |
| 1520 Atwood Ave., Johnston   | 13.0             | 13.1  | 13.0  | 13.3  | 13.6  | 13.1  | 12.5  | 12.3  | 12.4  | 12.3  | 12.7  | 12.9  | 12.9          |
| 774 Allens Ave.              | 13.0             | 13.0  | 13.0  | 13.3  | 13.6  | 13.1  | 12.5  | 12.3  | 12.4  | 12.2  | 12.7  | 12.9  | 12.8          |
| Dexter Manor                 | 13.0             | 13.1  | 13.0  | 13.4  | 13.5  | 13.0  | 12.5  | 12.4  | 12.4  | 12.2  | 12.7  | 12.9  | 12.8          |
| State Office Building        | 13.0             | 13.1  | 13.0  | 13.3  | 13.6  | 13.1  | 12.5  | 12.3  | 12.4  | 12.2  | 12.7  | 12.9  | 12.8          |
| 426 Admiral St.              | 13.0             | 13.1  | 13.0  | 13.4  | 13.6  | 13.0  | 12.5  | 12.4  | 12.4  | 12.2  | 12.7  | 12.9  | 12.9          |
| 238 Brook St.                | 13.0             | 13.1  | 13.0  | 13.4  | 13.5  | 13.1  | 12.5  | 12.3  | 12.4  | 12.2  | 12.6  | 12.9  | 12.8          |
| <b>Nitrites</b>              |                  |       |       |       |       |       |       |       |       |       |       |       |               |
| 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         |
| *301 Pontiac Ave., Cranston  | .001             | .001  | .001  | .001  | .001  | .001  | .001  | .001  | .001  | .001  | .001  | .001  | .001          |
| 630 Atwells Ave.             | .001             | .001  | .001  | .001  | .001  | .001  | .001  | .001  | .001  | .001  | .001  | .001  | .001          |
| 1384 Cranston St., 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          |
| 774 Allens Ave.              | .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          |
| 426 Admiral St.              | .000             | .000  | .000  | .000  | .000  | .000  | .001  | .001  | .001  | .001  | .001  | .000  | .000          |
| 238 Brook St.                | .000             | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .001  | .000  | .000  | .000  | .000          |
| <b>Taste</b>                 |                  |       |       |       |       |       |       |       |       |       |       |       |               |
| Neutaconkanut Reservoir      | 0                | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0             |
| *301 Pontiac Ave., Cranston  | 0                | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0             |
| 630 Atwells Ave.             | 0                | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0             |
| 1384 Cranston St., 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             |
| 774 Allens Ave.              | 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             |
| 426 Admiral St.              | 0                | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0             |
| 238 Brook St.                | 0                | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0             |
| <b>Odor</b>                  |                  |       |       |       |       |       |       |       |       |       |       |       |               |
| Neutaconkanut Reservoir      | 0                | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0             |
| *301 Pontiac Ave., Cranston  | 0                | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0             |
| 630 Atwells Ave.             | 0                | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0             |
| 1384 Cranston St., 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             |
| 774 Allens Ave.              | 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             |
| 426 Admiral St.              | 0                | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0             |
| 238 Brook St.                | 0                | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0             |
| <b>Fluoride</b>              |                  |       |       |       |       |       |       |       |       |       |       |       |               |
| Neutaconkanut Reservoir      | 0.99             | 1.02  | 0.98  | 1.01  | 0.93  | 0.95  | 0.96  | 0.99  | 0.97  | 0.97  | 0.97  | 0.96  | 0.98          |
| *301 Pontiac Ave., Cranston  | 0.99             | 1.04  | 1.02  | 1.04  | 0.98  | 1.00  | 0.99  | 1.02  | 1.01  | 1.01  | 0.99  | 0.97  | 1.01          |
| 630 Atwells Ave.             | 0.99             | 1.02  | 0.98  | 1.04  | 0.96  | 1.00  | 1.00  | 1.03  | 1.01  | 1.02  | 1.00  | 0.97  | 1.00          |
| 1384 Cranston St., Cranston  | 1.00             | 1.05  | 1.01  | 1.05  | 0.98  | 1.03  | 1.00  | 1.04  | 1.03  | 1.04  | 1.02  | 0.98  | 1.02          |
| 750 Reservoir Ave., Cranston | 1.00             | 1.03  | 1.02  | 1.05  | 0.99  | 1.04  | 1.02  | 1.04  | 1.04  | 1.03  | 1.03  | 1.00  | 1.02          |
| 1520 Atwood Ave., Johnston   | 0.99             | 1.02  | 0.99  | 1.03  | 0.96  | 1.01  | 1.01  | 1.03  | 1.02  | 1.01  | 1.02  | 1.00  | 1.01          |
| 774 Allens Ave.              | 1.00             | 1.02  | 1.02  | 1.05  | 0.99  | 1.01  | 1.09  | 1.06  | 1.03  | 1.01  | 1.03  | 1.00  | 1.03          |
| Dexter Manor                 | 0.99             | 1.04  | 1.02  | 1.05  | 0.99  | 1.01  | 1.05  | 1.06  | 1.03  | 1.02  | 1.01  | 0.99  | 1.02          |
| State Office Building        | 0.98             | 1.04  | 1.02  | 1.05  | 0.98  | 1.01  | 1.07  | 1.06  | 1.02  | 1.01  | 1.00  | 1.00  | 1.02          |
| 426 Admiral St.              | 0.97             | 1.05  | 1.01  | 1.03  | 0.95  | 0.99  | 1.03  | 1.04  | 1.02  | 1.01  | 1.02  | 0.99  | 1.01          |
| 238 Brook St.                | 0.99             | 1.04  | 1.02  | 1.04  | 0.96  | 1.00  | 1.03  | 1.04  | 1.01  | 1.01  | 1.02  | 0.98  | 1.01          |

\*Sample location changed to 160 Sockanosset Crossroad, Cranston on October 20, 1975.

TABLE 18

## WATER PURIFICATION WORKS

## BACTERIOLOGICAL EXAMINATION OF WATER IN PROCESS OF FILTRATION

YEAR ENDED JUNE 30, 1976

| Bacteria per Ml. (48 Hours on Agar at 20°C.) |          |      |      |          |      |      |         |      |      |               |      |      |               | Tap  |      |      |      |      |
|----------------------------------------------|----------|------|------|----------|------|------|---------|------|------|---------------|------|------|---------------|------|------|------|------|------|
| 1975-1976                                    | 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                                         | 210      | 10   | 39   | 139      | 8    | 31   | 80      | 0    | 4    | 0             | 0    | 0    | 1             | 0    | 0    | 3    | 0    | 0    |
| August                                       | 350      | 19   | 72   | 90       | 2    | 47   | 10      | 0    | 2    | 1             | 0    | 0    | 2             | 0    | 0    | 2    | 0    | 0    |
| September                                    | 153      | 11   | 47   | 135      | 0    | 58   | 8       | 0    | 2    | 5             | 0    | 0    | 75            | 0    | 4    | 2    | 0    | 0    |
| October                                      | 76       | 10   | 41   | 250      | 0    | 66   | 3       | 0    | 0    | 8             | 0    | 0    | 3             | 0    | 0    | 0    | 0    | 0    |
| November                                     | 82       | 10   | 35   | 132      | 11   | 52   | 2       | 0    | 1    | 3             | 0    | 0    | 3             | 0    | 0    | 1    | 0    | 0    |
| December                                     | 55       | 5    | 24   | 58       | 0    | 21   | 27      | 0    | 3    | 14            | 0    | 1    | 28            | 0    | 2    | 3    | 0    | 0    |
| January                                      | 63       | 6    | 27   | 63       | 0    | 30   | 210     | 0    | 16   | 1             | 0    | 0    | 87            | 0    | 4    | 0    | 0    | 0    |
| February                                     | 150      | 18   | 72   | 110      | 7    | 46   | 5       | 0    | 1    | 60            | 0    | 4    | 2             | 0    | 0    | 2    | 0    | 0    |
| March                                        | 62       | 5    | 28   | 46       | 2    | 23   | 780     | 0    | 37   | 21            | 0    | 3    | 12            | 0    | 2    | 9    | 0    | 1    |
| April                                        | 87       | 9    | 39   | 98       | 12   | 43   | 132     | 0    | 7    | 41            | 0    | 11   | 48            | 0    | 6    | 6    | 0    | 2    |
| May                                          | 150      | 9    | 33   | 85       | 5    | 25   | 5       | 0    | 0    | 7             | 0    | 2    | 14            | 0    | 3    | 7    | 0    | 1    |
| June                                         | 61       | 6    | 18   | 34       | 1    | 20   | 2       | 0    | 0    | 4             | 0    | 1    | 24            | 0    | 2    | 19   | 0    | 1    |
| For Year                                     | 350      | 5    | 40   | 250      | 0    | 39   | 780     | 0    | 6    | 60            | 0    | 2    | 87            | 0    | 2    | 19   | 0    | 0    |

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, 1976

| 1975-1976 | Bacteria per ML. (24 Hours on Agar at 35°C.) |      |      |          |      |      |         |      |      |               |      |      | Tap<br>Max.   | Min. | Avg. |
|-----------|----------------------------------------------|------|------|----------|------|------|---------|------|------|---------------|------|------|---------------|------|------|
|           | Raw-A.M.                                     |      |      | Raw-P.M. |      |      | Settled |      |      | Effluent-A.M. |      |      | Effluent-P.M. |      |      |
|           | Max.                                         | Min. | Avg. | Max.     | Min. | Avg. | Max.    | Min. | Avg. | Max.          | Min. | Avg. | Max.          | Min. | Avg. |
| July      | 9                                            | 1    | 4    | 33       | 1    | 5    | 6       | 0    | 1    | 0             | 0    | 0    | 3             | 0    | 0    |
| August    | 17                                           | 1    | 6    | 15       | 0    | 5    | 14      | 0    | 1    | 2             | 0    | 0    | 5             | 0    | 0    |
| September | 21                                           | 1    | 7    | 19       | 2    | 8    | 7       | 0    | 1    | 1             | 0    | 0    | 0             | 0    | 1    |
| October   | 30                                           | 6    | 13   | 29       | 5    | 14   | 4       | 0    | 0    | 1             | 0    | 0    | 0             | 0    | 0    |
| November  | 17                                           | 3    | 9    | 45       | 3    | 10   | 1       | 0    | 0    | 1             | 0    | 0    | 0             | 0    | 0    |
| December  | 13                                           | 0    | 5    | 13       | 2    | 6    | 32      | 0    | 2    | 1             | 0    | 0    | 0             | 1    | 0    |
| January   | 11                                           | 2    | 6    | 11       | 1    | 6    | 60      | 0    | 4    | 9             | 0    | 1    | 0             | 0    | 0    |
| February  | 20                                           | 2    | 10   | 22       | 0    | 10   | 25      | 0    | 2    | 2             | 0    | 0    | 0             | 0    | 0    |
| March     | 16                                           | 3    | 9    | 16       | 1    | 8    | 5       | 0    | 1    | 1             | 0    | 0    | 1             | 0    | 0    |
| April     | 9                                            | 0    | 4    | 12       | 0    | 5    | 9       | 0    | 1    | 0             | 0    | 0    | 4             | 0    | 0    |
| May       | 20                                           | 1    | 4    | 12       | 0    | 4    | 0       | 0    | 0    | 2             | 0    | 0    | 0             | 0    | 0    |
| June      | 300                                          | 0    | 15   | 4        | 0    | 2    | 14      | 0    | 1    | 20            | 0    | 1    | 1             | 0    | 0    |
| For Year  | 300                                          | 0    | 8    | 45       | 0    | 7    | 60      | 0    | 1    | 20            | 0    | 0    | 5             | 0    | 0    |
|           |                                              |      |      |          |      |      |         |      |      |               |      |      | 21            | 0    | 0    |

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

TABLE 20  
 WATER PURIFICATION WORKS  
 BACTERIOLOGICAL EXAMINATION OF WATER IN PROCESS OF FILTRATION  
 YEAR ENDED JUNE 30, 1976

## COLIFORM BACTERIA

|           | R                             | A       | W      | ----                                 | A.   | M. | Settled                                                   | Effluent<br>A.M.                                          | Effluent<br>P.M.                                          | *Tap                                                      |
|-----------|-------------------------------|---------|--------|--------------------------------------|------|----|-----------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
|           | No. of Portions               |         |        |                                      |      |    | M E M B R A N E    F I L T E R    M E T H O D             |                                                           |                                                           |                                                           |
|           | Positive<br>Per No.<br>Tested |         |        | Geometric<br>Mean MPN<br>Per 100 ml. |      |    | Number<br>of<br>Positives<br>per<br>Milliliters<br>Tested | Number<br>of<br>Positives<br>per<br>Milliliters<br>Tested | Number<br>of<br>Positives<br>per<br>Milliliters<br>Tested | Number<br>of<br>Positives<br>per<br>Milliliters<br>Tested |
| 1975-     | 10                            | 1.0     | 0.1    |                                      |      |    |                                                           |                                                           |                                                           |                                                           |
| 1976      | ml.                           | ml.     | ml.    |                                      |      |    |                                                           |                                                           |                                                           |                                                           |
| July      | 18/78                         | 0/78    | 0/78   | <                                    | 4.3  |    | 0/2,600                                                   | 1/2,600                                                   | 1/2,200                                                   | .2/26,800                                                 |
| August    | 8/75                          | 1/75    | 0/75   | <                                    | 3.4  |    | 3/2,500                                                   | 1/2,500                                                   | 0/2,000                                                   | 5/24,500                                                  |
| September | 22/75                         | 1/75    | 0/75   | <                                    | 4.4  |    | 0/2,500                                                   | 0/2,500                                                   | 0/2,100                                                   | 15/25,600                                                 |
| October   | 54/75                         | 15/75   | 1/75   | <                                    | 15.9 |    | 0/2,500                                                   | 0/2,500                                                   | 0/2,100                                                   | 0/25,600                                                  |
| November  | 72/72                         | 37/72   | 8/72   |                                      | 79.5 |    | 13/2,400                                                  | 26/2,400                                                  | 0/1,900                                                   | 41/23,300                                                 |
| December  | 77/78                         | 37/78   | 7/78   |                                      | 69.8 |    | 0/2,600                                                   | 0/2,600                                                   | 0/2,000                                                   | 0/24,800                                                  |
| January   | 61/78                         | 14/78   | 0/78   | <                                    | 17.9 |    | 0/2,600                                                   | 0/2,600                                                   | 0/2,100                                                   | 0/25,700                                                  |
| February  | 42/69                         | 0/69    | 0/69   | <                                    | 8.5  |    | 0/2,300                                                   | 0/2,300                                                   | 0/1,900                                                   | 0/23,200                                                  |
| March     | 13/81                         | 0/81    | 0/81   | <                                    | 3.6  |    | 0/2,700                                                   | 0/2,700                                                   | 0/2,300                                                   | 1/28,000                                                  |
| April     | 3/78                          | 0/78    | 0/78   | <                                    | 3.1  |    | 54/2,600                                                  | 0/2,600                                                   | 0/2,100                                                   | 0/26,400                                                  |
| May       | 6/72                          | 1/72    | 0/72   | <                                    | 3.3  |    | 0/2,400                                                   | 0/2,400                                                   | 0/1,900                                                   | 0/23,300                                                  |
| June      | 13/78                         | 0/78    | 0/78   | <                                    | 3.6  |    | 0/2,600                                                   | 0/2,600                                                   | 0/2,200                                                   | 0/26,800                                                  |
| For Year  | 389/909                       | 106/909 | 16/909 | <                                    | 8.3  |    | 70/30,300                                                 | 28/30,300                                                 | 1/24,800                                                  | 64/304,000                                                |

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 64 positives, 57 gave negative results in E.C. medium.

NOTE: 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, 1976

|                                            | 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                       | 540   | 480   | 190   | 900   | 78    | 22    | 22   | 36   | 24    | 78    | 130   | 240   | 228           |
| Coventry Brook                             | 900   | 900   | 480   | 660   | 480   | 130   | 83   | 102  | 56    | 360   | 120   | 480   | 396           |
| Wilbur Brook                               | 1,320 | 660   | 900   | 1,020 | 540   | 97    | 131  | 720  | 280   | 420   | 1,140 | 1,200 | 702           |
| Westconnaug Reservoir                      | 960   | 1,200 | 200   | 480   | 420   | 80    | 120  | 74   | 78    | 300   | 600   | 240   | 396           |
| Barden Reservoir                           | 420   | 360   | 480   | 900   | 480   | 59    | 540  | 144  | 138   | 27    | 210   | 360   | 343           |
| Cork Brook                                 | 660   | *     | *     | 480   | 300   | 290   | 110  | 172  | 104   | 166   | 540   | 900   | 372           |
| Rush Brook                                 | 900   | 660   | 900   | 540   | 420   | 300   | 85   | 660  | 300   | 660   | 1,500 | 660   | 632           |
| Huntinghouse Brook                         | 540   | *     | 1,380 | 600   | 186   | 360   | 66   | 420  | 230   | 900   | 125   | 1,200 | 546           |
| Harrisdale Brook                           | 660   | 360   | 480   | 2,100 | 420   | 600   | 35   | 120  | 720   | 420   | 46    | 540   | 542           |
| Blanchard Brook                            | 3,600 | *     | *     | 960   | 240   | 240   | 94   | 150  | 600   | 300   | 186   | 900   | 727           |
| Moswansicut Pond                           | 490   | 480   | 420   | 480   | 420   | 93    | 240  | 220  | 70    | 256   | 51    | 660   | 323           |
| Regulating Reservoir                       | 200   | 450   | 900   | 660   | 480   | 480   | 360  | 160  | 224   | 115   | 14    | 720   | 397           |
| Quonopaug Brook                            | 1,200 | 660   | 1,500 | 1,000 | 110   | 98    | 93   | 200  | 209   | 600   | 1,200 | 1,800 | 723           |
| Hemlock Brook                              | 360   | 360   | 170   | 1,380 | 300   | 126   | 150  | 480  | 216   | 660   | 360   | 110   | 389           |
| Betty Pond Stream                          | 840   | 600   | 540   | 540   | 960   | 300   | 360  | 660  | 180   | 300   | 540   | 720   | 545           |
| Spruce Brook                               | 900   | 900   | 210   | 1,200 | 180   | 300   | 260  | 540  | 208   | 660   | 480   | 420   | 522           |
| Brandy Brook                               | 1,500 | 540   | 360   | 1,500 | TNTC  | 1,200 | 900  | 480  | 1,080 | 600   | 900   | 420   | TNTC          |
| Moswansicut-South                          | 3,600 | 1,350 | 1,080 | 5,400 | 540   | 360   | 180  | 360  | 256   | 1,200 | 960   | 900   | 1,349         |
| Windsor Brook                              | 1,800 | *     | 540   | 480   | 240   | 160   | 73   | *    | 192   | 420   | 540   | 600   | 505           |
| Paine Pond                                 | 900   | *     | *     | 1,500 | 300   | 420   | 540  | 480  | 168   | 88    | 1,020 | 1,200 | 662           |
| Unnamed Brook--A                           | *     | *     | *     | 900   | 420   | 140   | 143  | 600  | 152   | 360   | 960   | *     | 459           |
| Unnamed Brook--B                           | 720   | 540   | 420   | 1,080 | 420   | 45    | 80   | 480  | 106   | 600   | 660   | 900   | 504           |
| Bacteria per ml. 24 Hours on Agar at 35°C. |       |       |       |       |       |       |      |      |       |       |       |       |               |
| Ponaganset Reservoir                       | 360   | 660   | 69    | 540   | 15    | 0     | 11   | 16   | 4     | 2     | 21    | 134   | 153           |
| Coventry Brook                             | 780   | 480   | 117   | 300   | 43    | 24    | 19   | 14   | 21    | 57    | 119   | 540   | 210           |
| Wilbur Brook                               | 1,200 | 720   | 600   | 540   | 160   | 46    | 28   | 25   | 57    | 120   | 280   | 900   | 390           |
| Westconnaug Reservoir                      | 900   | 1,200 | 82    | 300   | 103   | 20    | 14   | 17   | 18    | 72    | 96    | 270   | 258           |
| Barden Reservoir                           | 360   | 150   | 420   | 480   | 230   | 25    | 74   | 26   | 15    | 8     | 60    | 360   | 184           |
| Cork Brook                                 | 600   | *     | *     | 300   | 48    | 31    | 15   | 16   | 22    | 104   | 270   | 420   | 183           |
| Rush Brook                                 | 1,200 | 600   | 300   | 420   | 51    | 28    | 25   | 41   | 25    | 72    | 360   | 300   | 285           |
| Huntinghouse Brook                         | 720   | *     | 360   | 360   | 45    | 24    | 19   | 24   | 22    | 136   | 210   | 420   | 213           |
| Harrisdale Brook                           | 480   | 270   | 300   | 600   | 420   | 28    | 25   | 42   | 45    | 64    | 58    | 480   | 234           |
| Blanchard Brook                            | 1,200 | *     | *     | 360   | 39    | 49    | 35   | 34   | 420   | 480   | 360   | 720   | 370           |
| Moswansicut Pond                           | 780   | 420   | 280   | 73    | 95    | 13    | 20   | 47   | 14    | 21    | 8     | 480   | 188           |
| Regulating Reservoir                       | 180   | 360   | 260   | 105   | 130   | 50    | 72   | 13   | 22    | 44    | 9     | 420   | 139           |
| Quonopaug Brook                            | 480   | 480   | 1,200 | 270   | 40    | 31    | 32   | 10   | 37    | 540   | 480   | 540   | 345           |
| Hemlock Brook                              | 240   | 230   | 65    | 540   | 70    | 36    | 27   | 14   | 32    | 168   | 96    | 88    | 134           |
| Betty Pond Stream                          | 720   | 900   | 900   | 720   | 480   | 57    | 32   | 13   | 28    | 300   | 300   | 900   | 446           |
| Spruce Brook                               | 660   | 360   | 90    | 180   | 54    | 37    | 24   | 11   | 16    | 109   | 104   | 360   | 167           |
| Brandy Brook                               | 600   | 102   | 99    | 2,100 | 1,200 | 780   | 420  | 67   | 170   | 540   | 900   | 300   | 607           |
| Moswansicut-South                          | 3,240 | 3,900 | 1,200 | 1,500 | 72    | 48    | 42   | 45   | 38    | 113   | 720   | 540   | 955           |
| Windsor Brook                              | 720   | *     | 420   | 200   | 31    | 9     | 16   | *    | 16    | 136   | 240   | 178   | 197           |
| Paine Pond                                 | 220   | *     | *     | 960   | 59    | 31    | 140  | 38   | 52    | 57    | 360   | 480   | 240           |
| Unnamed Brook--A                           | *     | *     | *     | 900   | 79    | 18    | 34   | 29   | 27    | 184   | 480   | *     | 219           |
| Unnamed Brook--B                           | 900   | 420   | 180   | 300   | 48    | 27    | 20   | 77   | 21    | 360   | 300   | 360   | 251           |

\*No Sample Obtained--Dry.

TNTC means too numerous to count.

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, 1976

|                      | July                                | Aug.   | Sept.  | Oct.   | Nov.   | Dec.   | Jan.  | Feb. | Mar. | Apr. | May    | June   |
|----------------------|-------------------------------------|--------|--------|--------|--------|--------|-------|------|------|------|--------|--------|
|                      | Coliform Bacteria Index per 100 ml. |        |        |        |        |        |       |      |      |      |        |        |
| Ponaganset Reservoir | 700                                 | 13     | -5     | 700    | 25     | -5     | 6     | 60   | 6    | 5    | -5     | 25     |
| Coventry Brook       | 1,100+                              | 700    | 700    | 250    | 25     | 25     | 60    | 60   | 25   | 60   | 250    | 250    |
| Wilbur Brook         | 1,100+                              | 1,100+ | 1,100+ | 1,100+ | 250    | 60     | 60    | 60   | 25   | 60   | 250    | 130    |
| Westconaug Reservoir | 1,100+                              | 1,100+ | 200    | 1,100+ | 250    | 60     | 60    | 25   | 130  | 60   | 50     | 130    |
| Barden Reservoir     | 60                                  | 60     | 60     | 700    | 250    | 60     | 25    | 6    | 25   | -5   | 6      | 25     |
| Cork Brook           | 1,100+                              | *      | *      | 700    | 25     | 60     | 60    | 25   | 25   | 25   | 25     | 25     |
| Rush Brook           | 25                                  | 60     | 250    | 1,100+ | 700    | 60     | 25    | 250  | 60   | 60   | 700    | 250    |
| Huntinghouse Brook   | 1,100+                              | *      | 700    | 250    | 60     | 60     | 25    | 60   | 60   | 25   | 700    | 250    |
| Harrisdale Brook     | 130                                 | 700    | 250    | 1,100+ | 1,100+ | 60     | 60    | 25   | 250  | 25   | 25     | 60     |
| Blanchard Brook      | 1,100+                              | *      | *      | 250    | 250    | 60     | 60    | 25   | 60   | 60   | 60     | 700    |
| Moswansicut Pond     | 460                                 | 1,100  | 2,400+ | 240    | 43     | 15     | 43    | 43   | 6    | 9    | 93     | 150    |
| Regulating Reservoir | 60                                  | 6      | 25     | 250    | 250    | 700    | 60    | 6    | 6    | -5   | 25     | -5     |
| Quonopaug Brook      | 1,100+                              | 1,100+ | 1,100+ | 250    | 250    | 60     | 25    | 60   | 25   | 60   | 130    | 700    |
| Hemlock Brook        | 250                                 | 25     | 20     | 1,100+ | 130    | 250    | 25    | 250  | 25   | 25   | 25     | 250    |
| Betty Pond Stream    | 700                                 | 25     | 25     | 25     | 700    | -5     | 6     | -5   | 6    | 6    | 25     | 25     |
| Spruce Brook         | 1,100+                              | 1,100+ | 130    | 700    | 25     | 25     | 6     | 13   | 25   | 250  | 60     | 700    |
| Brandy Brook         | 250                                 | 250    | 250    | 1,100+ | 1,100+ | 1,100+ | 2,500 | 60   | 700  | 130  | 25     | 60     |
| Moswansicut-South    | 1,100+                              | 1,100+ | 1,100+ | 1,100+ | 250    | 250    | 60    | 25   | 25   | 700  | 700    | 1,100+ |
| Windsor Brook        | 1,100+                              | *      | 250    | 700    | 130    | 250    | 250   | 200  | 25   | 25   | 700    | 700    |
| Paine Pond           | 460                                 | *      | *      | 2,400+ | 2,400+ | 240    | 240   | 9    | 23   | 9    | 150    | 2,400+ |
| Unnamed Brook-A      | *                                   | *      | *      | 2,400+ | 460    | 460    | 93    | 150  | 23   | 120  | 2,400+ | *      |
| Unnamed Brook-B      | 1,100+                              | 250    | 250    | 1,100+ | 25     | 250    | 25    | 25   | 25   | 60   | 50     | 60     |

\*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, 1976

\*Sample location changed to 160 Sockanosset Crossroad, Cranston on October 20, 1975.

TABLE 23  
WATER PURIFICATION WORKS  
MINERAL ANALYSIS OF WATER - YEAR ENDED JUNE 30, 1976

| Parts per Million          | *R A W W A T E R |               |               |               |       | T A P W A T E R |               |               |              |       |
|----------------------------|------------------|---------------|---------------|---------------|-------|-----------------|---------------|---------------|--------------|-------|
|                            | 1975             |               | 1976          |               |       | 1975            |               | 1976          |              |       |
|                            | July-<br>Sept.   | Oct.-<br>Dec. | Jan.-<br>Mar. | Apr.-<br>June | Avg.  | July-<br>Sept.  | Oct.-<br>Dec. | Jan.-<br>Mar. | Apr.<br>June | Avg.  |
| Aluminum                   | 0.02             | 0.02          | 0.02          | 0.01          | 0.02  | 0.02            | 0.02          | 0.02          | 0.01         | 0.02  |
| Arsenic                    |                  | 0.00          |               | 0.00          | 0.00  |                 | 0.00          |               | 0.00         | 0.00  |
| Calcium                    | 4.05             | 4.49          | 3.23          | 3.17          | 3.74  | 10.50           | 10.15         | 10.35         | 9.77         | 10.19 |
| Chloride                   | 12.0             | 12.7          | 11.7          | 11.8          | 12.0  | 13.0            | 13.3          | 12.2          | 12.7         | 12.8  |
| Copper                     | 0.01             | 0.01          | 0.02          | 0.01          | 0.01  | 0.00            | 0.00          | 0.00          | 0.00         | 0.00  |
| Fluoride                   | 0.15             | 0.16          | 0.15          | 0.15          | 0.15  | 0.99            | 0.97          | 0.97          | 0.94         | 0.97  |
| Hardness                   | 11               | 12            | 11            | 10            | 11    | 31              | 29            | 30            | 29           | 30    |
| Iron                       | 0.06             | 0.09          | 0.08          | 0.05          | 0.07  | 0.01            | 0.03          | 0.03          | 0.03         | 0.03  |
| Lead                       | 0.00             | 0.00          | 0.00          | 0.00          | 0.00  | 0.00            | 0.00          | 0.00          | 0.00         | 0.00  |
| Magnesium                  | 0.32             | 0.19          | 0.73          | 0.58          | 0.46  | 1.16            | 1.07          | 1.04          | 1.17         | 1.11  |
| Manganese                  | 0.08             | 0.06          | 0.02          | 0.02          | 0.04  | 0.00            | 0.00          | 0.00          | 0.00         | 0.00  |
| Phenolic Compounds         |                  | 0.000         |               | 0.001         | 0.001 |                 | 0.000         |               | 0.001        | 0.001 |
| Selenium                   |                  | 0.00          |               | 0.00          | 0.00  |                 | 0.00          |               | 0.00         | 0.00  |
| Silica                     | 5.0              | 5.0           | 6.0           | 6.0           | 5.5   | 6.0             | 5.0           | 5.0           | 5.0          | 5.3   |
| Sulfate                    | 6.8              | 7.2           | 7.0           | 7.0           | 7.0   | 13.2            | 14.8          | 15.4          | 15.1         | 14.6  |
| Total Solids               | 48               | 50            | 43            | 46            | 47    | 68              | 68            | 68            | 60           | 66    |
| Loss on Ignition           | 17               | 17            | 16            | 14            | 16    | 20              | 16            | 17            | 14           | 17    |
| Total Alkalinity           | 4.6              | 3.9           | 3.1           | 2.9           | 3.6   | 15.4            | 12.2          | 11.8          | 12.0         | 12.9  |
| Phenolphthalein Alkalinity | 0.0              | 0.0           | 0.0           | 0.0           | 0.0   | 7.5             | 6.4           | 6.3           | 6.4          | 6.6   |
| Zinc                       |                  | 0.00          |               | 0.00          | 0.00  |                 | 0.00          |               | 0.00         | 0.00  |

\*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, 1976

\*R A W W A T E R T A P W A T E R

| 1975-<br>1976 | Ammonia |       |               |               |                |        |           |                 |                             |       | Dissolved Oxygen |               |               |                |        |           |                 |                             |  |  | Loss<br>on<br>Igni-<br>tion |
|---------------|---------|-------|---------------|---------------|----------------|--------|-----------|-----------------|-----------------------------|-------|------------------|---------------|---------------|----------------|--------|-----------|-----------------|-----------------------------|--|--|-----------------------------|
|               | Free    | Alb.  | Ni-<br>trites | Ni-<br>trates | Chlo-<br>rides | P.P.M. | %<br>Sat. | Total<br>Solids | Loss<br>on<br>Igni-<br>tion | Free  | Alb.             | Ni-<br>trites | Ni-<br>trates | Chlo-<br>rides | P.P.M. | %<br>Sat. | Total<br>Solids | Loss<br>on<br>Igni-<br>tion |  |  |                             |
| July          | 0.023   | 0.068 | 0.000         | 0.07          | 12.0           | 9.9    | 88.0      | 44              | 16                          | 0.016 | 0.036            | 0.001         | 0.07          | 13.0           | ---    | ---       | 68              | 25                          |  |  |                             |
| August        | .057    | .068  | .000          | .10           | 12.0           | 8.1    | 75.0      | 49              | 18                          | .017  | .047             | .001          | .10           | 13.0           | ---    | ---       | 70              | 18                          |  |  |                             |
| September     | .034    | .045  | .000          | .07           | 12.0           | 6.7    | 67.3      | 52              | 18                          | .034  | .050             | .001          | .05           | 13.0           | ---    | ---       | 67              | 17                          |  |  |                             |
| October       | .017    | .054  | .000          | .05           | 12.5           | 7.8    | 78.0      | 47              | 15                          | .013  | .031             | .001          | .07           | 13.0           | ---    | ---       | 67              | 17                          |  |  |                             |
| November      | .066    | .081  | .000          | .07           | 13.0           | 9.5    | 92.2      | 49              | 19                          | .028  | .055             | .001          | .10           | 14.0           | ---    | ---       | 67              | 16                          |  |  |                             |
| December      | .046    | .082  | .000          | .05           | 12.5           | 11.5   | 95.0      | 53              | 16                          | .028  | .042             | .001          | .05           | 13.0           | ---    | ---       | 70              | 16                          |  |  |                             |
| January       | .050    | .073  | .000          | .07           | 12.0           | 13.3   | 97.1      | 47              | 16                          | .033  | .044             | .001          | .07           | 12.5           | ---    | ---       | 69              | 20                          |  |  |                             |
| February      | .022    | .071  | .000          | .10           | 11.5           | 13.0   | 97.7      | 30              | 14                          | .017  | .046             | .001          | .10           | 12.0           | ---    | ---       | 67              | 16                          |  |  |                             |
| March         | .042    | .081  | .000          | .10           | 11.5           | 13.0   | 99.0      | 52              | 17                          | .022  | .044             | .001          | .10           | 12.0           | ---    | ---       | 67              | 15                          |  |  |                             |
| April         | .004    | .063  | .000          | .10           | 11.5           | 11.3   | 98.3      | 54              | 16                          | .003  | .023             | .001          | .10           | 12.5           | ---    | ---       | 69              | 13                          |  |  |                             |
| May           | .022    | .078  | .000          | .10           | 12.0           | 9.6    | 89.7      | 42              | 12                          | .016  | .044             | .001          | .10           | 12.5           | ---    | ---       | 62              | 12                          |  |  |                             |
| June          | .016    | .057  | .000          | .10           | 12.0           | 8.4    | 81.6      | 42              | 15                          | .034  | .108             | .001          | .10           | 13.0           | ---    | ---       | 50              | 18                          |  |  |                             |
| Averages      | 0.033   | 0.068 | 0.000         | 0.08          | 12.0           | 10.2   | 88.2      | 47              | 16                          | 0.022 | 0.048            | 0.001         | 0.08          | 12.8           | ---    | ---       | 66              | 17                          |  |  |                             |

\*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, 1976

| Source of Water Tested                                                                  | Frequency<br>of Test or<br>Examination | Number of Tests or Analyses Made During the Fiscal Year |                      |                    |                      |                               | Total |
|-----------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------|----------------------|--------------------|----------------------|-------------------------------|-------|
|                                                                                         |                                        | Chemical                                                | Bacteri-<br>ological | Micro-<br>scopical | Sanitary<br>Chemical | Miscel-<br>laneous<br>Mineral |       |
| I Brooks and Streams on Watershed<br>Fourteen Brooks, Two Streams and One Pond          | Monthly                                | 1,370                                                   | 2,335                |                    | 82                   |                               | 3,787 |
| II Smaller Storage Reservoirs on Watershed<br>Regulating Reservoir                      | Monthly                                | 83                                                      | 122                  |                    |                      |                               | 205   |
| Westconaug Reservoir                                                                    | Monthly                                | 83                                                      | 145                  |                    |                      |                               | 228   |
| Barden Reservoir                                                                        | Monthly                                | 83                                                      | 123                  |                    |                      |                               | 206   |
| Moswensicut Pond                                                                        | Monthly                                | 83                                                      | 191                  |                    |                      |                               | 274   |
| Ponaganset Reservoir                                                                    | Monthly                                | 82                                                      | 118                  |                    |                      |                               | 200   |
| III Scituate Reservoir<br>Surface Water<br>Subsurface Water (See Purif. Wks.-Raw Water) | Bi-Weekly                              | 208                                                     |                      | 26                 | 156                  |                               | 390   |
| IV Pawtuxet River-Below Gainer Dam<br>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                                                   |                      |                    | 2,184                |                               | 4,524 |
| V Water Purification Works<br>Raw Water (from Bottom of Scituate Reservoir)             | Daily                                  | 2,870                                                   | 4,550                |                    | 1,336                | 360                           | 9,116 |
| 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                                  | 720                                                     |                      |                    |                      |                               | 720   |
| Mixer                                                                                   | Daily                                  | 1,882                                                   |                      |                    |                      |                               | 1,882 |
| Settled                                                                                 | Daily                                  | 2,357                                                   | 898                  |                    | 301                  | 360                           | 3,916 |
| Settled                                                                                 | Bi-Weekly                              |                                                         |                      | 26                 |                      |                               | 26    |
| Settled                                                                                 | Monthly                                |                                                         |                      |                    |                      |                               | 36    |
| Filtered                                                                                | Daily                                  | 2,106                                                   | 853                  |                    | 1,637                |                               | 4,596 |
| Filtered                                                                                | Monthly                                |                                                         |                      |                    |                      |                               | 12    |
| Effluent                                                                                | Daily                                  | 3,023                                                   | 862                  |                    | 1,637                |                               | 5,522 |
| Effluent                                                                                | Bi-Weekly                              |                                                         |                      | 26                 |                      |                               | 26    |
| Effluent                                                                                | Monthly                                |                                                         |                      |                    |                      |                               | 24    |
| Raw Water (from Bottom of Scituate Reservoir)                                           | Daily at 1:00 P.M.                     | 992                                                     | 744                  |                    | 992                  |                               | 2,728 |
| Effluent                                                                                | Daily at 1:00 P.M.                     | 992                                                     | 747                  |                    | 992                  |                               | 2,731 |

\*Composite of 13 Weekly Samples.

TABLE 25 (Continued)

## WATER PURIFICATION WORKS

LABORATORY EXAMINATIONS MADE DURING THE FISCAL YEAR ENDED JUNE 30, 1976

## Number of Tests or Analyses Made During the Fiscal Year

|      | Source of Water Tested                             | Frequency of Test or Examination | Chemical | Bacteriological | Microscopical | Sanitary Chemical | Mineral | Miscellaneous | Total  |
|------|----------------------------------------------------|----------------------------------|----------|-----------------|---------------|-------------------|---------|---------------|--------|
| VI   | Neutaconkanut Distribution Reservoir               |                                  |          |                 |               |                   |         |               |        |
|      | Sample from nearby Tap                             | Daily                            | 1,506    | 756             |               | 1,255             |         |               | 3,517  |
|      | Sample from nearby Tap                             | Bi-Weekly                        |          |                 | 26            |                   |         |               | 26     |
| VII  | Longview Distribution Reservoir                    |                                  |          |                 |               |                   |         |               |        |
|      | Sample from nearby Tap                             | Daily                            | 1,506    | 756             |               | 1,004             |         |               | 3,266  |
|      | Sample from nearby Tap                             | Bi-Weekly                        |          |                 | 26            |                   |         |               | 26     |
| VIII | Distribution System                                |                                  |          |                 |               |                   |         |               |        |
|      | Providence City Hall Tap Water                     | Daily                            | 2,008    | 753             |               | 1,255             |         | 251           | 4,267  |
|      | 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                   |          |                 |               |                   | 36      |               | 36     |
|      | Consumers' Complaints (14 during the year)         |                                  | 267      | 24              |               | 58                |         |               | 349    |
|      | Disinfection of Newly Laid Mains                   |                                  |          | 216             |               | 42                |         |               | 258    |
|      | **Sectional Tests                                  | Daily                            | 13,734   | 6,844           |               | 9,418             |         | 52            | 30,048 |
| IX   | Miscellaneous Tests                                |                                  |          |                 |               |                   |         |               |        |
|      | Coagulation Tests to Determine Chemical Dosages    |                                  | 48       |                 |               |                   | 24      |               | 72     |
|      | Analysis of Ferri-Floc used for Treatment          |                                  | 69       |                 |               |                   | 23      |               | 92     |
|      | Analysis of Quicklime used for Treatment           |                                  | 48       |                 |               |                   | 92      |               | 140    |
|      | Analysis of Soda Silicofluoride used for Treatment |                                  | 7        |                 |               |                   |         |               | 7      |
|      | Water, Filter Sand and Other Materials             |                                  | 3,239    | 7,398           | 10            | 1,313             |         | 67            | 12,027 |
|      | Totals                                             |                                  | 42,070   | 28,435          | 192           | 24,178            | 72      | 1,229         | 96,176 |

\*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, 1976

|           |                                     | Electrically-Driven Pumps                 |                                            |                                           |         |          |             | Gasoline Engine-Driven Pump               |         |                       |                     |     |
|-----------|-------------------------------------|-------------------------------------------|--------------------------------------------|-------------------------------------------|---------|----------|-------------|-------------------------------------------|---------|-----------------------|---------------------|-----|
|           |                                     | No. 1<br>16" Pump<br>7000 GPM.<br>TDH 99' | No. 2<br>12" Pump<br>3800 GPM.<br>TDH 104' | No. 3<br>16" Pump<br>7000 GPM.<br>TDH 96' |         |          | *Power Used | No. 4<br>16" Pump<br>7000 GPM.<br>TDH 96' |         |                       |                     |     |
| 1975-1976 | Operated<br>Hours<br>and<br>Minutes | Operated<br>Hours<br>and<br>Minutes       |                                            | Operated<br>Hours<br>and<br>Minutes       |         | KWH      | Cost        | **Operated<br>Hours<br>and<br>Minutes     |         | Gas.<br>Used<br>Gals. | Oil<br>Used<br>Qts. |     |
|           |                                     | Days                                      | Minutes                                    | Days                                      | Minutes |          |             | Days                                      | Minutes |                       |                     |     |
| July      | 26                                  | 403-23                                    | 30                                         | 419-50                                    | 23      | 322-53   | 151,200     | \$ 5,463.10                               | 4       | 4-00                  | 56                  | 0   |
| August    | 26                                  | 335-25                                    | 28                                         | 414-45                                    | 22      | 302-00   | 142,600     | 5,247.67                                  | 2       | 4-00                  | 148                 | 0   |
| September | 27                                  | 256-45                                    | 28                                         | 502-45                                    | 2       | 29-30    | 115,200     | 4,225.04                                  | 4       | 4-00                  | 70                  | 50  |
| October   | 23                                  | 333-55                                    | 4                                          | 72-00                                     | 21      | 290-00   | 101,400     | 3,687.97                                  | 5       | 5-00                  | 130                 | 0   |
| November  | 20                                  | 149-40                                    | 30                                         | 511-15                                    | 13      | 104-45   | 109,000     | 3,919.92                                  | 4       | 8-30                  | 214                 | 0   |
| December  | 22                                  | 198-15                                    | 31                                         | 392-00                                    | 12      | 121-30   | 94,800      | 3,507.33                                  | 4       | 4-00                  | 68                  | 0   |
| January   | 23                                  | 287-20                                    | 31                                         | 203-35                                    | 14      | 193-00   | 106,400     | 3,788.39                                  | 4       | 4-00                  | 182                 | 0   |
| February  | 21                                  | 289-45                                    | 26                                         | 202-00                                    | 16      | 217-00   | 106,800     | 3,727.16                                  | 4       | 3-25                  | 76                  | 50  |
| March     | 27                                  | 468-00                                    | 31                                         | 698-15                                    | 13      | 179-40   | 152,400     | 5,486.74                                  | 0       | 0                     | 0                   | 0   |
| April     | 27                                  | 384-45                                    | 30                                         | 702-15                                    | 14      | 211-00   | 171,600     | 6,120.91                                  | 2       | 2-00                  | 38                  | 0   |
| May       | 28                                  | 311-30                                    | 31                                         | 628-30                                    | 15      | 188-00   | 139,600     | 5,140.70                                  | 1       | 1-00                  | 40                  | 0   |
| June      | 27                                  | 459-30                                    | 26                                         | 435-15                                    | 20      | 318-45   | 149,600     | 5,370.05                                  | 0       | 0-00                  | 40                  | 0   |
| Totals    | 297                                 | 3,878-13                                  | 326                                        | 5,182-25                                  | 185     | 2,217-03 | 1,540,600   | \$55,684.98                               | 34      | 39-55                 | 1,062               | 100 |

\*Narragansett Electric Co. Power Rate G.

\*\*Engine Test Run.

TABLE 26 (Continued)  
 WATER DISTRIBUTION SYSTEM  
 NEUTACONKANUT HIGH SERVICE PUMPING STATION  
 OPERATING STATISTICS -- YEAR ENDED JUNE 30, 1976

|                                           | Gasoline                                   |                                           |                                           |                            | Total<br>Water<br>Pumped<br>Mil. Gals. |                |
|-------------------------------------------|--------------------------------------------|-------------------------------------------|-------------------------------------------|----------------------------|----------------------------------------|----------------|
|                                           | Electrically-Driven Pumps                  |                                           | Engine-Driven Pump                        |                            |                                        |                |
| No. 1<br>16" Pump<br>7000 GPM.<br>TDH 99' | No. 2<br>12" Pump<br>3800 GPM.<br>TDH 104' | No. 3<br>16" Pump<br>7000 GPM.<br>TDH 96' | No. 4<br>16" Pump<br>7000 GPM.<br>TDH 96' |                            |                                        |                |
| 1975-1976                                 | Water Pumped<br>Mil. Gals.                 | Water Pumped<br>Mil. Gals.                | Water Pumped<br>Mil. Gals.                | Water Pumped<br>Mil. Gals. | For<br>Month                           | Avg.per<br>Day |
| July                                      | 147.956                                    | 125.179                                   | 109.278                                   | 2.349                      | 385.762                                | 12.444         |
| August                                    | 117.620                                    | 134.122                                   | 100.357                                   | 2.304                      | 354.403                                | 11.432         |
| September                                 | 124.214                                    | 165.246                                   | 15.130                                    | 2.278                      | 306.868                                | 10.229         |
| October                                   | 168.840                                    | 21.826                                    | 141.297                                   | 2.708                      | 334.671                                | 10.796         |
| November                                  | 69.029                                     | 151.683                                   | 48.264                                    | 4.489                      | 273.465                                | 9.116          |
| December                                  | 97.368                                     | 123.438                                   | 57.252                                    | 1.885                      | 279.943                                | 9.030          |
| January                                   | 140.373                                    | 66.126                                    | 90.283                                    | 2.078                      | 298.860                                | 9.641          |
| February                                  | 137.469                                    | 60.883                                    | 99.060                                    | 1.735                      | 299.147                                | 10.315         |
| March                                     | 187.568                                    | 155.072                                   | 67.514                                    | 0.000                      | 410.154                                | 13.231         |
| April                                     | 152.614                                    | 155.902                                   | 79.321                                    | 0.936                      | 388.773                                | 12.959         |
| May                                       | 125.901                                    | 163.891                                   | 67.740                                    | 0.494                      | 358.026                                | 11.549         |
| June                                      | 162.217                                    | 106.040                                   | 101.304                                   | 0.000                      | 369.561                                | 12.319         |
| Totals                                    | 1,631.169                                  | 1,429.408                                 | 976.800                                   | 21.256                     | 4,059.633                              | 11.092         |

TABLE 27  
 WATER DISTRIBUTION SYSTEM  
 BATH STREET HIGH SERVICE PUMPING STATION  
 OPERATING STATISTICS -- YEAR ENDED JUNE 30, 1976

| Electrically-Driven Pumps |                                     |                         |                                     |                         |             | Gasoline Engine-Driven Pump                              |      |                         |
|---------------------------|-------------------------------------|-------------------------|-------------------------------------|-------------------------|-------------|----------------------------------------------------------|------|-------------------------|
| 1975-<br>1976             | Pump No. 1<br>2500 GPM.<br>TDH 100' |                         | Pump No. 2<br>2500 GPM.<br>TDH 100' |                         | *Power Used | Pump No. 3<br>5000 GPM. TDH 100'<br>150 HP Climax Engine |      |                         |
|                           | Operated<br>Hours<br>and<br>Minutes |                         | Operated<br>Hours<br>and<br>Minutes |                         |             | **Operated<br>Hours<br>and<br>Minutes                    |      |                         |
|                           | Days                                | Hours<br>and<br>Minutes | Days                                | Hours<br>and<br>Minutes | KWH         | Cost                                                     | Days | Hours<br>and<br>Minutes |
| July                      | 31                                  | 639-55                  | 31                                  | 605-15                  | 68,740      | \$2,357.90                                               | 4    | 8-00                    |
| August                    | 31                                  | 612-25                  | 31                                  | 548-50                  | 70,840      | 2,463.80                                                 | 3    | 64-40                   |
| September                 | 30                                  | 541-00                  | 30                                  | 537-10                  | 63,140      | 2,204.09                                                 | 4    | 4-00                    |
| October                   | 31                                  | 408-30                  | 27                                  | 346-00                  | 47,040      | 1,699.50                                                 | 5    | 5-00                    |
| November                  | 30                                  | 504-15                  | 30                                  | 451-30                  | 54,040      | 1,883.59                                                 | 4    | 4-00                    |
| December                  | 24                                  | 415-00                  | 28                                  | 488-15                  | 54,180      | 1,898.22                                                 | 4    | 4-00                    |
| January                   | 18                                  | 375-05                  | 20                                  | 367-15                  | 48,300      | 1,700.09                                                 | 4    | 4-00                    |
| February                  | 18                                  | 244-03                  | 21                                  | 366-42                  | 42,700      | 1,518.19                                                 | 4    | 4-00                    |
| March                     | 4                                   | 27-48                   | 1                                   | 6-38                    | 5,460***    | 406.17                                                   | 5    | 4-33                    |
| April                     | 17                                  | 139-10                  | 10                                  | 77-15                   | 7,700***    | 482.30                                                   | 4    | 4-00                    |
| May                       | 31                                  | 365-30                  | 25                                  | 308-45                  | 81,790***   | 2,968.07                                                 | 4    | 4-00                    |
| June                      | 30                                  | 614-30                  | 30                                  | 562-00                  | 62,580      | 2,168.64                                                 | 14   | 170-05                  |
| Totals                    | 295                                 | 4,887-11                | 284                                 | 4,665-35                | 606,510     | \$21,750.56                                              | 59   | 280-18                  |
|                           |                                     |                         |                                     |                         |             |                                                          |      | 2,720                   |

\*Narragansett Electric Co. Power Rate G.

\*\*Engine Test Run.

\*\*\*March and April were figured incorrectly.

Corrected bill sent in May.

TABLE 27 (Continued)  
 WATER DISTRIBUTION SYSTEM  
 BATH STREET HIGH SERVICE PUMPING STATION  
 OPERATING STATISTICS - YEAR ENDED JUNE 30, 1976

|           | Electrically-Driven Pumps           |                                     | Gasoline Engine-Driven Pump                              | Total Water Pumped |              |
|-----------|-------------------------------------|-------------------------------------|----------------------------------------------------------|--------------------|--------------|
|           | Pump No. 1<br>2500 GPM.<br>TDH 100' | Pump No. 2<br>2500 GPM.<br>TDH 100' | Pump No. 3<br>5000 GPM. TDH 100'<br>150 HP Climax Engine | Mil. Gallons       |              |
| 1975-1976 | Water Pumped<br>Mil. Gals.          | Water Pumped<br>Mil. Gals.          | Water Pumped<br>Mil. Gals.                               | For Month          | Avg. per Day |
| July      | 76.517                              | 71.556                              | 2.158                                                    | 150.231            | 4.846        |
| August    | 74.918                              | 66.100                              | 13.747                                                   | 154.765            | 4.992        |
| September | 70.069                              | 69.230                              | 1.024                                                    | 140.323            | 4.677        |
| October   | 53.255                              | 44.455                              | 1.272                                                    | 98.982             | 3.193        |
| November  | 64.089                              | 56.763                              | 0.989                                                    | 121.841            | 4.061        |
| December  | 55.110                              | 65.582                              | 0.965                                                    | 121.657            | 3.924        |
| January   | 53.962                              | 53.487                              | 0.987                                                    | 108.436            | 3.498        |
| February  | 34.829                              | 52.916                              | 0.974                                                    | 88.719             | 3.059        |
| March     | 3.891                               | 0.927                               | 1.058                                                    | 5.876              | 0.190        |
| April     | 18.132                              | 9.840                               | 0.948                                                    | 28.920             | 0.964        |
| May       | 46.832                              | 39.155                              | 0.964                                                    | 86.951             | 2.805        |
| June      | 70.713                              | 63.571                              | 30.112                                                   | 164.396            | 5.480        |
| Totals    | 622.317                             | 593.582                             | 55.198                                                   | 1,271.097          | 3.473        |

TABLE 28

## WATER DISTRIBUTION SYSTEM

\*AQUEDUCT DISTRIBUTION RESERVOIR

OPERATING STATISTICS - YEAR ENDED JUNE 30, 1976

| 1975-<br>1976 | 7 A.M. Statistics<br>on First Day<br>of Month |                      |             |        | Operating Characteristics During Month |                   |       |        |                                      |      |      |                                   |      |      |      |      |      |
|---------------|-----------------------------------------------|----------------------|-------------|--------|----------------------------------------|-------------------|-------|--------|--------------------------------------|------|------|-----------------------------------|------|------|------|------|------|
|               | Water<br>Level                                | Storage<br>Mil.Gals. | Water Level |        |                                        | Storage-Mil.Gals. |       |        | Daily Water Level<br>Fluctuation-Ft. |      |      | Daily Storage<br>Fluctuation-M.G. |      |      |      |      |      |
|               |                                               |                      | Max.        | Min.   | **Avg.                                 | Max.              | Min.  | **Avg. | Max.                                 | Min. | Avg. | Max.                              | Min. | Avg. | Max. | Min. | Avg. |
| July          | 229.19                                        | 40.36                | 230.41      | 225.19 | 229.29                                 | 42.42             | 33.49 | 40.53  | 4.51                                 | 0.52 | 2.82 | 7.74                              | 0.89 | 4.82 |      |      |      |
| August        | 230.33                                        | 42.29                | 230.57      | 225.17 | 229.33                                 | 42.68             | 33.46 | 40.60  | 5.26                                 | 0.76 | 2.57 | 8.99                              | 1.30 | 4.38 |      |      |      |
| September     | 226.37                                        | 35.52                | 230.07      | 225.31 | 228.98                                 | 41.86             | 33.70 | 40.00  | 4.67                                 | 0.58 | 2.30 | 8.01                              | 0.99 | 3.95 |      |      |      |
| October       | 229.20                                        | 40.37                | 230.16      | 225.84 | 229.11                                 | 42.00             | 34.61 | 40.22  | 3.83                                 | 1.28 | 2.51 | 6.56                              | 2.19 | 4.30 |      |      |      |
| November      | 227.72                                        | 37.84                | 229.74      | 224.23 | 228.21                                 | 41.30             | 31.85 | 38.68  | 3.60                                 | 0.86 | 2.38 | 6.17                              | 1.48 | 4.09 |      |      |      |
| December      | 226.81                                        | 36.28                | 229.26      | 224.34 | 227.81                                 | 40.48             | 32.04 | 37.99  | 4.53                                 | 2.06 | 2.97 | 7.78                              | 3.53 | 5.10 |      |      |      |
| January       | 229.05                                        | 40.12                | 229.30      | 223.90 | 227.66                                 | 40.55             | 31.28 | 37.73  | 4.90                                 | 1.34 | 2.70 | 8.41                              | 2.30 | 4.63 |      |      |      |
| February      | 227.10                                        | 36.77                | 228.73      | 224.03 | 227.66                                 | 39.57             | 31.50 | 37.73  | 4.25                                 | 1.15 | 2.40 | 7.30                              | 1.98 | 4.12 |      |      |      |
| March         | 227.90                                        | 38.15                | 229.03      | 224.06 | 228.01                                 | 40.08             | 31.55 | 38.33  | 4.03                                 | 1.20 | 2.54 | 6.91                              | 2.06 | 4.35 |      |      |      |
| April         | 227.70                                        | 37.80                | 229.96      | 224.79 | 228.17                                 | 41.67             | 32.81 | 38.61  | 4.97                                 | 1.28 | 2.75 | 8.53                              | 2.20 | 4.71 |      |      |      |
| May           | 227.40                                        | 37.29                | 229.56      | 224.20 | 228.19                                 | 40.99             | 31.80 | 38.64  | 4.84                                 | 1.72 | 2.77 | 8.31                              | 2.95 | 4.75 |      |      |      |
| June          | 229.45                                        | 40.80                | 230.52      | 224.40 | 229.68                                 | 42.60             | 32.14 | 41.19  | 5.80                                 | 0.98 | 2.99 | 9.93                              | 1.65 | 5.11 |      |      |      |
| For Year      |                                               |                      | 230.57      | 223.90 | 228.51                                 | 42.68             | 31.28 | 39.19  | 5.80                                 | 0.52 | 2.64 | 9.93                              | 0.89 | 4.53 |      |      |      |

\*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, 1976

63

| 1975-<br>1976 | 7 A.M. Statistics<br>on First Day<br>of Month |                       |             | OPERATING CHARACTERISTICS DURING MONTH |        |                    |       |        |                                      |      |      |                                   |      |      |  |
|---------------|-----------------------------------------------|-----------------------|-------------|----------------------------------------|--------|--------------------|-------|--------|--------------------------------------|------|------|-----------------------------------|------|------|--|
|               | Water<br>Level                                | Storage<br>Mil. Gals. | Water Level |                                        |        | Storage-Mil. Gals. |       |        | Daily Water Level<br>Fluctuation-Ft. |      |      | Daily Storage<br>Fluctuation-M.G. |      |      |  |
|               |                                               |                       | Max.        | Min.                                   | **Avg. | Max.               | Min.  | **Avg. | Max.                                 | Min. | Avg. | Max.                              | Min. | Avg. |  |
| July          | 226.71                                        | 41.59                 | 226.71      | 222.12                                 | 226.01 | 41.59              | 33.51 | 40.36  | 3.81                                 | 1.22 | 2.74 | 6.70                              | 2.15 | 4.81 |  |
| August        | 225.70                                        | 39.81                 | 226.70      | 219.99                                 | 226.10 | 41.57              | 29.76 | 40.51  | 5.47                                 | 0.78 | 2.81 | 9.63                              | 1.36 | 4.95 |  |
| September     | 225.93                                        | 40.22                 | 226.83      | 222.77                                 | 226.51 | 41.81              | 34.66 | 41.23  | 4.00                                 | 0.76 | 1.92 | 7.04                              | 1.35 | 3.38 |  |
| October       | 226.26                                        | 40.79                 | 226.93      | 223.39                                 | 226.47 | 41.99              | 35.75 | 41.16  | 3.29                                 | 0.33 | 1.89 | 5.79                              | 0.60 | 3.32 |  |
| November      | 226.20                                        | 40.69                 | 226.38      | 222.17                                 | 225.96 | 41.00              | 33.60 | 40.27  | 3.43                                 | 0.93 | 2.20 | 6.04                              | 1.64 | 3.87 |  |
| December      | 225.04                                        | 38.65                 | 226.17      | 222.67                                 | 225.52 | 40.64              | 34.48 | 39.50  | 3.22                                 | 0.80 | 2.23 | 5.67                              | 1.41 | 3.93 |  |
| January       | 226.09                                        | 40.50                 | 226.36      | 222.20                                 | 225.56 | 40.97              | 33.65 | 39.57  | 3.40                                 | 0.96 | 2.20 | 5.99                              | 1.69 | 3.88 |  |
| February      | 225.16                                        | 38.86                 | 226.18      | 222.29                                 | 225.61 | 40.65              | 33.81 | 39.65  | 3.29                                 | 0.80 | 2.15 | 5.79                              | 1.40 | 3.78 |  |
| March         | 225.78                                        | 39.95                 | 226.32      | 222.78                                 | 225.75 | 40.90              | 34.67 | 39.90  | 3.22                                 | 0.63 | 2.24 | 5.67                              | 1.10 | 3.94 |  |
| April         | 225.97                                        | 40.29                 | 226.40      | 221.75                                 | 225.80 | 41.04              | 32.86 | 39.99  | 4.12                                 | 1.20 | 2.39 | 7.24                              | 2.11 | 4.21 |  |
| May           | 225.86                                        | 40.09                 | 226.29      | 222.15                                 | 225.79 | 40.84              | 33.56 | 39.97  | 3.63                                 | 0.84 | 2.47 | 6.39                              | 1.47 | 4.34 |  |
| June          | 226.28                                        | 40.83                 | 226.58      | 220.67                                 | 225.92 | 41.36              | 30.96 | 40.20  | 5.23                                 | 0.53 | 3.10 | 9.20                              | 0.93 | 5.44 |  |
| For Year      |                                               |                       | 226.49      | 222.08                                 | 225.92 | 41.20              | 33.44 | 40.19  | 3.84                                 | 0.82 | 2.36 | 6.76                              | 1.43 | 4.15 |  |

\*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, 1976

| 1975-<br>1976 | 7 A.M. Statistics<br>on First Day<br>of Month |                       |             | Operating Characteristics During Month |        |                    |       |        |                                      |      |      |                                   |      |      |  |
|---------------|-----------------------------------------------|-----------------------|-------------|----------------------------------------|--------|--------------------|-------|--------|--------------------------------------|------|------|-----------------------------------|------|------|--|
|               | Water<br>Level                                | Storage<br>Mil. Gals. | Water Level |                                        |        | Storage-Mil. Gals. |       |        | Daily Water Level<br>Fluctuation-Ft. |      |      | Daily Storage<br>Fluctuation-M.G. |      |      |  |
|               |                                               |                       | Max.        | Min.                                   | **Avg. | Max.               | Min.  | **Avg. | Max.                                 | Min. | Avg. | Max.                              | Min. | Avg. |  |
| July          | 304.90                                        | 11.89                 | 305.65      | 295.42                                 | 304.96 | 12.24              | 8.80  | 11.92  | 9.67                                 | 0.84 | 3.80 | 4.49                              | 0.39 | 1.76 |  |
| August        | 302.30                                        | 10.69                 | 305.98      | 294.80                                 | 304.82 | 12.39              | 7.21  | 11.86  | 7.80                                 | 0.76 | 2.83 | 3.62                              | 0.35 | 1.31 |  |
| September     | 305.28                                        | 12.07                 | 305.50      | 302.19                                 | 304.84 | 12.17              | 10.64 | 11.86  | 3.12                                 | 1.02 | 2.06 | 1.44                              | 0.48 | 0.96 |  |
| October       | 304.57                                        | 11.74                 | 305.72      | 302.07                                 | 304.81 | 12.27              | 10.58 | 11.85  | 3.11                                 | 0.99 | 2.01 | 1.44                              | 0.46 | 0.93 |  |
| November      | 304.83                                        | 11.86                 | 305.25      | 302.51                                 | 304.48 | 12.05              | 10.78 | 11.70  | 2.30                                 | 0.89 | 1.52 | 1.07                              | 0.42 | 0.71 |  |
| December      | 304.70                                        | 11.80                 | 305.10      | 301.71                                 | 304.54 | 11.99              | 10.41 | 11.72  | 3.28                                 | 0.76 | 1.87 | 1.53                              | 0.35 | 0.87 |  |
| January       | 304.60                                        | 11.75                 | 305.07      | 301.52                                 | 304.58 | 11.97              | 10.32 | 11.74  | 3.15                                 | 1.80 | 2.51 | 1.46                              | 0.83 | 1.16 |  |
| February      | 304.54                                        | 11.72                 | 305.80      | 301.37                                 | 304.78 | 12.31              | 10.25 | 11.84  | 3.95                                 | 1.52 | 2.77 | 1.83                              | 0.70 | 1.28 |  |
| March         | 305.10                                        | 11.99                 | 305.58      | 300.95                                 | 304.91 | 12.21              | 10.06 | 11.90  | 3.87                                 | 1.66 | 2.86 | 1.80                              | 0.78 | 1.33 |  |
| April         | 304.95                                        | 11.92                 | 305.48      | 300.70                                 | 304.88 | 12.16              | 9.94  | 11.88  | 4.34                                 | 1.11 | 2.65 | 2.02                              | 0.52 | 1.23 |  |
| May           | 305.20                                        | 12.03                 | 305.41      | 300.61                                 | 304.88 | 12.13              | 9.90  | 11.89  | 4.66                                 | 0.79 | 2.23 | 2.16                              | 0.37 | 1.03 |  |
| June          | 304.55                                        | 11.73                 | 306.28      | 294.84                                 | 304.83 | 12.52              | 7.23  | 11.86  | 9.46                                 | 1.76 | 4.58 | 4.39                              | 0.82 | 2.12 |  |
| For Year      |                                               |                       | 305.57      | 299.89                                 | 304.78 | 12.20              | 9.68  | 11.84  | 4.89                                 | 1.16 | 2.64 | 2.27                              | 0.54 | 1.22 |  |

\*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, 1976

| City or Town                            | Pipe Laid in Feet |          |     |          |          |     |     |     | Total     |
|-----------------------------------------|-------------------|----------|-----|----------|----------|-----|-----|-----|-----------|
|                                         | 6"                | 8"       | 10" | 12"      | 16"      | 20" | 24" | 30" |           |
| Providence                              | 730.55            | 444.05   | 0   | 162.25   | 318.30   | 0   | 0   | 0   | 1,655.15  |
| Cranston                                | 1,922.95          | 1,809.92 | 0   | 8,017.05 | 6,290.80 | 0   | 0   | 0   | 18,040.72 |
| Johnston                                | 142.95            | 4,730.60 | 0   | 0        | 0        | 0   | 0   | 0   | 4,873.55  |
| North Providence                        | 1,298.60          | 2,244.10 | 0   | 0        | 0        | 0   | 0   | 0   | 3,542.70  |
| Totals                                  | 4,095.05          | 9,228.67 | 0   | 8,179.30 | 6,609.10 | 0   | 0   | 0   | 28,112.12 |
| Pipe Removed in Feet                    |                   |          |     |          |          |     |     |     |           |
|                                         | 6"                | 8"       | 10" | 12"      | 16"      | 20" | 24" | 30" | Total     |
| Providence                              | 2,041.27          | 172.00   | 0   | 485.39   | 0        | 0   | 0   | 0   | 2,698.66  |
| Cranston                                | 488.97            | 0        | 0   | 1,456.77 | 0        | 0   | 0   | 0   | 1,945.74  |
| Johnston                                | 0                 | 0        | 0   | 0        | 0        | 0   | 0   | 0   | 0         |
| North Providence                        | 0                 | 0        | 0   | 0        | 0        | 0   | 0   | 0   | 0         |
| Totals                                  | 2,530.24          | 172.00   | 0   | 1,942.16 | 0        | 0   | 0   | 0   | 4,644.40  |
| Net Length Added to Distribution System |                   |          |     |          |          |     |     |     |           |
|                                         | 6"                | 8"       | 10" | 12"      | 16"      | 20" | 24" | 30" | Total     |
| Providence                              | -1,310.72         | 272.05   | 0   | -323.14  | 318.30   | 0   | 0   | 0   | -1,043.51 |
| Cranston                                | 1,433.98          | 1,809.92 | 0   | 6,560.28 | 6,290.80 | 0   | 0   | 0   | 16,094.98 |
| Johnston                                | 142.95            | 4,730.60 | 0   | 0        | 0        | 0   | 0   | 0   | 4,873.55  |
| North Providence                        | 1,298.60          | 2,244.10 | 0   | 0        | 0        | 0   | 0   | 0   | 3,542.70  |
| Totals                                  | 1,564.81          | 9,056.67 | 0   | 6,237.14 | 6,609.10 | 0   | 0   | 0   | 23,467.72 |

TABLE 32

PUBLIC WATER MAINS IN USE ON JUNE 30, 1976

|         | Providence   |        |              |        | Cranston   |       |            |       | Johnston     |        |           |       | North Providence |       |      |       | *Total |       | Special<br>High<br>Pressure<br>Fire Service |       |
|---------|--------------|--------|--------------|--------|------------|-------|------------|-------|--------------|--------|-----------|-------|------------------|-------|------|-------|--------|-------|---------------------------------------------|-------|
|         | Feet         | Miles  | Feet         | Miles  | Feet       | Miles | Feet       | Miles | Feet         | Miles  | Feet      | Miles | Feet             | Miles | Feet | Miles | Feet   | Miles | Feet                                        | Miles |
| 6-inch  | 1,448,600.80 | 274.36 | 643,869.71   | 121.95 | 133,627.62 | 25.31 | 172,307.79 | 32.63 | 2,398,405.92 | 454.24 | 82.06     | 0.02  |                  |       |      |       |        |       |                                             |       |
| 8-inch  | 358,348.43   | 67.87  | 393,485.53   | 74.52  | 220,717.87 | 41.80 | 154,343.09 | 29.23 | 1,126,894.92 | 213.43 | 1,221.65  | 0.23  |                  |       |      |       |        |       |                                             |       |
| 10-inch | 11,833.53    | 2.24   | 0            | 0      | 0          | 0     | 0          | 0     | 11,833.53    | 2.24   | 0         | 0     |                  |       |      |       |        |       |                                             |       |
| 12-inch | **252,438.56 | 47.81  | 114,447.73   | 21.68  | 13,556.11  | 2.57  | 33,169.10  | 6.28  | 413,611.50   | 78.34  | 7,458.17  | 1.41  |                  |       |      |       |        |       |                                             |       |
| 16-inch | 147,998.47   | 28.03  | 9,803.11     | 1.86   | 6,393.63   | 1.21  | 0          | 0     | 164,195.21   | 31.10  | 55,994.19 | 10.60 |                  |       |      |       |        |       |                                             |       |
| 20-inch | 20,172.24    | 3.82   | 0            | 0      | 0          | 0     | 0          | 0     | 20,172.24    | 3.82   | 0         | 0     |                  |       |      |       |        |       |                                             |       |
| 24-inch | 56,233.14    | 10.65  | 6,301.43     | 1.19   | 32,749.23  | 6.20  | 9,269.26   | 1.76  | 104,553.06   | 19.80  | 4,157.47  | 0.79  |                  |       |      |       |        |       |                                             |       |
| 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  | 2,373,756.29 | 449.58 | 1,250,990.61 | 236.93 | 411,778.46 | 77.99 | 373,098.53 | 70.66 | 4,409,623.89 | 835.16 | 68,913.54 | 13.05 |                  |       |      |       |        |       |                                             |       |

\*Special High Pressure Fire Service Included.

\*\*5,336' of 12" main installed in 1934; not accounted for until 1976.

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, 1976

| Stop Gates       |       |     |       |     |     |     |     |     |     | Gates on<br>Public Fire<br>Hydrants |     |        |       | Gates on<br>Unwatering<br>Hydrants |       |    |    | Gates on<br>Blow-offs |    |    |     | Total<br>number<br>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       |       |     |       |     |     |     |     |     |     |                                     |     |        |       |                                    |       |    |    |                       |    |    |     |                             |        |
| 4,429            | 1,026 | 16  | 664   | 284 | 28  | 73  | 39  | 6   | 3   | 10                                  | 0   | 6,578  | 1,703 | 1,432                              | 3,135 | 8  | 14 | 22                    | 1  | 2  | 1   | 4                           | 9,739  |
| CRANSTON         |       |     |       |     |     |     |     |     |     |                                     |     |        |       |                                    |       |    |    |                       |    |    |     |                             |        |
| L9               | 1,787 | 985 | 0     | 239 | 15  | 0   | 11  | 16  | 13  | 14                                  | 4   | 3,087  | 1,202 | 7                                  | 1,209 | 3  | 14 | 17                    | 0  | 2  | 28  | 30                          | 4,343  |
| JOHNSTON         |       |     |       |     |     |     |     |     |     |                                     |     |        |       |                                    |       |    |    |                       |    |    |     |                             |        |
| 373              | 485   | 1   | 31    | 12  | 6   | 5   | 0   | 0   | 0   | 1                                   | 0   | 914    | 346   | 11                                 | 357   | 3  | 0  | 3                     | 0  | 0  | 2   | 2                           | 1,276  |
| NORTH PROVIDENCE |       |     |       |     |     |     |     |     |     |                                     |     |        |       |                                    |       |    |    |                       |    |    |     |                             |        |
| 484              | 333   | 0   | 72    | 0   | 0   | 5   | 1   | 1   | 0   | 0                                   | 0   | 896    | 371   | 0                                  | 371   | 0  | 3  | 3                     | 0  | 0  | 0   | 0                           | 1,270  |
| TOTALS           |       |     |       |     |     |     |     |     |     |                                     |     |        |       |                                    |       |    |    |                       |    |    |     |                             |        |
| 7,073            | 2,829 | 17  | 1,006 | 311 | 34  | 94  | 56  | 20  | 17  | 15                                  | 3   | 11,475 | 3,622 | 1,450                              | 5,072 | 14 | 31 | 45                    | 1  | 4  | 31  | 36                          | 16,628 |

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.

TABLE 34  
SERVICE PIPES INSTALLED AND REMOVED--YEAR ENDED JUNE 30, 1976

| City or Town     | INSTALLED          |                     |                     |       |       |                                 | REMOVED             |                     |       |       |  |  |
|------------------|--------------------|---------------------|---------------------|-------|-------|---------------------------------|---------------------|---------------------|-------|-------|--|--|
|                  | General            |                     | Fire Supply         |       | Total | General                         |                     | Fire Supply         |       | Total |  |  |
|                  | Copper<br>3/4"- 2" | Cast Iron<br>4"-12" | Cast Iron<br>4"-12" | Total |       | Lead<br>or<br>Copper<br>1/2"-2" | Cast Iron<br>4"-12" | Cast Iron<br>4"-12" | Total |       |  |  |
| Providence       | 85                 | 11                  | 14                  | 110   |       | 249                             | 1                   | 2                   | 252   |       |  |  |
| Cranston         | 120                | 5                   | 2                   | 127   |       | 13                              | 0                   | 1                   | 14    |       |  |  |
| Johnston         | 79                 | 2                   | 0                   | 81    |       | 2                               | 0                   | 0                   | 2     |       |  |  |
| North Providence | 78                 | 0                   | 0                   | 78    |       | 4                               | 0                   | 0                   | 2     |       |  |  |
| Totals           | 362                | 18                  | 16                  | 396   |       | 268                             | 1                   | 3                   | 272   |       |  |  |

TABLE 35  
NUMBER AND SIZE OF ACTIVE SERVICES--YEAR ENDED JUNE 30, 1976

|                  | 1/2" | 5/8"   | 3/4"   | 1"    | 1 1/4" | 1 1/2" | 2"    | 3" | 4"    | 6"    | 8"  | 10" | 12" | 16" | 24" | 30" | 42"     | Totals |
|------------------|------|--------|--------|-------|--------|--------|-------|----|-------|-------|-----|-----|-----|-----|-----|-----|---------|--------|
| Providence       | 198  | 23,442 | 7,510  | 2,097 | 446    | 496    | 649   | 6  | 1,013 | 962   | 99  | 4   | 10  | 2   | 0   | 0   | 36,934  |        |
| Cranston         | 5    | 6,846  | 8,364  | 2,332 | 40     | 525    | 388   | 0  | 128   | 110   | 35  | 0   | 5   | 0   | 1   | 1   | 18,782  |        |
| Johnston         | 0    | 746    | 2,506  | 1,322 | 9      | 289    | 93    | 0  | 17    | 27    | 5   | 0   | 1   | 0   | 0   | 0   | 5,015   |        |
| North Providence | 0    | 1,060  | 2,683  | 1,151 | 6      | 310    | 120   | 0  | 41    | 20    | 4   | 0   | 2   | 0   | 0   | 0   | 5,397   |        |
| Totals           | 203  | 32,094 | 21,063 | 6,902 | 501    | 1,620  | 1,250 | 6  | 1,199 | 1,119 | 143 | 4   | 18  | 2   | 1   | 1   | *66,128 |        |

\*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., Hope, R.I.

TABLE 36  
PUBLIC FIRE HYDRANTS  
HYDRANT ACTIVITIES DURING YEAR ENDED JUNE 30, 1976

|                         | Providence | Cranston | Johnston | North Providence | Totals |
|-------------------------|------------|----------|----------|------------------|--------|
| Post Hydrants Installed | 33         | 29       | 36       | 7                | 105    |
| Post Hydrants Removed   | 30         | 11       | 5        | 4                | 50     |
| Flush Hydrants Removed  | 1          | 0        | 0        | 0                | 1      |

HYDRANTS IN DISTRIBUTION SYSTEM ON JUNE 30, 1976

|               |       |       |     |     |       |
|---------------|-------|-------|-----|-----|-------|
| Post Hydrants | 3,149 | 1,209 | 366 | 372 | 5,096 |
|---------------|-------|-------|-----|-----|-------|

TABLE 37  
NUMBER, MAKE AND SIZE OF METERS ON ACTIVE SERVICES  
YEAR ENDED JUNE 30, 1976

| Size        | 5/8"   | 3/4"  | 1"    | 1 1/2" | 2"    | 3" | 4" | 6"  | 8" | 10" | 12" | 16" | 24" | 30" | 36" | Total  |
|-------------|--------|-------|-------|--------|-------|----|----|-----|----|-----|-----|-----|-----|-----|-----|--------|
| *PROVIDENCE |        |       |       |        |       |    |    |     |    |     |     |     |     |     |     |        |
| Make        |        |       |       |        |       |    |    |     |    |     |     |     |     |     |     |        |
| Trident     | 28,941 | 3,054 | 1,009 | 1,225  | 1,762 | 75 | 60 | 60  | 17 | 5   | -   | -   | -   | -   | -   | 36,208 |
| Thomson     | 762    | 81    | 73    | 30     | 94    | -  | 2  | -   | -  | -   | -   | -   | -   | -   | -   | 1,042  |
| Empire      | 30     | -     | 6     | -      | 1     | -  | -  | -   | -  | -   | -   | -   | -   | -   | -   | 37     |
| Crown       | 14     | 3     | 2     | -      | -     | -  | -  | -   | -  | -   | -   | -   | -   | -   | -   | 19     |
| Hersey      | -      | -     | -     | 2      | 3     | 2  | 13 | 60  | 6  | -   | -   | -   | -   | -   | -   | 86     |
| Flow Meter  | -      | -     | -     | -      | -     | -  | -  | -   | -  | -   | 1   | 2   | -   | -   | -   | 3      |
| Totals      | 29,747 | 3,138 | 1,090 | 1,257  | 1,860 | 77 | 75 | 120 | 23 | 5   | 1   | 2   | -   | -   | -   | 37,395 |

\*Includes 1-12" Flow Meter Supplying City of East Providence.

\*CRANSTON

| Make       |        |       |     |     |     |   |   |    |    |   |   |   |   |   |   |        |
|------------|--------|-------|-----|-----|-----|---|---|----|----|---|---|---|---|---|---|--------|
| Trident    | 16,086 | 1,411 | 560 | 306 | 416 | 2 | 6 | 15 | 6  | - | 1 | - | - | - | - | 18,809 |
| Thomson    | -      | 6     | -   | 8   | 8   | - | - | -  | -  | - | - | - | - | - | - | 22     |
| Hersey     | -      | -     | -   | -   | 1   | - | - | 4  | 4  | - | - | - | - | - | - | 9      |
| Flow Meter | -      | -     | -   | -   | -   | - | - | -  | 1  | - | 2 | 1 | 1 | 1 | 2 | 8      |
| Totals     | 16,086 | 1,417 | 560 | 314 | 425 | 2 | 6 | 19 | 11 | - | 3 | 1 | 1 | 1 | 2 | 18,848 |

\*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.

1-16" Flow Meter supplying Western Cranston.

1-24" Flow Meter supplying City of Warwick.

1-30" Flow Meter supplying Kent County Water Authority pumping station,  
Clinton Avenue, Hope, R.I. from 30-inch connection off 78-inch aqueduct.

1-36" Flow Meter supplying City of East Providence.

1-36" Flow Meter supplying City of Warwick.

\*JOHNSTON

| Make       |       |     |     |    |    |   |   |   |   |   |   |   |   |   |   |       |
|------------|-------|-----|-----|----|----|---|---|---|---|---|---|---|---|---|---|-------|
| Trident    | 3,852 | 794 | 180 | 69 | 93 | - | - | 3 | 3 | - | - | - | - | - | - | 4,994 |
| Thomson    | 44    | 1   | 1   | -  | -  | - | - | - | - | - | - | - | - | - | - | 46    |
| Flow Meter | -     | -   | -   | -  | -  | - | - | - | - | - | 1 | - | - | - | - | 1     |
| Totals     | 3,896 | 795 | 181 | 69 | 93 | - | - | 3 | 3 | - | 1 | - | - | - | - | 5,041 |

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

1-12" Flow Meter supplying Greenville Water District.

\*NORTH PROVIDENCE

| Make       |       |     |     |    |     |   |   |   |   |   |   |   |   |   |   |       |
|------------|-------|-----|-----|----|-----|---|---|---|---|---|---|---|---|---|---|-------|
| Trident    | 4,041 | 710 | 304 | 72 | 108 | 1 | 2 | 4 | - | - | - | - | - | - | - | 5,242 |
| Thomson    | 159   | 4   | 3   | 1  | 1   | - | - | - | - | - | - | - | - | - | - | 168   |
| Hersey     | -     | -   | -   | -  | -   | - | - | 5 | - | - | - | - | - | - | - | 5     |
| Flow Meter | -     | -   | -   | -  | -   | - | - | - | - | - | 1 | - | - | - | - | 1     |
| Totals     | 4,200 | 714 | 307 | 73 | 109 | 1 | 2 | 9 | - | - | 1 | - | - | - | - | 5,416 |

\*Includes 1-6" Trident Protectus Meter supplying East Smithfield Water Co.

1-12" Flow Meter supplying Town of Smithfield.

TABLE 38  
CAPACITY AND CONSUMPTION

|                     |                    | C                     | O                      | N              | S          | U                         | M                      | P     | T     | I              | O                                      | N                      |
|---------------------|--------------------|-----------------------|------------------------|----------------|------------|---------------------------|------------------------|-------|-------|----------------|----------------------------------------|------------------------|
|                     | Purification Works | Total Capacity M.G.D. | Total During Year M.G. | Average M.G.D. | Total M.G. | Percent of Plant Capacity | Percent of Average Day |       |       | Rate in M.G.D. | Maximum Hour Percent of Plant Capacity | Percent of Average Day |
| Year Ended Sept. 30 |                    |                       |                        |                |            |                           |                        |       |       |                |                                        |                        |
| 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              | 21,933.2              | 60.1                   | 109.0          | 75.7       | 181.4                     | 158.4                  | 110.0 | 263.6 |                |                                        |                        |
| 1972                | 144.0              | 23,570.4              | 64.4                   | 100.6          | 69.9       | 156.2                     | 146.9                  | 102.0 | 228.1 |                |                                        |                        |
| 1973                | 144.0              | 23,203.3              | 63.6                   | 105.9          | 73.5       | 166.5                     | 152.3                  | 105.8 | 239.5 |                |                                        |                        |
| 1974                | 144.0              | 23,468.1              | 64.3                   | 104.7          | 72.7       | 162.8                     | 147.5                  | 102.4 | 229.4 |                |                                        |                        |
| 1975                | 144.0              | 23,228.4              | 63.6                   | 109.8          | 76.3       | 172.6                     | 156.7                  | 108.8 | 246.4 |                |                                        |                        |
| 1976                | 144.0              | 23,694.5              | 64.7                   | 118.0          | 81.9       | 182.4                     | 162.9                  | 113.1 | 251.8 |                |                                        |                        |

TABLE 39

## CONSUMPTION OF WATER - MILLION GALLONS

YEAR ENDED JUNE 30, 1976

| 1975-<br>1976 | Low Service (1) |             |             | High Service (2) |              |             | Total Service (1,2) |           |              | Total       |        |            |
|---------------|-----------------|-------------|-------------|------------------|--------------|-------------|---------------------|-----------|--------------|-------------|--------|------------|
|               | Max.<br>Day     | Min.<br>Day | Avg.<br>Day | Total            | Max.<br>Day  | Min.<br>Day | Avg.<br>Day         | Total     | Max.<br>Day  |             |        |            |
| July          | 79.393          | 36.641      | 59.773      | 1,852.979        | 22.941       | 12.946      | 17.329              | 537.193   | 102.334      | 49.587      | 77.102 | 2,390.172  |
| August        | 83.901          | 35.592      | 58.147      | 1,802.560        | 23.092       | 12.171      | 16.380              | 507.788   | 106.626      | 47.763      | 74.527 | 2,310.348  |
| September     | 62.149          | 35.728      | 49.974      | 1,499.232        | 16.640       | 13.206      | 14.917              | 447.521   | 78.467       | 49.408      | 64.892 | 1,946.753  |
| October       | 54.849          | 33.133      | 46.270      | 1,434.364        | 15.902       | 11.999      | 13.985              | 433.533   | 68.857       | 45.644      | 60.255 | 1,867.897  |
| November      | 53.659          | 34.930      | 45.370      | 1,361.095        | 14.214       | 11.161      | 13.179              | 395.366   | 67.674       | 46.091      | 58.549 | 1,756.461  |
| December      | 52.454          | 31.458      | 44.440      | 1,377.651        | 13.883       | 11.061      | 12.956              | 401.650   | 66.139       | 42.519      | 57.397 | 1,779.301  |
| January       | 51.851          | 34.178      | 44.468      | 1,378.521        | 14.222       | 10.978      | 13.140              | 407.326   | 65.773       | 45.156      | 57.608 | 1,785.847  |
| February      | 52.193          | 32.008      | 44.014      | 1,276.420        | 14.451       | 11.871      | 13.365              | 387.596   | 66.288       | 43.947      | 57.379 | 1,664.016  |
| March         | 51.043          | 35.323      | 45.206      | 1,401.408        | 14.339       | 12.111      | 13.423              | 416.100   | 64.730       | 47.798      | 58.629 | 1,817.508  |
| April         | 64.629          | 34.518      | 48.240      | 1,447.194        | 17.142       | 11.728      | 13.919              | 417.583   | 81.771       | 46.246      | 62.159 | 1,864.777  |
| May           | 62.612          | 36.865      | 49.329      | 1,529.213        | 17.189       | 12.601      | 14.364              | 445.277   | 78.408       | 49.855      | 63.693 | 1,974.490  |
| June          | 94.795          | 37.829      | 66.749      | 2,002.484        | 23.185       | 12.707      | 17.785              | 533.547   | 117.980      | 50.536      | 84.534 | 2,536.031  |
| For Year      | 94.795(a)       | 31.458(b)   | 50.172      | 18,363.121       | 23.185(c)    | 10.978(d)   | 14.564              | 5,330.480 | 117.980(e)   | 42.519(f)   | 64.737 | 23,693.601 |
|               | (a) June 24;    | (b) Dec. 25 |             |                  | (c) June 24; | (d) Jan. 1  |                     |           | (e) June 24; | (f) Dec. 25 |        |            |

(1) Includes water supplied to City of Warwick, Kent County Water Authority, City of East Providence and West Cranston.

(2) Includes water supplied to East Smithfield Water Co., Smithfield Water Department and Greenville Water District.

TABLE 40  
 WATER SOLD TO KENT COUNTY WATER AUTHORITY  
 AND THE WESTERN SECTION OF THE CITY OF CRANSTON  
 YEAR ENDED JUNE 30, 1976

| KENT COUNTY WATER AUTHORITY |                                                    |                                                    |                                  | WEST CRANSTON                                                      |                         |                                  |
|-----------------------------|----------------------------------------------------|----------------------------------------------------|----------------------------------|--------------------------------------------------------------------|-------------------------|----------------------------------|
|                             | S.S.58,985<br>Oaklawn<br>Avenue<br>Cranston<br>12" | S.S.75,430<br>Clinton<br>Avenue<br>Scituate<br>30" | Tri-Crest<br>Meter               | S.S.76,957<br>Adjacent to<br>Aqueduct Reservoir<br>Cranston<br>16" | Flow<br>Meter           | Average<br>Gallons<br>per<br>Day |
| 1975-<br>1976               | Gallons<br>per<br>Month                            | Gallons<br>per<br>Month                            | Total<br>Gallons<br>per<br>Month | Average<br>Gallons<br>per<br>Day                                   | Gallons<br>per<br>Month | Average<br>Gallons<br>per<br>Day |
| July                        | 13,615,500                                         | 96,776,250                                         | 110,391,750                      | 3,561,024                                                          | 2,717,500               | 87,661                           |
| August                      | 11,991,750                                         | 78,983,350                                         | 90,975,100                       | 2,934,681                                                          | 3,410,600               | 110,019                          |
| September                   | 9,363,000                                          | 67,807,900                                         | 77,170,900                       | 2,572,363                                                          | 2,129,600               | 70,987                           |
| October                     | 8,760,000                                          | 84,177,600                                         | 92,937,600                       | 2,997,987                                                          | 3,552,000               | 114,581                          |
| November                    | 7,696,500                                          | 89,377,700                                         | 97,074,200                       | 3,235,807                                                          | 1,736,200               | 57,873                           |
| December                    | 7,984,500                                          | 93,426,000                                         | 101,410,500                      | 3,271,306                                                          | 2,394,000               | 77,226                           |
| January                     | 7,800,750                                          | 91,610,250                                         | 99,411,000                       | 3,206,806                                                          | 2,361,500               | 76,177                           |
| February                    | 7,377,750                                          | 85,567,100                                         | 92,944,850                       | 3,204,995                                                          | 1,925,300               | 66,390                           |
| March                       | 8,031,750                                          | 93,771,100                                         | 101,802,850                      | 3,283,963                                                          | 2,755,600               | 88,890                           |
| April                       | 8,132,250                                          | 89,405,700                                         | 97,537,950                       | 3,251,265                                                          | 2,018,000               | 67,267                           |
| May                         | 10,647,000                                         | 86,954,200                                         | 97,601,200                       | 3,148,426                                                          | 2,333,800               | 75,284                           |
| June                        | 14,246,250                                         | 117,743,600                                        | 131,989,850                      | 4,399,662                                                          | 4,007,500               | 133,583                          |
| For Year                    | 115,647,000                                        | 1,075,600,750                                      | 1,191,247,750                    | 3,254,775                                                          | 31,341,600              | 85,633                           |

TABLE 41

WATER SOLD TO THE CITY OF WARWICK  
AND THE CITY OF EAST PROVIDENCE

YEAR ENDED JUNE 30, 1976

| CITY OF WARWICK |               |               |               | CITY OF EAST PROVIDENCE |               |           |          |
|-----------------|---------------|---------------|---------------|-------------------------|---------------|-----------|----------|
|                 | S.S.47,269    | S.S.76,834    |               | S.S.76,257              | Budlong       | Road      | Cranston |
|                 | Petta-        | Natick        |               |                         |               |           |          |
|                 | consett       | Avenue        |               |                         |               |           |          |
|                 | Cranston      | W. Warwick    |               |                         |               |           |          |
|                 | 24"           | 36"           |               |                         |               |           |          |
|                 | Flow          | Flow          |               |                         |               |           |          |
|                 | Meter         | Meter         |               |                         |               |           |          |
|                 | Gallons       | Gallons       | Total         | Average                 | Gallons       | Average   |          |
| 1975-           | per           | per           | Gallons       | Gallons                 | per           | Gallons   |          |
| 1976            | Month         | Month         | Month         | per                     | Month         | per       |          |
|                 |               |               |               | Day                     |               | Day       |          |
| July            | 147,361,000   | 149,844,800   | 297,205,800   | 9,587,284               | 225,014,500   | 7,258,532 |          |
| August          | 137,073,000   | 129,848,000   | 266,921,000   | 8,610,355               | 205,232,600   | 6,620,406 |          |
| September       | 95,842,000    | 87,586,800    | 183,428,800   | 6,114,293               | 164,082,300   | 5,469,410 |          |
| October         | 105,445,000   | 67,135,575    | 172,580,575   | 5,567,115               | 146,119,700   | 4,713,539 |          |
| November        | 74,779,000    | 85,055,700    | 159,834,700   | 5,327,823               | 134,709,000   | 4,490,300 |          |
| December        | 79,470,000    | 93,181,650    | 172,651,650   | 5,569,408               | 138,492,200   | 4,467,490 |          |
| January         | 80,069,000    | 91,360,300    | 171,429,000   | 5,529,968               | 144,499,500   | 4,661,274 |          |
| February        | 76,403,000    | 84,975,400    | 161,378,400   | 5,564,772               | 126,343,600   | 4,356,676 |          |
| March           | 86,227,000    | 94,312,500    | 180,539,500   | 5,823,855               | 141,252,100   | 4,556,519 |          |
| April           | 87,529,000    | 101,996,450   | 189,525,450   | 6,317,515               | 156,220,800   | 5,207,360 |          |
| May             | 113,283,000   | 115,665,000   | 228,948,000   | 7,385,419               | 166,826,200   | 5,381,490 |          |
| June            | 195,548,000   | 172,405,950   | 367,953,950   | 12,265,132              | 218,035,700   | 7,267,857 |          |
| For Year        | 1,279,029,000 | 1,273,367,825 | 2,552,396,825 | 6,973,762               | 1,966,828,200 | 5,373,848 |          |

TABLE 42

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

YEAR ENDED JUNE 30, 1976

|           | EAST SMITHFIELD WATER COMPANY                       |                                                  |                                  |                                    | SMITHFIELD WATER DEPT.                                                       |                         | GREENVILLE WATER DISTRICT        |                                                                           |                         |                                  |
|-----------|-----------------------------------------------------|--------------------------------------------------|----------------------------------|------------------------------------|------------------------------------------------------------------------------|-------------------------|----------------------------------|---------------------------------------------------------------------------|-------------------------|----------------------------------|
| 1975-1976 | S.S.51,198<br>Waterman<br>Avenue<br>No. Prov.<br>6" | S.S.52,403<br>Dean<br>Avenue<br>Smithfield<br>8" | Total<br>Gallons<br>per<br>Month | Average<br>Gallons<br>per<br>Month | S.S.71,980<br>Smithfield Road<br>North<br>Providence<br>12"<br>Flow<br>Meter | Gallons<br>per<br>Month | Average<br>Gallons<br>per<br>Day | S.S.76,310<br>George Waterman<br>Road<br>Johnston<br>12"<br>Flow<br>Meter | Gallons<br>per<br>Month | Average<br>Gallons<br>per<br>Day |
| July      | 16,271,250                                          | 8,040,750                                        | 24,312,000                       | 784,258                            | 8,241,600                                                                    | 265,858                 | 14,396,400                       | 464,400                                                                   |                         |                                  |
| August    | 18,381,000                                          | 8,724,750                                        | 27,105,750                       | 874,379                            | 8,705,200                                                                    | 280,813                 | 12,614,700                       | 406,926                                                                   |                         |                                  |
| September | 13,731,000                                          | 7,183,500                                        | 20,914,500                       | 697,150                            | 9,414,300                                                                    | 313,810                 | 10,585,300                       | 352,843                                                                   |                         |                                  |
| October   | 12,825,000                                          | 7,575,750                                        | 20,400,750                       | 658,089                            | 8,873,500                                                                    | 286,242                 | 11,299,200                       | 364,490                                                                   |                         |                                  |
| November  | 13,720,500                                          | 7,186,500                                        | 20,907,000                       | 696,900                            | 7,912,800                                                                    | 263,760                 | 10,678,400                       | 355,947                                                                   |                         |                                  |
| December  | 13,465,500                                          | 7,525,500                                        | 20,991,000                       | 677,129                            | 6,647,300                                                                    | 214,429                 | 10,419,900                       | 336,126                                                                   |                         |                                  |
| January   | 11,916,000                                          | 7,198,500                                        | 19,114,500                       | 616,597                            | 5,956,100                                                                    | 192,132                 | 9,260,900                        | 298,739                                                                   |                         |                                  |
| February  | 11,163,750                                          | 6,573,000                                        | 17,736,750                       | 611,612                            | 7,022,800                                                                    | 242,166                 | 9,439,900                        | 325,514                                                                   |                         |                                  |
| March     | 12,328,500                                          | 7,660,500                                        | 19,989,000                       | 644,806                            | 7,210,100                                                                    | 232,584                 | 10,299,100                       | 332,229                                                                   |                         |                                  |
| April     | 11,730,750                                          | 6,795,750                                        | 18,526,500                       | 617,550                            | 7,249,000                                                                    | 241,633                 | 11,081,800                       | 369,393                                                                   |                         |                                  |
| May       | 14,649,000                                          | 7,785,000                                        | 22,434,000                       | 723,677                            | 8,386,100                                                                    | 270,519                 | 13,302,900                       | 429,126                                                                   |                         |                                  |
| June      | 19,665,750                                          | 8,384,250                                        | 28,050,000                       | 935,000                            | 8,371,100                                                                    | 279,037                 | 19,861,600                       | 662,053                                                                   |                         |                                  |
| For Year  | 169,848,000                                         | 90,633,750                                       | 260,481,750                      | 711,699                            | 93,989,900                                                                   | 256,803                 | 143,240,100                      | 391,366                                                                   |                         |                                  |

TABLE 43  
AVERAGE DAILY CONSUMPTION OF WATER PER MONTH IN MILLION GALLONS

| Year<br>Ending<br>Sept. 30 | Oct.  | Nov.  | Dec.  | Jan.  | Feb.  | Mar.  | Apr.  | May   | June  | July  | Aug.  | Sept. | Avg. for<br>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  | 2.21  | 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<br>Ending<br>Sept. 30 | Oct.  | Nov.  | Dec.  | Jan.  | Feb.  | Mar.  | Apr.  | May   | June  | July  | Aug.  | Sept. | Avg. for<br>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            |
| 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<br>Ended<br>June 30 | July  | Aug.  | Sept. | Oct.  | Nov.  | Dec.  | Jan.  | Feb.  | Mar.  | Apr.  | May   | June  | Avg. for<br>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<br>Ended<br>June 30 | July  | Aug.  | Sept. | Oct.  | Nov.  | Dec.  | Jan.  | Feb.  | Mar.  | Apr.  | May   | June  | Avg. for<br>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<br>Ended<br>June 30 | July  | Aug.  | Sept. | Oct.  | Nov.  | Dec.  | Jan.  | Feb.  | Mar.  | Apr.  | May   | June  | Avg.for<br>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           |
| 1972                     | 78.28 | 73.89 | 69.41 | 61.93 | 60.56 | 57.13 | 57.70 | 59.17 | 60.59 | 60.06 | 65.67 | 68.08 | 64.40           |
| 1973                     | 68.15 | 72.36 | 67.64 | 63.07 | 62.36 | 58.35 | 59.15 | 58.32 | 58.54 | 58.85 | 60.83 | 75.02 | 63.57           |
| 1974                     | 72.66 | 79.70 | 69.20 | 63.78 | 59.35 | 55.48 | 57.42 | 58.91 | 58.14 | 60.81 | 63.81 | 71.90 | 64.30           |
| 1975                     | 79.08 | 84.06 | 64.81 | 60.12 | 58.70 | 55.81 | 56.84 | 56.76 | 56.67 | 57.86 | 63.15 | 69.01 | 63.64           |
| 1976                     | 77.10 | 74.53 | 64.89 | 60.26 | 58.55 | 57.40 | 57.61 | 57.38 | 58.63 | 62.16 | 63.69 | 84.53 | 64.74           |

TABLE 45

## FUEL OIL CONSUMPTION

YEAR ENDED JUNE 30, 1976

| 1975-1976 | Administration<br>and Operations<br>Building | Raw<br>Water          |                       | Water<br>Purification<br>Plant | Forestry and<br>Maintenance<br>Building | Neutaconkanut<br>Pumping<br>Station | Bath Street<br>Pumping<br>Station | Total                 |                       |
|-----------|----------------------------------------------|-----------------------|-----------------------|--------------------------------|-----------------------------------------|-------------------------------------|-----------------------------------|-----------------------|-----------------------|
|           |                                              | Gallons Used<br>No. 4 | Gallons Used<br>No. 2 |                                |                                         |                                     |                                   | Gallons Used<br>No. 2 | Gallons Used<br>No. 4 |
| July      | 136                                          | 0                     | 1,828                 | 0                              | 0                                       | 0                                   | 0                                 | 1,828                 | 136                   |
| August    | 60                                           | 0                     | 2,195                 | 0                              | 48                                      | 0                                   | 0                                 | 2,243                 | 60                    |
| September | 1,204                                        | 40                    | 1,768                 | 776                            | 427                                     | 0                                   | 0                                 | 2,235                 | 1,980                 |
| October   | 1,854                                        | 56                    | 1,968                 | 2,305                          | 713                                     | 0                                   | 0                                 | 2,737                 | 4,159                 |
| November  | 2,643                                        | 853                   | 323                   | 5,236                          | 1,433                                   | 500                                 | 200                               | 3,309                 | 7,879                 |
| December  | 7,413                                        | 1,193                 | 0                     | 10,219                         | 2,377                                   | 500                                 | 200                               | 4,270                 | 17,632                |
| January   | 8,190                                        | 1,679                 | 6                     | 9,871                          | 3,000                                   | 500                                 | 874                               | 6,059                 | 18,061                |
| February  | 5,979                                        | 1,403                 | 0                     | 10,209                         | 2,409                                   | 200                                 | 250                               | 4,262                 | 16,188                |
| March     | 4,394                                        | 1,997                 | 0                     | 7,645                          | 2,216                                   | 200                                 | 0                                 | 4,413                 | 12,039                |
| April     | 4,321                                        | 379                   | 370                   | 4,343                          | 684                                     | 200                                 | 0                                 | 1,633                 | 8,664                 |
| May       | 2,229                                        | 0                     | 0                     | 4,030                          | 625                                     | 0                                   | 0                                 | 625                   | 6,259                 |
| June      | 793                                          | 0                     | 664                   | 3,035                          | 0                                       | 0                                   | 0                                 | 664                   | 3,828                 |
| Totals    | 39,216                                       | 7,600                 | 9,122                 | 57,669                         | 13,932                                  | 2,100                               | 1,524                             | 34,278                | 96,885                |

TABLE 46

## FINANCIAL STATEMENT

YEAR ENDED JUNE 30, 1976

|                                                 |                     |
|-------------------------------------------------|---------------------|
| <b>Operating Revenues</b>                       |                     |
| Sale of Water                                   | \$4,855,378.47      |
| Hydrant Rental                                  | 127,661.24          |
| Electric Power                                  | 19,998.90           |
| Setting Meters                                  | 4,431.50            |
| Repairing Meters                                | 729.83              |
| Repairs to Water Services                       | 2,726.45            |
| Repairs to Distribution Mains                   | 5,855.35            |
| Repairs to Hydrants                             | 6,578.39            |
| Installation of New Fire Supplies               | 18,880.00           |
| Installation of New Water Mains                 | 90,602.92           |
| Installation of New Water Services              | 84,415.00           |
| Water Meters-Revolving Fund                     | 18,281.38           |
| Sale of Pulpwood-Logs and Misc. Timber Products | 5,814.10            |
| Transferred from Reserve Fund                   | 80,000.00           |
| <br>Total Operating Revenue                     | <br>\$5,321,353.53  |
| <br><b>Operating Expenses</b>                   | <br>                |
| Administrative                                  | \$ 316,703.62       |
| Source of Supply                                | 828,644.48          |
| Transmission and Distribution                   | 1,329,989.50        |
| Accounting and Commercial                       | 390,810.69          |
| Taxes                                           | 1,012,271.66        |
| Employees' Retirement System                    | 110,000.00          |
| Social Security                                 | 94,474.46           |
| <br>Total Operating Expense                     | <br>*\$4,082,894.41 |
| <br><b>Operating Income</b>                     | <br>\$1,238,459.12  |
| <br><b>Add Non-Operating Revenue</b>            |                     |
| Rental of Real Estate                           | \$ 281.06           |
| Other                                           | 6,720.74            |
| <br>Total Non-Operating Revenue                 | <br>\$ 7,001.80     |
| <br><b>Sub-Total</b>                            | <br>\$1,245,460.92  |
| <br><b>Less Non-Operating Expenses</b>          |                     |
| Interest on Bonded Debt                         | \$687,085.00        |
| Retirement-Serial Bonds                         | 280,000.00          |
| <br>Total Non-Operating Expense                 | <br>\$ 967,085.00   |
| <br><b>SURPLUS</b>                              | <br>\$ 278,375.92   |

\*See Table 47 for detailed account of Operating Expense.

TABLE 47

## WATER SUPPLY BOARD OPERATING EXPENSES

YEAR ENDED JUNE 30, 1976

## ADMINISTRATIVE

## Salaries:

|                         |              |
|-------------------------|--------------|
| 001 Officials           | \$ 48,184.92 |
| Clerical-Accounting     | 47,929.78    |
| Engineering             | 107,156.06   |
| Labor-General           | 12,016.81    |
| 008 Sick Leave Payrolls | 7,723.99     |
| 009 Vacation Payrolls   | 9,897.59     |
| 025 Injury Payroll      | 28.14        |
| 034 Holiday Payrolls    | 312.59       |
| Total                   | \$233,249.88 |

## Services Other Than Personal:

|                                               |              |
|-----------------------------------------------|--------------|
| 102 Expert, Consultant and Other Service Fees | \$ 50.00     |
| 109 Fees Not Otherwise Classified             | 18.00        |
| 111 Telephone and Telegraph                   | 4,997.79     |
| 112 Postage, Freight and Express              | 2,789.83     |
| 115 Transportation of Persons-Conventions     | 90.00        |
| 117 Travel Subsistence-Conventions            | 155.00       |
| 121 Printing and Binding                      | 3,566.15     |
| 131 Heat, Light and Power                     | 7,500.00     |
| 141 Repairs-Office Machinery                  | 651.05       |
| 142 Repairs-Automobiles and Trucks            | 612.00       |
| 150 Repairs-Buildings                         | 1,821.05     |
| 151 Maintenance and Servicing                 | 1,100.02     |
| 183 Dues and Subscriptions                    | 548.50       |
| 199 Miscellaneous Services                    | 22,232.00    |
| Total                                         | \$ 46,131.39 |

## Materials and Supplies:

|                                                |             |
|------------------------------------------------|-------------|
| 201 Stationery and Office Supplies             | \$ 1,895.19 |
| 211 Motor Fuel                                 | 1,127.50    |
| 214 Repair Parts and Supplies-Trucks and Autos | 156.95      |
| 241 Fuel                                       | 1,486.05    |
| 244 Housekeeping Supplies and Minor Equipment  | 651.79      |
| 299 Miscellaneous Materials and Supplies       | 143.00      |
| Total                                          | \$ 5,460.48 |

## Special Items:

|                                        |              |
|----------------------------------------|--------------|
| 338 Union Employee Legal Services      | \$ 2,008.00  |
| 350 Blue Cross-Major Medical and RIGHA | 15,894.48    |
| 382 Laborers' Union Pension Fund       | 12,058.50    |
| Total                                  | \$ 29,960.98 |

## Capital Outlay:

|                                               |           |
|-----------------------------------------------|-----------|
| 501 Office Furniture, Machinery and Equipment | \$ 446.95 |
| Total                                         | \$ 446.95 |

|                                                      |        |
|------------------------------------------------------|--------|
| Outstanding Commitments-Services Other Than Personal | 651.00 |
| Outstanding Commitments-Materials and Supplies       | 207.32 |
| Outstanding Commitments-Capital Outlay               | 595.62 |

Total Administrative \$316,703.62

SOURCE OF SUPPLY

Hydro-Electric Station:

Salaries:

|                       |              |
|-----------------------|--------------|
| 001 Labor-Operation   | \$ 18,559.56 |
| Labor-Care of Grounds | 2,511.15     |
| Total                 | \$ 21,070.71 |

Services Other Than Personal:

|                                     |           |
|-------------------------------------|-----------|
| 148 Repairs-Communication Equipment | \$ 234.00 |
| Total                               | \$ 234.00 |

Materials and Supplies:

|                                               |             |
|-----------------------------------------------|-------------|
| 212 Lubricants                                | \$ 1,420.35 |
| 222 Repair Parts and Supplies-Plant Equipment | 100.00      |
| Total                                         | \$ 1,520.35 |

Water Purification Works:

Salaries:

|                          |              |
|--------------------------|--------------|
| 001 Supervision          | \$ 18,102.41 |
| Labor-Operation          | 103,878.07   |
| Labor-Care of Grounds    | 7,291.56     |
| Labor-Handling Chemicals | 4,261.43     |
| Clerical                 | 5,199.75     |
| Technical                | 13,425.61    |
| Total                    | \$152,158.83 |

Services Other Than Personal:

|                               |              |
|-------------------------------|--------------|
| 131 Heat, Light and Power     | \$ 226.03    |
| 146 Repairs-Plant Equipment   | 3,666.00     |
| 150 Repairs-Buildings         | 380.25       |
| 151 Maintenance and Servicing | 2,090.59     |
| 181 Laundry and Cleaning      | 3,069.60     |
| 199 Miscellaneous Services    | 1,397.09     |
| Total                         | \$ 10,829.56 |

Materials and Supplies:

|                                                 |              |
|-------------------------------------------------|--------------|
| 201 Stationery and Office Supplies              | \$ 1,488.67  |
| 202 Small Tools and Shop Supplies               | 365.71       |
| 204 Wearing Apparel and Personal Supplies       | 576.80       |
| 222 Repair Parts and Supplies-Plant Equipment   | 8,408.20     |
| 231 Ferric Sulfate                              | 126,425.08   |
| 231 Lime                                        | 39,972.81    |
| 231 Chlorine                                    | 11,880.00    |
| 231 Sodium Silicofluoride                       | 27,360.00    |
| 231 Miscellaneous Laboratory Supplies           | 15.57        |
| 244 Housekeeping Supplies                       | 2,756.85     |
| 265 Fabricated Metal Products                   | 264.00       |
| 266 Lumber and Hardware                         | 526.41       |
| 267 Paint and Painters' Supplies                | 611.39       |
| 268 Plumbing and Electrical Supplies            | 3,269.23     |
| 269 Misc. Construction and Maintenance Supplies | 1,427.29     |
| 299 Miscellaneous Materials and Supplies        | 121.70       |
| Total                                           | \$225,469.71 |

Capital Outlay:

|                              |             |
|------------------------------|-------------|
| 502 Books, Maps and Charts   | \$ 924.26   |
| 561 Shop and Plant Equipment | 1,449.80    |
| Total                        | \$ 2,374.06 |

|                                           |             |             |
|-------------------------------------------|-------------|-------------|
| Laboratory:                               |             |             |
| Salaries:                                 |             |             |
| 001 Clerical                              | \$ 654.46   |             |
| Technical                                 | 40,954.83   |             |
| Total                                     |             | \$41,609.29 |
| Services Other Than Personal:             |             |             |
| 115 Transportation of Persons-Conventions | \$ 171.73   |             |
| 117 Travel Subsistence-Conventions        | 180.00      |             |
| 149 Repairs-Other Equipment               | 105.00      |             |
| Total                                     |             | \$ 456.73   |
| Materials and Supplies:                   |             |             |
| 231 Miscellaneous Laboratory Supplies     | \$ 5,369.74 |             |
| 268 Plumbing and Electrical Supplies      | 166.97      |             |
| Total                                     |             | \$ 5,536.71 |
| Capital Outlay:                           |             |             |
| 561 Shop and Plant Equipment              | \$ 700.00   |             |
| Total                                     |             | \$ 700.00   |
| Scituate Reservoir                        |             |             |
| Salaries:                                 |             |             |
| 001 Labor-Operation                       | \$11,249.35 |             |
| Labor-Care of Grounds                     | 5,647.92    |             |
| Total                                     |             | \$16,897.27 |
| Materials and Supplies:                   |             |             |
| 252 Seeds, Fertilizer, Trees and Shrubs   | \$ 765.00   |             |
| 267 Paint and Painters' Supplies          | 112.40      |             |
| Total                                     |             | \$ 877.40   |
| Other Reservoirs:                         |             |             |
| Salaries:                                 |             |             |
| 001 Labor-Operation                       | \$10,283.70 |             |
| Labor-Care of Grounds                     | 561.60      |             |
| Total                                     |             | \$10,845.30 |
| Rockland Cemetery:                        |             |             |
| Salaries:                                 |             |             |
| 001 Labor-Care of Grounds                 | \$ 1,077.93 |             |
| Total                                     |             | \$ 1,077.93 |
| Forestry and Maintenance:                 |             |             |
| Salaries:                                 |             |             |
| 001 Supervision                           | \$22,818.47 |             |
| Labor-Operation                           | 1,561.15    |             |
| Labor-Care of Grounds                     | 20,063.75   |             |
| Total                                     |             | \$44,443.37 |
| Services Other Than Personal:             |             |             |
| 115 Transportation of Persons-Conventions | \$ 75.00    |             |
| 117 Travel Subsistence-Conventions        | 233.50      |             |
| 118 Travel Subsistence-Other              | 180.00      |             |
| 146 Repairs-Plant Equipment               | 147.50      |             |
| 149 Repairs-Other Equipment               | 38.70       |             |
| 150 Repairs-Buildings                     | 607.00      |             |
| 151 Maintenance and Servicing             | 185.00      |             |
| 181 Laundry and Cleaning                  | 786.50      |             |
| Total                                     |             | \$ 2,253.20 |

|                                          |                                                     |             |
|------------------------------------------|-----------------------------------------------------|-------------|
| <b>Materials and Supplies:</b>           |                                                     |             |
| 202                                      | Small Tools and Shop Supplies                       | \$ 578.84   |
| 204                                      | Wearing Apparel and Personal Supplies               | 452.40      |
| 214                                      | Repair Parts and Supplies-Trucks and Autos          | 275.44      |
| 222                                      | Repair Parts and Supplies-Plant Equipment           | 737.34      |
| 244                                      | Housekeeping Supplies                               | 78.10       |
| 252                                      | Seeds, Fertilizer, Trees and Shrubs                 | 5,408.75    |
| 259                                      | Other Agricultural Supplies                         | 275.72      |
| 261                                      | Gravel, Sand and Stone                              | 74.50       |
| 262                                      | Cement, Plaster and Related Products                | 242.00      |
| 265                                      | Fabricated Metal Products                           | 995.12      |
| 266                                      | Lumber and Hardware                                 | 434.36      |
| 267                                      | Paint and Painters' Supplies                        | 222.60      |
| 268                                      | Plumbing and Electrical Supplies                    | 68.70       |
| 269                                      | Misc. Construction and Maintenance Materials        | 288.75      |
| 299                                      | Miscellaneous Materials and Supplies                | 111.10      |
| <hr/>                                    |                                                     |             |
| Total                                    |                                                     | \$10,243.72 |
| <br><b>General:</b>                      |                                                     |             |
| <b>Salaries:</b>                         |                                                     |             |
| 001                                      | Clerical                                            | \$ 744.81   |
|                                          | Engineering                                         | 21,927.26   |
|                                          | Labor-Operation                                     | 17,235.00   |
|                                          | Labor-Care of Grounds                               | 17,480.92   |
| 008                                      | Sick Leave Payrolls                                 | 12,721.57   |
| 009                                      | Vacation Payrolls                                   | 20,260.55   |
| 025                                      | Injured Employees' Payrolls                         | 2,570.20    |
| 034                                      | Holiday Payrolls                                    | 6,764.00    |
| <hr/>                                    |                                                     |             |
| Total                                    |                                                     | \$99,704.31 |
| <br><b>Services Other Than Personal:</b> |                                                     |             |
| 102                                      | Expert Consultant and Other Service Fees            | \$ 217.05   |
| 109                                      | Fees Not Otherwise Classified                       | 58.24       |
| 111                                      | Telephone and Telegraph                             | 4,498.00    |
| 112                                      | Postage, Freight and Express                        | 728.50      |
| 121                                      | Printing and Binding                                | 29.26       |
| 131                                      | Heat, Light and Power                               | 37,352.19   |
| 141                                      | Repairs-Office Machinery                            | 38.50       |
| 142                                      | Repairs-Trucks and Autos                            | 2,696.85    |
| 143                                      | Repairs-Construction and Other Automotive Equipment | 266.03      |
| 148                                      | Repairs-Communications Equipment                    | 1,160.91    |
| 149                                      | Repairs-Other Equipment                             | 42.00       |
| 151                                      | Maintenance and Servicing                           | 1,007.25    |
| 183                                      | Dues and Subscriptions                              | 30.55       |
| <hr/>                                    |                                                     |             |
| Total                                    |                                                     | \$48,125.33 |
| <br><b>Materials and Supplies</b>        |                                                     |             |
| 211                                      | Motor Fuel                                          | \$ 4,020.45 |
| 212                                      | Lubricants                                          | 843.03      |
| 213                                      | Tires and Tubes                                     | 5,221.43    |
| 214                                      | Repair Parts and Supplies-Trucks and Autos          | 2,654.95    |
| 241                                      | Fuel                                                | 16,554.87   |
| 272                                      | Hydrants, Valves and Fittings                       | 129.40      |
| <hr/>                                    |                                                     |             |
| Total                                    |                                                     | \$29,424.13 |

Special Items:

|                                                      |                    |
|------------------------------------------------------|--------------------|
| 338 Union Employee Legal Services                    | \$ 3,414.75        |
| 350 Blue Cross, Major Medical and RIGHA              | 25,249.26          |
| 382 Laborers' Union Pension Fund                     | 20,476.50          |
| Total                                                | <hr/> \$ 49,140.51 |
| Outstanding Commitments-Services Other Than Personal | 29,785.81          |
| Outstanding Commitments-Materials and Supplies       | 9,392.25           |
| Outstanding Commitments-Capital Outlay               | 14,474.00          |
| Total - Source of Supply                             | <hr/> \$828,644.48 |

TRANSMISSION AND DISTRIBUTION

Pumping Stations:

Services Other Than Personal:

|                               |                    |
|-------------------------------|--------------------|
| 121 Printing and Binding      | \$ 96.00           |
| 131 Heat, Light and Power     | 52,260.71          |
| 150 Repairs-Buildings         | 1,350.00           |
| 151 Maintenance and Servicing | 423.30             |
| Total                         | <hr/> \$ 54,130.01 |

Materials and Supplies:

|                                      |                |
|--------------------------------------|----------------|
| 268 Plumbing and Electrical Supplies | \$ 16.00       |
| Total                                | <hr/> \$ 16.00 |

Pipe Lines:

Salaries:

|                                       |                    |
|---------------------------------------|--------------------|
| 001 Clerical                          | \$ 16,421.33       |
| Labor-Operation                       | 296,443.66         |
| Supervision                           | 17,313.07          |
| Repairs-Trucks and Autos              | 8,812.49           |
| Repairs-Care of Grounds and Buildings | 7,778.46           |
| Repairs-Transmission Mains            | 479.85             |
| Repairs-Distribution Mains            | 21,662.02          |
| Repairs-Gates and Valves              | 24,451.86          |
| Repairs-Hydrants                      | 15,190.44          |
| Repairs-Services                      | 84,840.11          |
| New Work-Distribution Mains           | 846.90             |
| New Work-Gates and Valves             | 2,571.27           |
| New Work-Hydrants                     | 15,989.35          |
| New Work-Services                     | 51,633.20          |
| Retirement Work-Distribution Mains    | 574.31             |
| Retirement Work-Gates and Valves      | 44.50              |
| Retirement Work-Hydrants              | 239.35             |
| Retirement Work-Services              | 11,056.34          |
| Total                                 | <hr/> \$576,348.51 |

Services Other Than Personal:

|                                                         |                    |
|---------------------------------------------------------|--------------------|
| 102 Expert Consultant and Other Service Fees            | \$ 907.49          |
| 142 Repairs-Autos and Trucks                            | 5,431.99           |
| 143 Repairs-Construction and Other Automotive Equipment | 1,707.40           |
| 146 Repairs-Plant Equipment                             | 3,119.11           |
| 148 Repairs-Communication Equipment                     | 1,221.10           |
| 153 Repairs-Street Openings                             | 7,840.64           |
| 162 Rental-Automotive and Construction Equipment        | 160.00             |
| 163 Rental-Other Equipment                              | 1,961.40           |
| 165 Rental of Land                                      | 283.00             |
| 181 Laundry and Cleaning                                | 326.92             |
| 199 Miscellaneous Services                              | 1,629.52           |
| Total                                                   | <hr/> \$ 24,588.57 |

**Materials and Supplies:**

|              |                                            |                     |
|--------------|--------------------------------------------|---------------------|
| 202          | Small Tools and Shop Supplies              | \$ 1,481.63         |
| 204          | Wearing Apparel and Personal Supplies      | 1,346.84            |
| 211          | Motor Fuel                                 | 16,120.16           |
| 212          | Lubricants                                 | 1,599.03            |
| 213          | Tires and Tubes                            | 7,335.10            |
| 214          | Repair Parts and Supplies-Trucks and Autos | 9,634.85            |
| 262          | Cement, Plaster and Related Products       | 634.50              |
| 268          | Plumbing and Electrical Supplies           | 3,529.92            |
| 271          | Pipe                                       | 11,115.74           |
| 272          | Hydrants, Valves and Fittings              | 54,634.61           |
| <b>Total</b> |                                            | <b>\$107,432.38</b> |

**Other Structures and Improvements:**

|              |                     |                     |
|--------------|---------------------|---------------------|
| 721          | New Main Extensions | \$181,598.63        |
| <b>Total</b> |                     | <b>\$181,598.63</b> |

**Metering:**

**Salaries:**

|              |                                    |                     |
|--------------|------------------------------------|---------------------|
| 001          | Supervision                        | \$ 7,220.52         |
|              | Repairing Meters                   | 6,920.99            |
|              | Removing and Setting Meters        | 19,751.36           |
|              | Installation-New Encoder Registers | 16,858.57           |
|              | Testing Meters                     | 1,810.03            |
|              | Inspection-Services                | 5,766.12            |
|              | Labor-Operation                    | 37,316.14           |
|              | Collections-Overdue Accounts       | 14,716.85           |
| <b>Total</b> |                                    | <b>\$110,360.58</b> |

**Materials and Supplies:**

|              |                               |                    |
|--------------|-------------------------------|--------------------|
| 202          | Small Tools and Shop Supplies | \$ 1,398.81        |
| 274          | Meters and Meter Parts        | 848.24             |
| <b>Total</b> |                               | <b>\$ 2,247.05</b> |

**General:**

**Salaries:**

|              |                             |                     |
|--------------|-----------------------------|---------------------|
| 001          | Repairs-Trucks and Autos    | \$ 718.20           |
| 008          | Sick Leave Payrolls         | 46,495.05           |
| 009          | Vacation Payrolls           | 32,951.15           |
| 025          | Injured Employees' Payrolls | 4,765.40            |
| 034          | Holiday Payrolls            | 22,928.80           |
| <b>Total</b> |                             | <b>\$107,858.60</b> |

**Services Other Than Personal:**

|              |                                      |                    |
|--------------|--------------------------------------|--------------------|
| 109          | Fees Not Otherwise Classified        | \$ 90.80           |
| 111          | Telephone and Telegraph              | 4,377.18           |
| 112          | Postage, Freight and Express         | 41.17              |
| 150          | Repairs-Buildings                    | 1,607.60           |
| 151          | Maintenance and Servicing            | 101.55             |
| 153          | Repairs-Street Openings              | 178.00             |
| 154          | Installation of Communication System | 235.00             |
| 199          | Miscellaneous Services               | 143.00             |
| <b>Total</b> |                                      | <b>\$ 6,774.30</b> |

Materials and Supplies:

|       |                                             |              |
|-------|---------------------------------------------|--------------|
| 201   | Stationery and Office Supplies              | \$ 681.07    |
| 222   | Repair Parts and Supplies-Plant Equipment   | 2,330.28     |
| 231   | Chemical and Laboratory Supplies            | 315.90       |
| 241   | Fuel                                        | 16,495.73    |
| 244   | Housekeeping Supplies                       | 1,344.07     |
| 261   | Gravel, Sand and Stone                      | 447.72       |
| 265   | Fabricated Metal Products                   | 93.60        |
| 266   | Lumber and Hardware                         | 1,893.59     |
| 267   | Paint and Painters' Supplies                | 1,629.47     |
| 269   | Misc. Construction and Maintenance Supplies | 1,353.11     |
| 272   | Hydrants, Valves and Fittings               | 14,811.98    |
| 273   | Special Castings                            | 330.00       |
| 279   | Water System Materials Not Classified       | 150.90       |
| 299   | Miscellaneous Materials and Supplies        | 254.86       |
| Total |                                             | \$ 42,132.28 |

Special Items:

|       |                                     |               |
|-------|-------------------------------------|---------------|
| 338   | Union Employee Legal Services       | \$ 7,641.75   |
| 350   | Blue Cross, Major Medical and RIGHA | 53,129.24     |
| 382   | Laborers' Union Pension Fund        | 45,802.50     |
| Total |                                     | \$ 106,573.49 |

Capital Outlay:

|       |                                        |           |
|-------|----------------------------------------|-----------|
| 561   | Shop and Plant Equipment               | \$ 454.90 |
| 571   | Agricultural and Landscaping Equipment | 247.00    |
| Total |                                        | \$ 701.90 |

|                                                           |  |          |
|-----------------------------------------------------------|--|----------|
| Outstanding Commitments-Services Other Than Personal      |  | 4,352.00 |
| Outstanding Commitments-Materials and Supplies            |  | 4,055.24 |
| Outstanding Commitments-Other Structures and Improvements |  | 819.96   |

|                                     |  |                 |
|-------------------------------------|--|-----------------|
| Total-Transmission and Distribution |  | \$ 1,329,989.50 |
|-------------------------------------|--|-----------------|

ACCOUNTING AND COMMERCIAL

Salaries:

|       |                            |               |
|-------|----------------------------|---------------|
| 001   | Supervision                | \$ 8,852.00   |
|       | Clerical                   | 128,493.47    |
|       | Meter Reading              | 91,334.31     |
|       | Labor-Operation            | 6,291.31      |
| 008   | Sick Leave Payrolls        | 17,723.60     |
| 009   | Vacation Payrolls          | 14,440.25     |
| 025   | Injured Employees Payrolls | 1,345.65      |
| 034   | Holiday Payrolls           | 3,530.40      |
| Total |                            | \$ 272,010.99 |

Services Other Than Personal:

|       |                                                  |              |
|-------|--------------------------------------------------|--------------|
| 102   | Expert Consultant and Other Service Fees         | \$ 223.74    |
| 109   | Fees Not Otherwise Classified                    | 10.00        |
| 111   | Telephone and Telegraph                          | 2,850.46     |
| 112   | Postage, Freight and Express                     | 1,677.20     |
| 116   | Transportation of Persons                        | 1,116.50     |
| 131   | Heat, Light and Power                            | 4,500.00     |
| 141   | Repairs-Office Machinery and Equipment           | 1,120.82     |
| 142   | Repairs-Trucks and Autos                         | 71.00        |
| 151   | Maintenance and Servicing                        | 674.50       |
| 161   | Rental-Office Machinery and Equipment            | 720.00       |
| 181   | Laundry and Cleaning                             | 1,687.44     |
| 190   | Data Processing                                  | 10,026.00    |
| 199   | Miscellaneous Services-City Collector's Services | 43,351.00    |
| Total |                                                  | \$ 68,028.66 |

|                                                |                       |
|------------------------------------------------|-----------------------|
| <b>Materials and Supplies:</b>                 |                       |
| 201 Stationery and Office Supplies             | \$ 1,507.12           |
| 204 Wearing Apparel and Personal Supplies      | 356.32                |
| 211 Motor Fuel                                 | 1,852.72              |
| 214 Repair Parts and Supplies-Trucks and Autos | 73.10                 |
| 241 Fuel                                       | 1,154.61              |
| 244 Housekeeping Supplies and Minor Equipment  | 382.69                |
| 268 Plumbing and Electrical Supplies           | 313.26                |
| 299 Miscellaneous Materials and Supplies       | 170.80                |
| <b>Total</b>                                   | <b>\$ 5,810.62</b>    |
| <b>Special Items:</b>                          |                       |
| 338 Union Employee Legal Services              | \$ 3,303.75           |
| 350 Blue Cross, Major Medical and RIGHA        | 21,166.68             |
| 382 Laborers' Union Pension Fund               | 19,822.50             |
| <b>Total</b>                                   | <b>\$44,292.93</b>    |
| <b>Capital Outlay:</b>                         |                       |
| 501 Office Furniture, Machinery and Equipment  | \$ 169.00             |
| <b>Total</b>                                   | <b>\$ 169.00</b>      |
| Outstanding Commitments-Materials and Supplies | 368.54                |
| Outstanding Commitments-Capital Outlay         | 129.95                |
| <b>Total-Accounting and Commercial</b>         | <b>\$390,810.69</b>   |
| Taxes                                          | \$1,012,271.66        |
| Employees' Retirement System                   | 110,000.00            |
| Social Security F.O.A.S.I.                     | 94,474.46             |
| <b>TOTAL OPERATING EXPENSE</b>                 | <b>\$4,082,894.41</b> |

TABLE 48  
SUMMARY OF ANNUAL WATER WORKS REVENUES 1930-1976

| Fiscal Years Ended<br>September 30 | Receipts from<br>Sale of Water | Miscellaneous<br>Receipts | Total          |
|------------------------------------|--------------------------------|---------------------------|----------------|
| 1930                               | \$1,384,369.54                 | \$218,844.87              | \$1,603,214.41 |
| 1931                               | 1,414,336.00                   | 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                               | 1,491,918.63                   | 124,901.37                | 1,616,820.00   |
| 1940                               | 1,551,917.24                   | 115,540.98                | 1,667,458.22   |
| 1941                               | 1,615,351.79                   | 114,960.58                | 1,730,312.37   |
| 1942                               | 1,679,058.50                   | 103,368.22                | 1,782,426.72   |
| 1943                               | 1,629,268.35                   | 86,580.98                 | 1,715,849.33   |
| 1944                               | 1,761,016.12                   | 87,946.71                 | 1,848,962.83   |
| 1945                               | 1,812,311.82                   | 99,271.44                 | 1,911,583.26   |
| 1946                               | 1,808,993.17                   | 123,247.90                | 1,932,241.07   |
| 1947                               | 1,877,471.18                   | 124,372.47                | 2,001,843.65   |
| 1948                               | 2,005,242.58                   | 222,419.41                | 2,227,661.99   |
| 1949                               | 2,031,633.37                   | 229,317.72                | 2,260,951.09   |
| 1950                               | 2,082,814.82                   | 199,061.80                | 2,281,876.62   |
| 1951                               | 2,078,209.84                   | 214,868.70                | 2,293,078.54   |
| 1952                               | 2,053,427.76                   | 322,761.07                | 2,376,188.83   |
| 1953                               | 2,093,625.85                   | 343,477.23                | 2,437,103.08   |
| 1954                               | 2,146,947.18                   | 302,707.38                | 2,449,654.56   |
| 1955                               | 2,166,180.84                   | 379,010.13                | 2,545,190.97   |
| 1956                               | 2,236,331.86                   | 371,715.61                | 2,608,047.47   |
| 1957                               | 2,262,879.80                   | 322,948.62                | 2,585,828.42   |
| 1958                               | 2,273,583.77                   | 318,752.87                | 2,592,336.64   |
| 1959                               | 2,255,865.23                   | 374,493.67                | 2,630,358.90   |
| 1960                               | 2,528,805.97                   | 330,120.32                | 2,858,926.29   |
| 1961                               | 2,758,603.26                   | 351,179.65                | 3,109,782.91   |
| 1962                               | 2,794,556.45                   | 440,769.75                | 3,235,326.20   |
| 1963                               | 2,947,872.00                   | 366,756.30                | 3,314,628.30   |
| 1964                               | 2,986,556.95                   | 441,238.98                | 3,427,795.93   |
| 1965                               | 3,113,868.26                   | 362,201.67                | 3,476,069.93   |
| 1966                               | 3,149,078.53                   | 373,307.57                | 3,522,386.10   |
| 1967                               | 3,033,036.68                   | 369,911.49                | 3,402,948.17   |
| 1968                               | 2,942,611.22                   | 345,144.86                | 3,287,756.08   |
| 1969                               | 3,097,831.73                   | 310,117.04                | 3,407,948.77   |
| <br>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   |
| 1972                               | 3,747,073.12                   | 360,753.98                | 4,107,827.10   |
| 1973                               | 3,626,330.13                   | 595,667.53                | 4,221,997.66   |
| 1974                               | 3,803,468.01                   | 855,859.09                | 4,659,327.10   |
| 1975                               | 4,292,452.95                   | 565,243.23                | 4,857,696.18   |
| 1976                               | 4,855,378.47                   | 472,976.86                | 5,328,355.33   |

\*October 1, 1969 - June 30, 1970.

TABLE 49

## STATEMENT OF REVENUE - ESTIMATED AND ACTUAL

YEAR ENDED JUNE 30, 1976

| Account                       | Estimated Revenue | Actual Revenue |
|-------------------------------|-------------------|----------------|
| Water Rents                   | \$4,958,000.00    | \$4,855,378.47 |
| Hydrant Rental                | 252,000.00        | 127,661.24     |
| Electricity                   | 24,000.00         | 19,998.90      |
| Meter Revolving Fund          | 5,200.00          | 18,281.38      |
| Repairing and Setting Meters  | 6,900.00          | 5,161.33       |
| Miscellaneous Repairs         | 41,000.00         | 15,160.19      |
| Installation of Fire Supplies | 10,200.00         | 18,880.00      |
| New Service Installations     | 120,000.00        | 90,602.92      |
| New Main Extensions           | 150,000.00        | 84,415.00      |
| Transfer from Reserve Fund    | --                | 80,000.00      |
| Other Miscellaneous Receipts  | 9,275.00          | 12,815.90      |
| Total                         | \$5,568,575.00    | \$5,328,355.33 |

TABLE 50

## RESERVE FUND

YEAR ENDED JUNE 30, 1976

|                                               | Investment    | Cash           | Due from Other Funds | Total        |
|-----------------------------------------------|---------------|----------------|----------------------|--------------|
| Balance - June 30, 1975                       | \$ 783,000.00 | \$ 1,340.11    | Nil                  | \$784,340.11 |
| Increase during Year Ended June 30, 1976      | *5,707,000.00 | 5,935,712.67   |                      |              |
| Disbursements during Year Ended June 30, 1976 | 5,740,000.00  | **5,937,000.00 |                      |              |
| Balance                                       | \$ 750,000.00 | \$ 52.78       | Nil                  | \$750,052.78 |

\*Includes interest of \$28,360.95 on Certificates of Deposit.

\*\*Includes \$80,000.00 transferred to Operating Revenue.

TABLE 51  
STATEMENT OF SERIAL BONDS OUTSTANDING  
YEAR ENDED JUNE 30, 1976

| Description                                                             | Rate of Interest % | Year of Issue Maturity | Serial Requirement | Issued       | Bonds Outstanding |
|-------------------------------------------------------------------------|--------------------|------------------------|--------------------|--------------|-------------------|
| Additions, Alterations and Improvements to the Water Purification Works | 3 $\frac{1}{4}$    | 1962                   | 1992               | \$ 35,000.00 | \$ 1,100,000.00   |
| Aqueduct 40 Million Gallon Distribution Reservoir                       | 3 $\frac{1}{4}$    | 1962                   | 1992               | 65,000.00    | 2,050,000.00      |
| Total                                                                   |                    |                        |                    | \$100,000.00 | \$ 3,150,000.00   |
| General Obligation Bonds                                                | 5                  | 1971                   | 2001               | \$180,000.00 | \$11,000,000.00   |
| Total-Bonds and Requirements                                            |                    |                        |                    | \$280,000.00 | \$14,150,000.00   |
|                                                                         |                    |                        |                    |              | \$12,295,000.00   |

TABLE 52  
A SUMMARY OF INVENTORIES OF PERSONAL PROPERTY  
YEAR ENDED JUNE 30, 1976

|                                       |  |              |
|---------------------------------------|--|--------------|
| REMOVABLE PROPERTY INVENTORY:         |  | \$233,247.93 |
| <b>SOURCE OF SUPPLY</b>               |  |              |
| Purification Works                    |  | \$4,883.29   |
| Laboratory                            |  | 3,562.22     |
| Raw Water Pumping Station             |  | 3,016.27     |
| General and Reforestation             |  | 8,558.42     |
|                                       |  | 20,020.20    |
| <b>TRANSMISSION AND DISTRIBUTION:</b> |  |              |
| Pipe Lines                            |  | \$146,396.26 |
| Pumping Stations                      |  | 330.60       |
| Garage                                |  | 15,923.80    |
|                                       |  | 162,650.66   |
| <b>METERING:</b>                      |  |              |
|                                       |  | 44,152.69    |
| <b>GENERAL SUPPLIES:</b>              |  |              |
|                                       |  | 1,713.62     |
| Total Personal Property Inventory     |  | \$461,785.10 |

TABLE 53

## STATEMENT OF METER REVOLVING FUND

YEAR ENDED JUNE 30, 1976

|                                         |             |
|-----------------------------------------|-------------|
| Cash Balance - June 30, 1975            | \$10,000.00 |
| Outstanding Commitments-June 30, 1975   | 18,113.40   |
| Receipts - July 1, 1975 - June 30, 1976 | 54,283.93   |
| <br>Total Available                     |             |
|                                         | \$82,397.33 |
| Disbursements - June 30, 1976           | \$52,088.83 |
| Outstanding Commitments-June 30, 1976   | 2,029.07    |
| Transferred to Operating Revenue        | 18,281.38   |
| <br>Total Disbursements                 | \$72,399.28 |
| <br>Cash Balance - June 30, 1976        | \$ 9,998.05 |

TABLE 54

## STATEMENT OF WATER METER CONVERSION REVOLVING FUND

YEAR ENDED JUNE 30, 1976

|                                              |             |
|----------------------------------------------|-------------|
| Cash Balance - June 30, 1975                 | \$25,504.07 |
| Outstanding Commitments-June 30, 1975        | 15,925.58   |
| Receipts - July 1, 1975 - June 30, 1976      | 54,229.76   |
| <br>Total Available                          | \$95,659.41 |
| Disbursements - July 1, 1975 - June 30, 1976 | \$85,882.63 |
| Outstanding Commitments-June 30, 1976        | 6,866.76    |
| <br>Total Disbursements                      | \$92,749.39 |
| <br>Cash Balance - June 30, 1976             | \$ 2,910.02 |

TABLE 55  
TAXES PAID TO VARIOUS CITIES AND TOWNS  
JULY 1, 1975 TO JUNE 30, 1976

| Location of Property     | Land Area<br>(Acres) | ASSESSED VALUATIONS |                               |                 | TAX               |                  |
|--------------------------|----------------------|---------------------|-------------------------------|-----------------|-------------------|------------------|
|                          |                      | Land                | Buildings and<br>Improvements | Total           | Rate per<br>\$100 | Amount<br>Paid   |
| City of Warwick          | 0.060                | \$ 160.00           | \$ 0                          | \$ 160.00       | -----             | \$ 8.61          |
| City of Cranston         | 110.627              | 62,840.00           | 942,340.00                    | 1,005,180.00    | -----             | 59,571.05        |
| Town of Foster           | 1,994.280            | 837,460.00          | 0                             | 837,460.00      | \$4.70            | 39,216.80        |
| Town of Gloucester       | 73.300               | 17,970.00           | 0                             | 17,970.00       | 5.74              | 1,031.48         |
| Town of Johnston         | 103.130              | 42,163.00           | 321,937.00                    | 364,100.00      | 6.275             | 28,559.10        |
| Town of North Providence | 8.529                | 321,880.00          | 1,122,780.00                  | 1,444,660.00    | 2.88              | -----            |
| Town of Scituate         | 13,149.030           | 1,390,625.00        | 12,312,500.00                 | *13,718,750.00  | 6.43              | 882,115.63       |
| Town of West Warwick     | 8.940                | 34,310.00           | 0                             | 34,310.00       | 4.80              | 1,646.88         |
| Total Real Estate        | 15,447.896           |                     |                               | \$17,422,590.00 |                   | **\$1,012,149.56 |

\*Includes \$15,625.00 Tangible Personal.

\*\*In addition to this amount, \$106.65 was paid to the West Gloucester Fire District and \$15.45 to the Harmony Fire District.

NOTE: Cranston was paid three installments totaling \$43,613.83 based on a total valuation of \$990,660.00 at a rate of \$5.87 per \$100 and one payment of \$15,957.23 at a rate of \$6.35 per \$100 on a valuation of \$1,005,180.00.

Credit of \$143.82 was taken on Foster tax bill due to building being demolished.

Five payments of \$5,711.82 each were made to the Town of Johnston during the fiscal year.

TABLE 56  
SUMMARY OF STATISTICS  
PROVIDENCE WATER SUPPLY BOARD  
YEAR ENDED JUNE 30, 1976

| *PROVIDENCE<br>(City or Town)                                   | PROVIDENCE<br>(County)                                                                                       | RHODE ISLAND<br>(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                                                  | 77.5% by gravity; 22.5% by pumping                                                                           |                         |
| STATISTICS OF CONSUMPTION OF WATER                              |                                                                                                              |                         |
| 1. Estimated population supplies                                |                                                                                                              | 430,815                 |
| 2. Total raw water influent for the year, gallons               |                                                                                                              | 24,016,918,000          |
| 3. Average daily raw water influent, gallons                    |                                                                                                              | 65,620,000              |
| 4. Raw water consumption per capita, gallons daily              |                                                                                                              | 152.3                   |
| 5. Total consumption for the year, gallons                      |                                                                                                              | 23,693,601,000          |
| 6. Total registration on customers' meters, gallons             |                                                                                                              | 20,766,750,000          |
| 7. Percentage of consumption accounted for on customers' meters |                                                                                                              | 87.7%                   |
| 8. Average daily consumption, gallons                           |                                                                                                              | 64,737,000              |
| 9. Per capita consumption, gallons daily                        |                                                                                                              | 150.3                   |
| 10. Gallons per day to each tap                                 |                                                                                                              | 979                     |

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

TABLE 56 (Continued)  
 SUMMARY OF STATISTICS  
 PROVIDENCE WATER SUPPLY BOARD  
 YEAR ENDED JUNE 30, 1976

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                                          | 23,941,051,000                                            |
| 6. Average quantity filtered per day, gallons                                         | 65,413,000                                                |
| 7. Total filtered water delivered to the distribution system during the year, gallons | 23,694,061,000                                            |

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, Ductile Iron, Steel and Concrete |
| 2. Sizes                                                           | From 6 to 66 inches                                          |
| 3. Installed                                                       | 28,112.12 feet                                               |
| 4. Removed                                                         | 4,644.40 feet                                                |
| 5. Net Increase                                                    | 23,467.72 feet                                               |
| 6. Total now in use                                                | 835.16 miles                                                 |
| 7. Number of leaks per mile                                        | 0.08                                                         |
| 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                                   | 105                                                          |
| 11. Number removed                                                 | 51                                                           |
| 12. Net Increase                                                   | 54                                                           |
| 13. Number of hydrants now in use                                  | 5,096                                                        |
| 14. Number of stop gates installed                                 | 65                                                           |
| 15. Number removed                                                 | 18                                                           |
| 16. Net Increase                                                   | 47                                                           |
| 17. Number of stop gates now in use                                | 11,475                                                       |

TABLE 56 (Continued)  
 SUMMARY OF STATISTICS  
 PROVIDENCE WATER SUPPLY BOARD  
 YEAR ENDED JUNE 30, 1976  
 STATISTICS RELATING TO THE DISTRIBUTION SYSTEM  
 (Continued)

|                                      |                                  |
|--------------------------------------|----------------------------------|
| 18. Kind of services                 | Lead, Copper and Cast Iron       |
| 19. Sizes                            | $\frac{1}{2}$ -inch to 42 inches |
| 20. Number of service taps installed | 396                              |
| 21. Number removed                   | 272                              |
| 22. Net increase                     | 124                              |
| 23. Number of services now in use    | *66,128                          |
| 24. Number of meters installed       | 637                              |
| 25. Number removed or condemned      | 494                              |
| 26. Net increase                     | 143                              |
| 27. Number of meters now in use      | **66,700                         |
| 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 57

YEAR ENDED JUNE 30, 1976

COMPARISON OF PROVIDENCE DISTRIBUTION  
SYSTEM WATER CHARACTERISTICS WITH  
PROPOSED E.P.A. REGULATIONSE.P.A. Standards  
(Maximum Permissible)

## \*Physical Characteristics:

|           |          |          |
|-----------|----------|----------|
| Color     | 15 units | 3        |
| Turbidity | 1 unit   | 0.0      |
| Odor      | 3        | no odor  |
| Taste     | ----     | no taste |

## Characteristics (milligrams per liter)

|                                  |       |                 |
|----------------------------------|-------|-----------------|
| Arsenic                          | 0.05  | 0.00            |
| Barium                           | 1.    | less than 0.1   |
| Cadmium                          | 0.010 | less than 0.002 |
| Chromium                         | 0.05  | less than 0.02  |
| Copper                           | 1.    | 0.00            |
| Cyanide                          | 0.2   | 0.00            |
| Fluoride                         | 2.0   | 1.01            |
| Iron                             | 0.30  | 0.02            |
| Lead                             | 0.05  | 0.00            |
| Manganese                        | 0.05  | 0.00            |
| Mercury                          | 0.002 | less than 0.001 |
| Methylene Blue Active Substances | 0.50  | 0.00            |
| Nickel                           | ---   | less than 0.02  |
| Nitrate (as N)                   | 10.   | 0.08            |
| Phenols                          | 0.001 | 0.000           |
| Selenium                         | 0.01  | 0.00            |
| Silver                           | 0.05  | less than 0.02  |
| Total Dissolved Solids           | 500.  | 66.             |
| Zinc                             | 5.    | 0.00            |

## Characteristics (micrograms per liter)

|                    |      |                 |
|--------------------|------|-----------------|
| Aldrin             | 1.   | less than 0.001 |
| Chlordane          | 3.   | less than 0.005 |
| **DDT              | 5.   | less than 0.002 |
| Dieldrin           | 1.   | less than 0.001 |
| Endrin             | 0.2  | less than 0.002 |
| Heptachlor         | 0.1  | less than 0.001 |
| Heptachlor Epoxide | 0.1  | less than 0.002 |
| Lindane            | 4.   | less than 0.001 |
| Methoxychlor       | 100. | less than 0.005 |
| Toxaphene          | 5.   | less than 0.050 |
| 2,4-D              | 100. | less than 0.01  |
| 2,4,5-TP           | 10.  | less than 0.005 |

\*Color, odor and taste limits as given in 1962 USPHS Drinking Water Standards; "Drinking water should contain no impurity which would cause offense to the sense of sight, taste, or smell."

\*\*Includes isomers of DDT and metabolites.

JOHN A. DOHERTY, *Chairman*  
EARL H. ASHLEY  
ALFRED T. CICCONE  
ROBERT F. HOWARD  
RAYMOND COLA  
VINCENT J. CIRELLI  
VINCENT T. IZZO, *Ex-Officio*

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

Peter P. Granieri, Jr.,  
~~JOHN H. SEITES P.E.~~  
*Chief Engineer*  
JOHN H. SEITES P.E.  
*Deputy Chief Engineer*  
Wm McGair,~~WILLIAM K. MAXZER~~  
*Legal Advisor*  
JAMES A. LOMBARDI  
*Secretary*

April 18, 1977

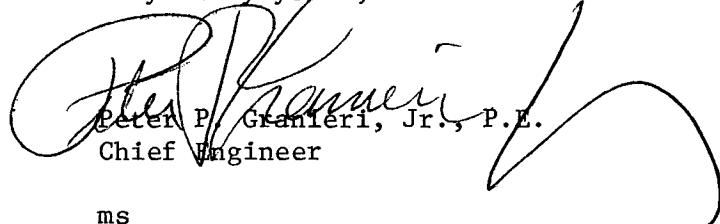
Mr. Vincent Vespa, City Clerk  
City Hall  
Providence, Rhode Island

Dear Mr. Vespa:

I am enclosing a copy of the Annual Report of the Water Supply Board for the fiscal year ended June 30, 1976, 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,



Peter P. Granieri, Jr., P.E.  
Chief Engineer

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Enclosure