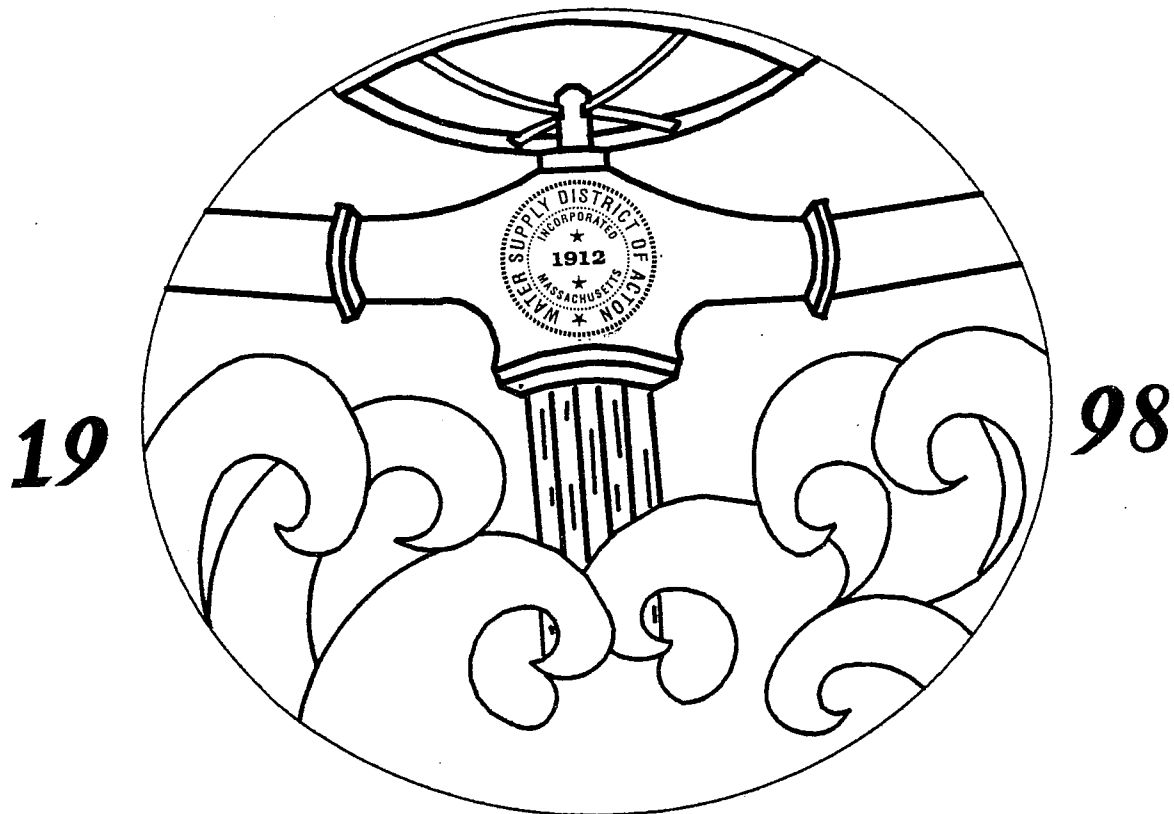


ANNUAL REPORT

FOR THE YEAR ENDING
DECEMBER 31, 1998

ACTON WATER



DISTRICT

WARRANT ARTICLES

FOR THE
ANNUAL REPORT

MARCH 17, 1999

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Commissioners meet on second and fourth Monday of each month, at
7:30 P.M., 693 Massachusetts Avenue, Acton

WATER DISTRICT ORGANIZATION - 1998

ELECTED OFFICIALS

COMMISSIONERS

Leonard A. Phillips, Chairman
Stephen C. Stuntz
Ronald R. Parenti

Term expires 2000
Term expires 1999
Term expires 2001

CLERK

Jane Cutler

Term expires 1999

MODERATOR

Richard P. O'Brien

Term expires 1999

APPOINTED OFFICIALS

FINANCE COMMITTEE

William Kingman, Chairman
Theodore Jarvis
Charles Bradley

Term expires 1999
Term expires 2001
Term expires 2000

DISTRICT MANAGER

James L. Deming

Contract expires 2001

TREASURER & COLLECTOR

Linda M. Larson

Term expires 1999

DISTRICT COUNSEL

Mary Bassett-Stanford

Term expires 1999

COMMISSIONERS SECRETARY

Debra A. Pyro

Term expires 1999

ACCOUNTANTS

Maureen Waters Mara, CPA, MST
Scheid & Mara, P.C.

Term expires 1999

WATER DISTRICT STAFF

Debra A. Pyro

Secretary/A/P Bookkeeper

Helen F. Argento

A/R Bookkeeper/Secretary

Robert Koch

General Foreman

Stephen G. Peterson

Assistant Foreman/ Water Supply Treatment

Patrick DeCesare

Assistant Foreman/Water Distribution

Paul McGovern

Operator/Pump Stations

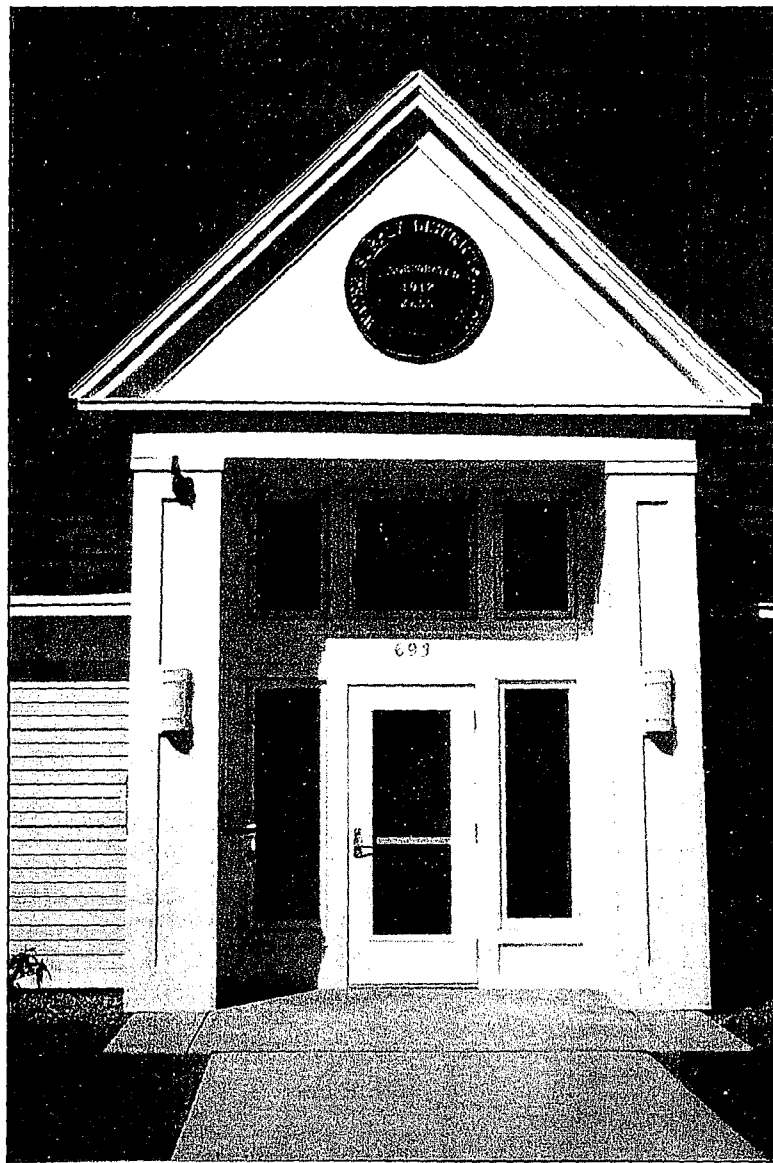
Ronald Davan
Charles Rouleau

Operator/Distribution

Robert Murch

Backflow Technician/Computer Specialist

This years Annual Report is dedicated to all the present and past elected officials, appointed officials, employees and dedicated volunteers, with honors and gratitude extended to the family/s that have not only given of their time but have donated land to the District for the current and future wells that will take The Acton Water District into the new MILLENIUM.



New Acton Water District Office 1996

Page 1 of pictures

Debra A. Pyrro
Secretary &
A/P Bookkeeper

Helen F Argento
A/R Bookkeeper &
Secretary

Water Operations & CrossConn. Specialist
Stephen G. Peterson, Jr. - Ronald W. Davan
Patrick A. Decesare - Paul McGovern
Charles T. Rouleau - Robert S. Murch

John E. MacLeod, retired District Manager
James L. Deming, District Manager

Commissioners
Stephen C. Stuntz - Leonard A. Phillips
Ronald R. Parenti

Elected & Appointed Officials
Ronald R. Parenti, Stephen C. Stuntz
Linda M. Larson, Leonard A. Phillips,
Maureen W. Mara, Mary Bassett-Stanford,
James L. Deming

Finance Committee, Clerk, Commissioners
Secretary and volunteer Finance Member
William L. Kingman, Debra A. Pyrro, Jane Cutler
Charles E. Bradley, Brewster Conant
Theodore Jarvis

Moderator
Richard P. O'Brien

Page 2 of pictures, past and present

Albert F. Ziman
Operator

Anita Page, Clerk & Raymond Page, Auditor

Stephen W. Scribner
Superintendent

Charles E. Orcutt, Jr.
District Counsel

Kevin B. Sweeney
Commissioner

Commissioners
William Walsh, Alvin Piper,
Stephen Stuntz

Harry B. Morse
Commissioner

Carleton Troupe
Superintendent

Joseph Markind
Environmental Engineer

Stephen G. Peterson, Sr.
Treasurer/Collector

Page 3 of pictures, past and present

Joseph Lauzon
Commissioner

Joseph Markind, John E. MacLeod, William
Walsh, Stephen Stuntz, D.E.P. representative
Chester Atkins, Alvin Piper

John E. MacLeod, William Walsh,
Alvin Piper, Leonard Phillips,
Stephen Stuntz

John Swallow, Chemist

Raymond L. Harris
Superintendent (2nd left)

Edwin H. & Gladys Christofferson
Commissioner

Commissioners Meeting
William Walsh, Alvin Piper,
Stephen Stuntz, Joseph Markind
John E. MacLeod

Conant Land Gift
Ronald Parenti, Brewster Conant
Leonard Phillips, Stephen Stuntz

Page 4 of pictures, wells and pump stations

William Walsh Reservoir

Christopherson Well

District Garage Construction
Stephen Scribner & Kevin B. Sweeney

Harlan Tuttle Building

Original District office

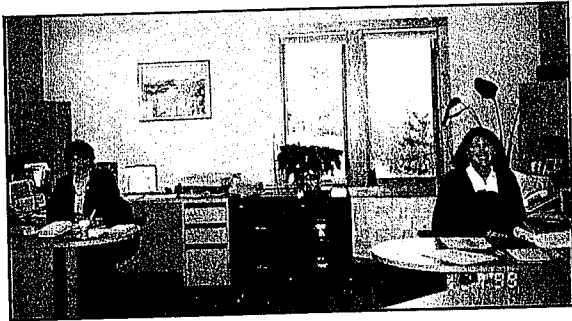
Whitcomb Well

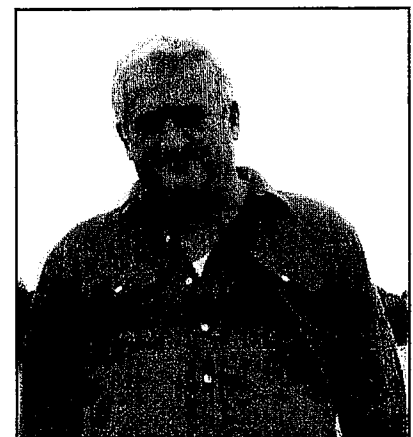
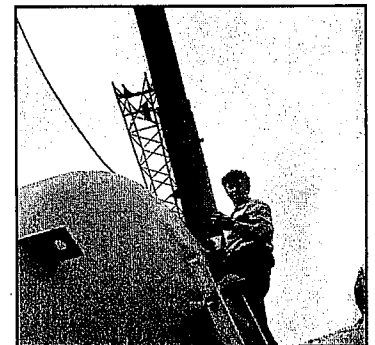
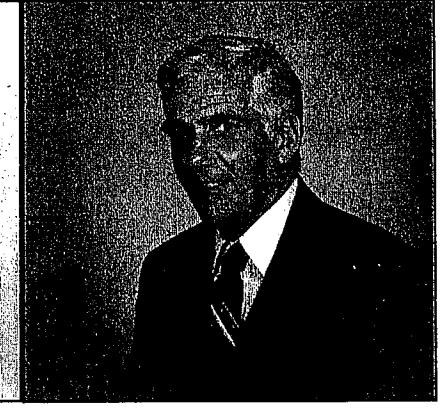
Assabet I Treatment and Well

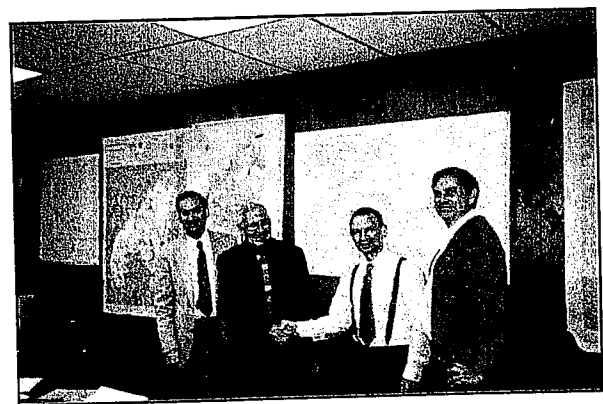
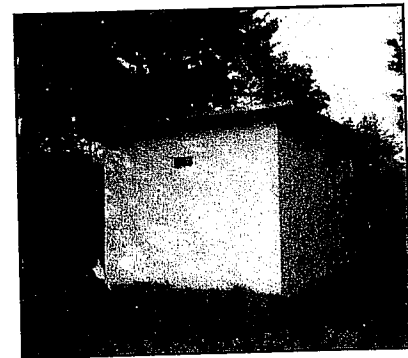
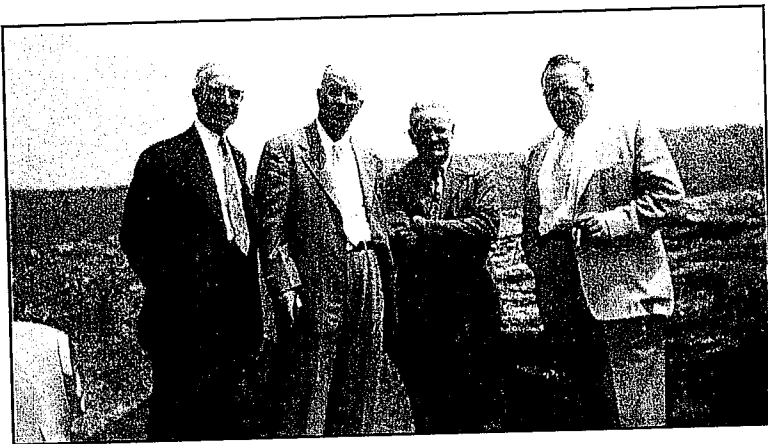
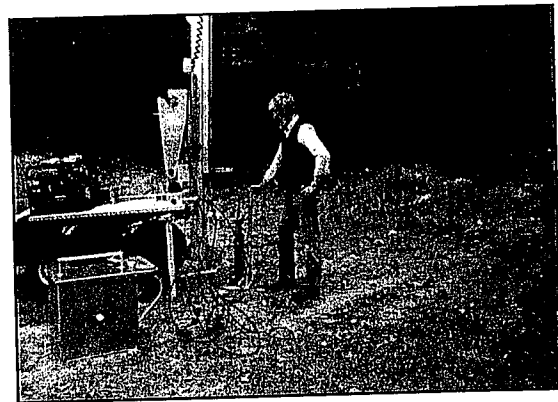
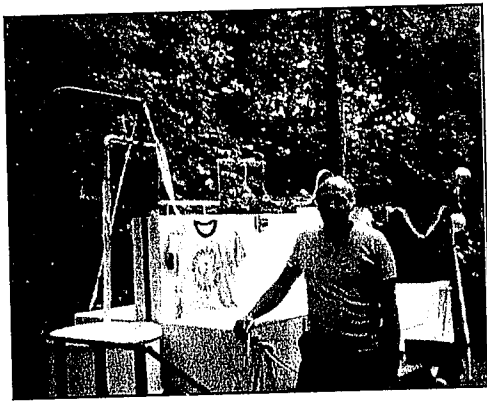
Conant Well

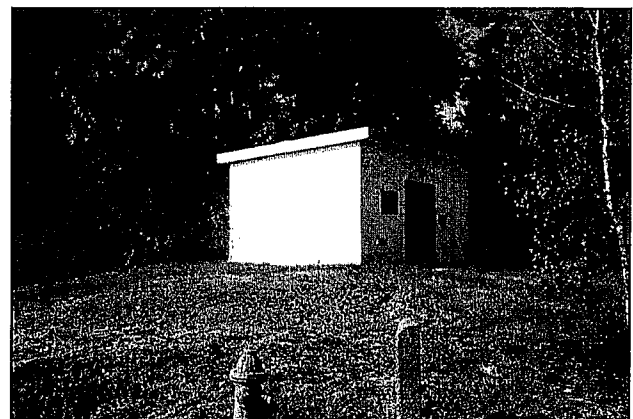
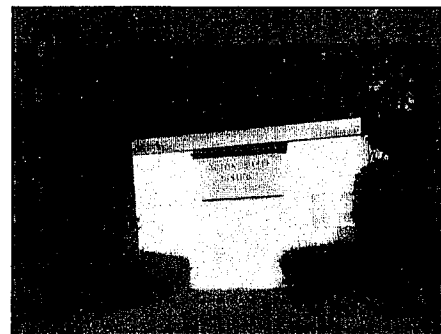
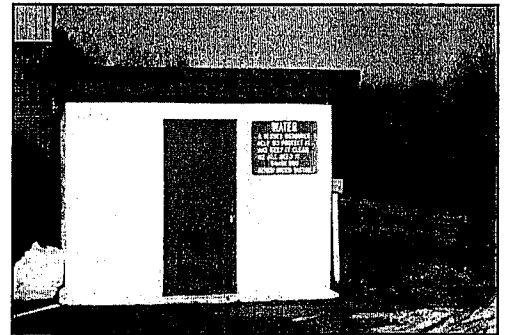
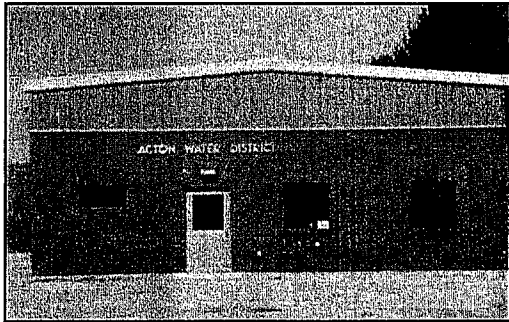
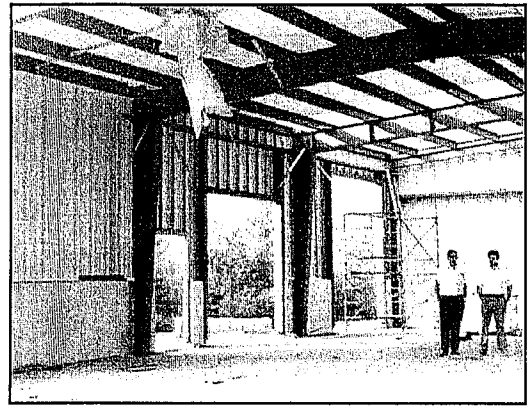
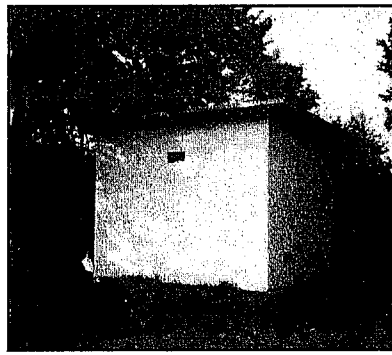
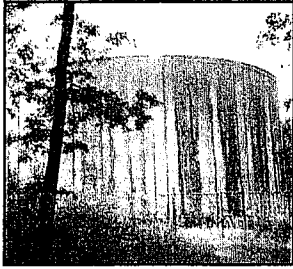
District's laboratory

Clapp Well









"Report of Committee"

The first report submitted and recorded at the District was the Report of Committee dated November 22, 1895. This committee appointed at the annual Town meeting held in April, 1895, herewith submit their report as per instructions given in the adoption of the following vote:

"Voted, That H.A. Littlefield and D.J. Wetherbee be added to present committee – Wm. D. Tuttle, D.H. Hall and Francis Conant, and this Committee is instructed to employ a competent engineer to examine the sources of water supply, make plans and estimate of cost, also to ascertain the number of persons in town who will take water, and submit their report to the town in print as soon as ready." From this first meeting, an engineer was hired, land surveyed, test wells driven, and a site for a stand pipe was determined. **(From Engineer's Report 1895, F.L. Fuller, Civil Engineer)** "On May 25th the various parts of the town were visited with the committee and all the possible sources of supply examined. Two sources seemed possible, but only one appeared of reasonable cost, viz: a ground water supply from the valley of Fort Pond Brook. The other supply which has been suggested is Nagog Pond, which lies partly in Acton and partly in Littleton.

The water shed of this pond, as measured on the State topographical map is about 1.75 square miles. It is about four miles from the pond to Great Hill, the most suitable elevation for a stand pipe. The surface of the water in the pond is of about the same elevation as the ground at South Acton. Water taken from this source would therefore require to be pumped. The force main from Nagog Pond to the stand pipe would pass through very ledgy streets and the cost for rock excavation would be very great. The pumping station would naturally be located at the south westerly end of the pond. This would require a long haul for coal and would be a long distance from either village of the town".

For these reasons attention was directed to ground water source for supplying the town.

"By the census of 1895 the town of Acton had a population of 1,979, an increase of a little over 4 per cent over the population in 1890. The town is well provided with railroad accommodations and is naturally attractive. It seems to need more general business, and additional manufacturing industries would be a great advantage. To secure these, a town must be progressive and offer inducements equal to those of other towns. Chief among other inducements, is a good water supply. Most towns are obtaining them, not so much as a luxury as a necessity."

West and South Water Supply District of Acton, Mass., Incorporated by the Acts of Legislature of 1912 Chapter 326, and Accepted by the District April 16, 1912.

Report of Water Commissioners

April 26th, 1912; Board was organized with Edgar H. Hall, Chairman; Waldo E. Whitcomb, Clerk; Frank W. Hoit, appointed District Treasurer.

In May, Frank L. Fuller was engaged as Engineer for the sum of \$2,000.00, to superintend the construction and installation of the water system for the West and South District.

June 1, 1912; it was voted to contract with Fred A. Houdlette & Son, Inc. of Boston to install a complete water works system covering the villages of West and South Acton for the sum of \$65,000.00. The system was to be complete in every detail from driven wells to standpipe, and operated for one month.

March 1, 1926; the estimated operating budget was at \$12,980.00. Edgar H. Hall, Waldo E. Whitcomb and George E. Clapp, were commissioners, Frank W. Hoit was the

appointed Treasurer, Waldo E. Whitcomb, Collector and George E. Clapp was the superintendent. There were 510 customers and the District pumped 38,536,186 gallons of water. As the years past by, the District continued to add new services to homes and added water mains yearly. By the year 1932, the District had felt the impact of the depression. Water consumption was down and the necessary expenditures unusually large. One of the chief losses in revenue during this time was caused by the Boston and Maine Railroad using less than fifty per cent of the amount of water used the year before.

As reported by the Collector of Water Rates, the District had installed 187 new services between 1927 and 1940. The Commissioners report of April 1, 1941:

"On account of restrictions imposed by the present emergency, no extensions have been made during the year and none will be allowed except for the purpose of connecting with the water systems of neighboring towns or for other emergency purposes.

It should also be pointed out that all municipal water systems have been placed under military control for the duration of the war and that we have been advised to provide guards or watchmen for protection of the water supply. This will entail considerable expense and we are bringing the matter before the annual meeting for consideration and in the interim the Town Police are giving special attention to the protection of this property.

An unusual amount of material for repairs and maintenance has been purchased and is on hand in anticipation of procurement difficulties and emergency demands.

The commissioners are now considering the installation of a cathodic rust preventing device on the inside of the stand pipe which will obviate the necessity for periodic painting.

Both engines have been overhauled during the year and the outside of the stand pipe has been painted. Major repairs have also been made on the wells and fifteen new services were installed."

Waldo E. Whitcomb

Walter B. Stevens

Howard J. Billings

In 1945 the commissioners had under consideration the building of an office at the Pumping Station and this construction was completed shortly after the war ended. This year also brought about the retirement of Collector of Water Revenue, W.E. Whitcomb. G. E. Clapp, Superintendent was appointed as Collector. Mr. Clapp's hours at the new office were between the hours of 2:P.M. to 5:P.M. At the April 2, 1946, Water Meeting the Commissioners presented an article, which, if approved by the voters, would require the District to perform an annual financial audit. The voters approved the article and this same high standard is a requirement at the District today.

Organization of the District in 1950: Water Commissioners, Benjamin J. Ineson, Harlan E. Tuttle, Waldo E. Whitcomb, Treasurer, Ormal S. Laffin, Collector, Raymond A. Gallant, Superintendent and Clerk of Commissioners, Ray L. Harris, Clerk, James E. Kinsley. George E. Clapp retired as superintendent after reaching the age where the Commonwealth compelled him to retire on pension.

Organization of the District in 1951: Water Commissioners, Waldo E. Whitcomb, Harlan E. Tuttle, Edwin Christofferson, Treasurer, Ormal S. Laffin, Auditor, David R. Kinsley, Collector, Raymond A. Gallant, Clerk, Beryl B. Silva and Superintendent and Clerk of the Commissioners, Ray L. Harris. Estimated revenue \$50,500.00 with estimated expenses

\$37,890.00 for an estimated gain of \$12,610.00. The District now consisted of 917 services and pumped 73,561,400 gallons of water into the system.

At the Water Meeting of February 18, 1952 the District added to the records the following resolution: Resolved: That the District extends its thanks and appreciation to Waldo E. Whitcomb for forty years of faithful and efficient service as District Water Commissioner.

Organization of the District 1962: Water Commissioners, Donald L. Loring, Harlan E. Tuttle, Robert E. Sweeney, Collector, Harold M. Richardson, Treasurer, Ormal S. Laffin, Clerk, Beryl B. Silva and Superintendent, Ray L. Harris. February 18, 1963, the Water Meeting held in the Town Hall, Acton Center gave approval for the name of the West and South Water Supply District of Acton to be changed as follows; Voted: To accept the provisions of Chapter 667 of the Acts of 1962, relative to the change of name of the District and to the extension of the area of the District to cover the whole of the territory of the Town of Acton (Unanimous vote). The name therefore will be Water Supply District of Acton. The anticipated budget was approved for \$115,431.11.

1965; the District accepted the retirement of Ray L. Harris as Superintendent after fifteen years of service. The Commissioners appointed Stephen Scribner as the new Superintendent. Organization 1965; Commissioners, Donald L. Loring, Harlan E. Tuttle, Edwin H. Christofferson, Treasurer, Ormal S. Laffin, Collector, Harold M. Richardson, Clerk, Beryl B. Silva, Superintendent Stephen Scribner (Ray L. Harris, retired).

During the 60's the District continued to grow at a rapid pace along with the Town. Customers now numbered 2940, the estimated expenses for the operation of the District was \$169,800.00. The voters approved the addition of fluoridation to the public water supply at the June 9, 1969 District Meeting. Organization 1969; Commissioners, Harlan E. Tuttle, Donald L. Loring, Alvin R. Piper, Treasurer, Carl R. Godfrey, Collector, Harold M. Richardson, Superintendent, Stephen W. Scribner and Clerk, Beryl B. Silva.

Organization 1970; Commissioners, Kevin B. Sweeney, Alvin Piper, Harlan Tuttle, Treasurer, Carl R. Godfrey, Collector, Harold M. Richardson, Clerk, Beryl B. Silva and Superintendent, Stephen W. Scribner. With the retirement of Harold M. Richardson In 1971, Stephen G. Peterson, Sr. was appointed on July 1, 1971 as the Collector. With the Annual Report, the voters received a copy of the master plan as prepared by the firm of Dufresne-Henry Engineering. The Commissioners asked that the report be read carefully and to consider the recommendations as this was of great importance to the District's growth. Of great importance was the recommendation to construct a standpipe/reservoir in the Route 2A section of Acton. Due to the growth and efficient administration of the District, rates were not increased for the 10th consecutive year. 1973; the District voters approved to purchase land and construct a 3 million-gallon reservoir on Nagog Hill Road. This reservoir was later dedicated in memory to James Edward Kinsley for his many years of service to the District. The Organization 1976: Commissioners, Kevin B. Sweeney, Alvin R. Piper, Harry B. Morse, Treasurer, Carl R. Godfrey, Collector, Stephen G. Peterson, Sr., Clerk, Anita E. Page and Finance Committee, Raymond L. Page and Charles W. Pappas.

The year of 1978 was an extremely important time for the District. Two of the District's wells, Assabet 1 and 2, located on the 375 acre Sinking Pond Aquifer, were found to have been contaminated by a mixture of organic chemicals typical of industrial processes. The wells were subsequently removed from service by order of the Acton Board of Health and Acton Water District, which created a 40% loss to the water supply.

In early fall the District entered into an agreement with the firm of Goldberg Zoino Associates to perform a geohydrological studies. The major elements of this effort embraced the following activities: location of major sources of water for municipal supply; determination of the origin and flow paths of water contaminated in the municipal aquifer system. The main sources were a landfill and waste lagoons located 3000 feet away from the wells, and owned by the W.R. Grace Co. The study also found an extensive plume (10,000 pbb total hydrocarbons) to be within 1000 feet of Assabet 2. The Water District then began investigating possible treatment alternatives for the Assabet wells. Concurrently, the legal aspects of the contamination came to court in April 1980, when the U.S. EPA filed the first suit in Massachusetts under the Federal Resources Conservation and Recovery Act. Later, the Water District filed a separate three (3) million dollar suit against W. R. Grace Co. The federal suit was settled by a consent decree in which the company agreed to assist in cleaning up the aquifer. The District installed state of the art carbon filtration and aeration facilities to insure that the treated water fed into the distribution system met the self-imposed standards of 1 ppb for total V.O.C.'s. At the same time the W.R. Grace Company was following the E.P.A.'s procedures to remove and/or treat all sources of contamination on their property. That E.P.A.'s mandate is now in its' final phase of ground water remediation. Although the District continues to use the aeration facility to insure compliance with it's own standard, recent tests have shown that the removal of source material has significantly reduced the V.O.C.'s to a point where no contamination has been found in the raw water at the Assabet Well fields in over two years. Groundwater remediation continues on the Grace property and final target number is still being negotiated.

Organization 1979: Water Commissioners, Kevin B. Sweeney, Alvin Piper, Harry Morse. Treasurer/Collector, Stephen G. Peterson, Clerk, Anita E. Page, Moderator, Richard O'Brien, Finance Committee, Raymond L. Page and Charles W. Pappas, Superintendent, Stephen W. Scribner, Attorney, Charles E. Orcutt, Jr., Accountant, Louise Murray. During this year, Stephen W. Scribner retired from his position as Superintendent. John E. MacLeod was appointed as Superintendent until the title changed to District Manager serving in the position until his retirement in 1996.

By mid 1980, the District and the Town of Acton had grown, and at the Annual Meeting an operating budget was presented, totaling \$1,213,933.00. There were now six full-time Water Operators, two full time Office Staff employees, a full-time Treasurer/Collector, Stephen G. Peterson, Sr., a full-time environmental engineer, Lawrence S. Dayian and a part-time chemist, Dr. John Swallow. The Finance Committee, in conjunction with the Commissioners, Legal Counsel, Accountant, District Manager and Treasurer began the process of interviewing investment management firms to conservatively and appropriately invest the remaining funds received in the settlement awarded against the W. R. Grace Co. The Finance Committee members; Joyce Foley, William Kingman and Theodore Jarvis. The Water Supply District of Acton received the 1987 Community Award for the State of Massachusetts for best exemplifying the high-test standards of water supply practice. The Commissioners in 1988, William P. Walsh, Stephen C. Stuntz and Leonard A. Phillips. Clerk, Anita E. Page and appointed officials, District Manager, John E. MacLeod, Treasurer/Collector, Stephen G. Peterson, Sr., Accountant, Raymond L. Page, Attorney, Charles E. Orcutt, Jr.

The 90's were an ever-changing time for the District. The Rules, Regulations and Rates were amended, Bylaws were amended at the Annual District Meeting, Stephen G. Peterson, Sr. Treasurer/Collector retired after twenty years of dedicated service, Linda M. Larson was appointed Treasurer/Collector. Ronald R. Parenti was elected as Commissioner; the water operations had grown to seven full-time employees. Carl Troupe had been assigned the position of Assistant Superintendent. Charles Bradley

was appointed to the Finance Committee, John W. Putnam was elected as moderator and Raymond L. Page was the District's accountant. In the spring of 1991 the Finance Committee, Treasurer/Collector and Commissioners interviewed for a new auditing firm for the District after Raymond L. Page announced he would be stepping down as the District's auditor. The firm of William E. Scheid & Company, P.C. (now known as Scheid & Mara, P.C.) was chosen and has continued for the past nine years with the District. The individual accounts totaled 6,080 customers and the District pumped 654,853,000 gallons of water. Jane Cutler continued as secretary to the Commissioners until 1995, when Anita Page announced she would step down as Clerk after 19 years of dedicated service. Jane Cutler announced she would run for the position of Clerk and was elected by the voters in 1995.

Charles E. Orcutt, Jr., counsel to the District since 1967, ran unopposed for the position of Water District Moderator in 1995. His devotion and dedication to the District showed with the wearing of "two hats". As the District's legal requirements increased, Charles brought on board an assistant, Mary Bassett-Stanford. Working with District Counsel and the Commissioners for several years, Mary Bassett-Stanford was appointed Assistant District Counsel. In 1996 the District had a tremendous loss with the passing of Charles E. Orcutt, Jr., a great legal expert and mentor. The Commissioners appointed Mary Bassett-Stanford, District Counsel. Mary continues to serve a vital role as District Counsel advising on the ever increasing laws and regulations governing a public water supply.

As the District grew and new home construction continued in the Town, so did the demand on the District's staff. After a much exhausting review process, the Commissioners awarded to the Carell Group Architects, the contract to build a new office building. The firm of Star Consultants, Stephen M. Aronson, President, was contracted to review the District's operations, employee performances and to establish an employee manual.

District Manager, John E. MacLeod gave notice that he would be retiring in 1996. John "Jock" served the District with dedication and a relentless pursuit for the highest quality of water for Acton as well as for other communities in the area. Commissioners began a long and intense search for a new District Manager. After closing the field to three candidates, the Commissioners and committee unanimously voted to enter into a contract with James L. Deming. Jim came to the District with over 20 years of experience in managing public water supply and wastewater collection systems in four different communities throughout Massachusetts.

Organization 1998/1999; Commissioners, Stephen C. Stuntz, Leonard A. Phillips, Ronald R. Parenti. Finance Committee, William L. Kingman, Theodore Jarvis, Charles E. Bradley, and volunteer member, Brewster Conant. District Manager, James L. Deming, Clerk, Jane Cutler, Treasurer/Collector, Linda M. Larson, Moderator, Richard P. O'Brien. District Counsel, Mary Bassett-Stanford, and District's Accountant, Maureen W. Mara. The District's office staff; Debra A. Pyrro, Helen F. Argento and Robert Murch. The District's water staff; Robert Koch, Stephen Peterson, Paul McGovern, Patrick Decesare, Ronald Davan, Charles Rouleau and Andrew Peterson.

As the District looks forward to the next century, it can look back and treasure the countless hours of service and commitment that have been given by its' various elected officials, appointed officials, and numerous dedicated employees. Unwavering community support by individuals and groups, such as the ACES, that have provided the backbone on which the existing infrastructure has developed. The District's residents can look to the future with enthusiasm and the knowledge that the foundation that has been laid over the prior century will provide a sturdy base upon which we can continue to build. We all welcome the new MILLENNIUM and look forward to any challenges that it may present.

February 9, 1999

ACTON WATER DISTRICT



WARRANT

MARCH 17, 1999

COMMONWEALTH OF MASSACHUSETTS

Middlesex, ss.



To the Clerk of the Water Supply District of Acton, GREETINGS:

You are directed to notify the inhabitants of the Town of Acton who are qualified to vote in elections and town affairs, to assemble at their precinct:

Precincts 1 & 2- Conant School, 80 Taylor Road
Precincts 3, 4 & 5- Blanchard Auditorium, R.J. Grey Junior High School, 16 Charter Road
Acton, Massachusetts

On Tuesday, March 30, 1999
between 7 o'clock A.M. and 8 o'clock P.M.

Then and there to bring their votes on one ballot for the following officers:

Moderator for one year, one Commissioner for three years, Clerk for one year.

You are further requested to notify the legal voters of the Town of Acton, as aforesaid, to assemble at:

R.J. Grey Junior High School
Library
16 Charter Road
Acton, Massachusetts

On Wednesday, March 17, 1999
At 7:30 o'clock P.M.

Then and there to act on the following articles:

Article 1. To fix salaries of the elected officials.

Article 2. To act on the reports of the Commissioners, the Treasurer and other officers and committees of the District.

Article 3. To see if the District will vote to authorize the Treasurer, with the approval of the Commissioners, to borrow in anticipation of the revenue of the fiscal year beginning July 1, 1999, in accordance with the provisions of General Laws, Chapter 44, Section 4, and to renew any note or notes as may be given for a period of less than one year, in accordance with the provisions of the General Laws, Chapter 44, Section 17, or to take any other action relative thereto.

Article 4. To see what sums of money the District will vote to raise and appropriate to defray the usual expenses of the District.

Article 5. To see if the District will vote to transfer from Receipt Reserve for Appropriation Account (W.R. Grace settlement) the sum of \$75,000 for the maintenance and operation, carbon replacement, and power costs at the various treatment plants operated by the District, or to take any other action relative thereto.

Article 6. To see if the District will vote to transfer from Surplus Revenue the sum of \$100,000 for the purchase of new radio read water meters for a continuing program for the installation of both new and existing services of the District, or to take any other action relative thereto.

Article 7. To see if the District will vote to transfer from Surplus Revenue the sum of \$30,000 to supplement Article 8 of the Annual Meeting of March 18, 1998 for the purpose of replacing old water mains, renewing numerous outdated water services from existing water mains to the property line, and to replace old outdated fire hydrants, or to take any other action relative thereto.

Article 8. To see if the District will vote to transfer from Surplus Revenue the sum of \$60,000 to purchase a new dump truck and to authorize the Commissioners to trade or sell the District's 1985 dump truck, or to take any other action relative thereto.

Article 9. To see if the District will vote to transfer from Surplus Revenue the sum of \$30,000 to purchase a new cargo van, or to take any other action relative thereto.

Article 10. To see if the District will vote to transfer from Surplus Revenue the sum of \$9,500 for a leak detection survey, for pipes and water mains owned by the District, or to take any other action relative thereto.

Article 11. To see if the District will vote to transfer from Surplus Revenue the sum of \$9,970 to purchase a new digital copier, or to take any other action relative thereto.

Article 12. To see if the District will vote to transfer from Surplus Revenue the sum of \$135,000 for the design, engineering plans and preliminary construction for the future water main project on School Street and Weatherbee Street, or to take any other action relative thereto.

Article 13. To see if the District will vote to transfer from Surplus Revenue the sum of \$15,000 to supplement Article 3 of the Special District Meeting of December 8, 1997, for emergency water main breaks and repairs, or to take any other action relative thereto.

Article 14. To see if the District will vote to transfer from Surplus Revenue the sum of \$9,500 for the implementation of a hydrant flushing program for the District's water system, or to take any other action relative thereto.

Hereof fail not and make due returns of this Warrant with your doings thereon to the Water Commissioners on or before the time of holding said meeting.

Given under our hands this first day of February in the year one thousand nine hundred and ninety-nine.

Leonard A. Phillips, Chairman
Ronald R. Parenti
Stephen C. Stuntz,
Water Commissioners

A true copy. ATTEST:

Jane Cutler,
District Clerk

1999 Appropriation & Six Month Expenditure

2000 Anticipated Appropriations and Revenue

Account Name Expense	FY99 Appropriation	Six Month Expenses	Appropriation FY2000
Accounting	5,000.00	975.00	5,000.00
Audit	13,500.00	13,500.00	13,500.00
Auto Maint/Fuel	16,500.00	4,988.22	15,000.00
BackFlow/CrossConn.	5,000.00	430.36	5,000.00
Bank Fees	1,000.00	0.00	1,000.00
Bonds,Interest,Fees	351,350.00	36,675.00	338,875.00
Chemicals	38,000.00	23,402.82	40,000.00
** Computers	15,000.00	10,413.80	20,000.00
DEP Withdrawal Fees	6,000.00	0.00	6,000.00
Education	9,000.00	4,659.20	10,000.00
Engineering	10,000.00	2,738.07	10,000.00
*** Equipment Rental	3,000.00	0.00	N/A
Health/Life Insurance	110,000.00	50,767.12	118,000.00
Hydrants	10,000.00	1,879.53	10,000.00
Insurance	32,000.00	21,346.35	32,000.00
Laboratory Analysis	11,000.00	7,316.58	12,000.00
Legal	20,000.00	12,197.42	20,000.00
Lights,Power,Fuel	115,000.00	68,466.59	115,000.00
Maintenance & Operations	90,000.00	52,485.80	90,000.00
Middlesex Retirement	57,500.00	26,938.00	51,690.00
Meters	2,000.00	146.16	1,000.00
Office Supplies	14,000.00	5,029.56	15,000.00
Paving	12,000.00	4,375.06	12,000.00
Petty Cash	1,000.00	0.00	1,000.00
Postage	6,000.00	1,571.47	6,000.00
Reserve Fund	30,000.00	0.00	30,000.00
Salaries & Wages	583,000.00	284,804.98	720,000.00
Telephone	20,000.00	11,074.29	20,000.00
** Informational Reports	2,000.00	2,000.00	9,000.00
	<u>1,588,850.00</u>	<u>648,181.38</u>	<u>1,727,065.00</u>
Revenue			
Water Rates	1,349,930.00	844,691.70	1,315,065.00
Sprinklers	14,500.00	15,442.29	15,500.00
Rent/Lease	54,420.00	27,927.25	55,000.00
Repairs/Installation & Cross Connections	30,000.00	39,699.83	40,000.00
Demand Fees	140,000.00	301,410.00	301,500.00
	<u>1,588,850.00</u>	<u>1,229,171.07</u>	<u>1,727,065.00</u>

** name changes

*** removed Y2K

Report of the Treasurer FY98
Audited Account Balances
As of June 30, 1998

Fleet Bank A/P Checking	73,153.03	
Fleet Bank Savings	<u>66,730.01</u>	
Total		139,883.04
MMDT Interest Account	<u>965,647.26</u>	
Total		965,647.26
MMDT W.R. Grace A/P	<u>78,785.14</u>	
Total		78,785.14
Middlesex Savings Ban	<u>36,184.99</u>	
Total		36,184.99
BankBoston Savings	16,432.44	
BankBoston CD	<u>99,711.11</u>	
Total		<u>116,143.55</u>
		\$1,336,643.98

On February 15, 1998 the District retired the Water Main Bond issue for the water main at the intersection of North Briar Road and Route 27 and the installation of several wells and pumping station located on land formerly owned by Mary Marshall off Route 27. The total combined bond was for \$625,000.00 at an interest rate of 6.39%. The William Walsh Reservoir located off Route 27 at Wyndcliff Drive was approved by the voters on November 30, 1988 and bonded for \$2,100,000.00 at an interest rate of 6.70% to be retired on June 1, 2001. The new bond issue approved at the March 31, 1998 Annual meeting is for the construction costs for the new Conant II Well and Pumping Station on land formerly owned by Brewster Conant located off Route 27 and Post Office Square. This bond was issued on June 15, 1998 at an interest rate of 4.75% and will be retired June 15, 2005.

General Long Term Debt as of June 30, 1998

<u>Description</u>	<u>Original Amount</u>	<u>Interest Rate</u>	<u>Date of Maturity</u>	<u>Balance 6/30/98</u>
Conant Well II	800,000	4.75%	06/15/05	800,000
W. Walsh Resv.	<u>2,100,000</u>	6.70%	06/01/01	<u>525,000</u>
	2,900,000			1,325,000

1912 Bond Issue

The first bond issue was awarded to N.W. Harris & Company and delivered on September 9, 1912 in the amount of \$101,266.67 at an interest rate of 4% per annum. The bond was for installation of a standpipe, pumping station, distribution lines, hydrants and engineering on Great Hill. The Commissioners at this time were, Edgar H. Hall, William Rawitser, Waldo E. Whitcomb, Mark W. Richardson, Secreatry, William F. Stevens, Collector and Frank W. Hoit, Treasurer. The District was then known as West and South Water Supply District of Acton.

Report of the Collector FY98
Audited Account Balances
As of June 30, 1998

Outstanding June 30, 1997	49,663.72	
Charges	1,741,605.13	
Interest Charges	5,836.26	
Refunds	<u>432.21</u>	
Total		\$1,797,537.32

Payments	1,742,938.75	
Abatements	2,869.59	
Adjustments	.00	
Outstanding June 30, 1998	<u>51,728.98</u>	
Total		\$1,797,537.32

Water Charges history:	FY95	1,665,186.67
	FY96	1,878,049.40
	FY97	1,785,097.28
	FY98	1,747,441.39

As reported in the history of the District:

Water Charges	1913	Number of takers - 275 \$3,256.00
Water Charges	1914	Number of takers - 318 \$3,902.22
Water Charges	1915	Number of takers - 338 \$4,440.39

The total expenditures from September 1912 to April 1, 1916 for the West and South District were \$160,866.88. During this period of time Charles H. Mead was the Clerk, Commissioners Edgar H. Hall, William Rawitser and Waldo E. Whitcomb. The Treasurer was Frank W. Hoit, Collector Arthur M. Whitcomb, Clerk Howard Jones and Superintendent James Fitzgerald. April 1, 1917 to March 31, 1918 the District extended the water mains to, High Street, South Street and Concord Road and by the end of 1920 there were a total of 422 water takers. From the Annual Report of March 1, 1924 Water Commissioners' Report: James Fitzgerald resigned his position as superintendent and George E. Clapp was employed. It is so stated that if you have cause for complaint, you may notify the superintendent, Mr. Clapp at the pumping station, call West Acton 37-4. The organization in 1923 - 1924, Commissioners Edgar H. Hall, Waldo E. Whitcomb, George E. Clapp, Treasurer Frank W. Hoit, Collector Waldo E. Whitcomb and Clerk Lowell H. Cram. During the year of 1923 the District was serving 499 customers and annual revenue of \$6,585.05. 1927 brought about the first year the District did not place a tax levy and the receipts were able to fund the expenses, total budget was \$12,995.00.

Acton Water District Annual Report of Commissioners For The Year 1999

This is the last Annual Report of the Commissioners for this Millennium. With the year 2000 less than a year away, the Acton Water District looks back and looks to the future with confidence based on successfully overcoming the wide range of challenges it has faced.

During the last quarter century, we've come a long way! When this Commissioner was first elected, the Acton Water District had just suffered the loss of about 40% of its supply when Assabet Wells 1 and 2 were shut down in 1977 due to organic chemical contamination. The Acton Water District took immediate action to solve the contamination problem and in the process set important precedents:

- We promulgated the strictest volatile organic contaminant (VOC) limit—no more than .5 ppb—among public water supplies in the United States
- We pioneered the first high-pressure granulated activated carbon (GAC) municipal-scale filtration system, later combined with an efficient aeration process that alone reduced VOCs by over 99%!

In an interesting confluence of technologies, our storage tank sites have become desirable to telecommunications operators. Both the force of gravity and the superior line-of-sight provided by their height above mean ground level have enabled us to lease some space on Great Hill to telecommunications companies. The revenues provided add meaningfully to the District's annual income, and the tower also provides ideal free siting for emergency Town communications antennas.

Today, with Acton water quite possibly the purest municipal water delivered in the nation, our water supply is facing a new challenge—the withdrawal limit imposed by the Massachusetts Water Management Act of 1985 to the quantity of water we are allowed to deliver to our watertakers. The Act has imposed an average Daily Water Withdrawal Limit of 1.92 million gallons per day (an average of approximately 80,000 gallons per hour) for the year 2000, 1.94 million gallons per day for 2010, and 1.96 million gallons per day for 2014. However, we expect actual daily demand to be about 1.9 million gallons per day during 2000, and even higher in subsequent years. Furthermore, peak hourly demand can be much higher than the average during dry growing seasons, or especially during a firefighting emergency or a serious water main break. It is comforting that we calculate that our wells have a safe pumping capacity of 3.42 million gallons per day and a total available yield of 3.0 million gallons per day, even with one well assumed out of service. While the District continues to petition the Commonwealth to increase our withdrawal limit, we also continuously and rigorously search for any leakage in the water distribution system. The District admonishes water takers to exercise care and conservation to prevent the District from exceeding our permitted withdrawal limit.

In an effort to assist the Acton Town Government, and as a key investment for the future, this year the Acton Water District purchased a sophisticated Global Positioning Satellite (GPS) receiver system. The system is contained in a backpack that is worn by the operator and processes signals received from navigation satellites orbiting the earth to locate with high accuracy the latitude, longitude, and altitude of appurtenances such as hydrants, gates, and curbstops as well as wells, storage tanks, and other key features of our water distribution system. Using specialized software, we will integrate this information into a standardized Geographic Information System (GIS)-based model of Acton. The information will be extremely useful in the day-to-day operation of the district, in planning system expansion, and even in leak detection. In addition, this information will be integrated into the Town's own GIS geopolitical base map. We

will provide the GPS receiver system to the Town for its use as needed to further develop its geopolitical map of the town.

Looking forward, we have tested all of our computer software and hardware and confirmed that all is Y2K (Year 2000) compliant. Our District Manager, Jim Deming, is doing an excellent job of handling the daily business of the District and in keeping morale and performance standards high. We face the next Millennium with confidence that we can continue to meet the needs of our watertakers.

Respectfully submitted,

Leonard A. Phillips, Chairman
Ronald Parenti
Stephen Stuntz

WATER MAINS INSTALLED IN 1998

CARLTON DRIVE EXTENSION

DAVIS ROAD EXTENSION

LONGMEADOW WAY

FARMERS ROW

OLD OREGON TRAIL

OXBOW DRIVE

STACY'S WAY

MILBERRY LANE

Report of the District Manager

This past year the Acton Water District completed two major projects that will help to address the two most pressing issues that we face, water quantity and water quality.

On the water quantity side, the Conant II well has been completed. This new well will provide up to 300,000 gallons of water per day. The process of bringing this well on line began over six (6) years ago, and is the culmination of the efforts of many people. Of particular note is the donation of the land on which the well is located by the Brewster Conant family. We are all in debt to them for their generous contribution.

The Clapp/Whitcomb Treatment facility will be completed in April of this year, and will help to resolve the long standing problem of "discolored" water in West Acton. This discoloration, while not a health concern, has long been a problem to West Acton residents. The technology used at this facility may well be extended to other wells in the District, should similar "discoloration" problems persist.

Water use in the District continues to increase, and we struggle every summer trying to meet the demand. Compliance with our odd/even outdoor watering restrictions is vital, additionally, watering for short periods of time in the early morning and late evening is not only better for the plants and grasses, but is also less of a strain on our system. Outdoor watering in the middle of the day should always be avoided.

We have been preparing for quite some time now for the long awaited construction of the town's sanitary sewer system. While we will do everything in our power to minimize disruption to water service during this project, it is unrealistic to think that all problems can be avoided. We ask for, and will need, everyone's cooperation and understanding during this time. Ultimately, a public sewer system will benefit everyone in town and will help to insure the long term protection of our water resources.

I would like to thank all the town departments and their employees for their continued cooperation and support throughout the year.

I would also like to acknowledge the time and effort put in by the District Commissioners and Finance Committee members on behalf of everyone in the District.

Finally, my personal thanks to District Counsel and to all the District employees for their efforts throughout the year. We will all continue to strive to provide the best service possible to all the District's residents.

Annual Report of the Finance Committee for 1998

The moderator appoints the AWD Finance Committee. The Committee reviews the budget, makes the recommendations on financial matters to the District Commissioners, District Treasurer and the District Manager and monitors the financial activities of the District. The committee makes a recommendation to the Commissioners on all financial and budget activities that are discussed at their meetings. One member of the Committee attends each of the Commissioners meeting.

The total number of new water service applications during 1998 was 93, including 6 commercial buildings and 123 apartment units, bringing the number of buildings receiving water in Acton to 6,793.

At the March 18, 1998, Annual Meeting, approval was given to borrow \$800,000 to complete the Conant II Well that is scheduled to be in service early in 1999. The meeting also approved an expenditure of \$245,000 from W.R. Grace investment account for treatment at the Clapp and Whitcomb Wells at Massachusetts Avenue. The treatment vessel no longer needed at the Assabet Wells, will be moved to these wells, thus minimizing the treatment cost. The market value of the Grace Fund on June 30, 1998 was \$2,959,335 versus \$2,508,448 in 1997. The portfolio continues to be managed by Brown Brothers Hariman and Co.

Also, approved at the March 18, 1998, Annual Meeting, was a 457-Pension Plan for the District's employees. This is an employee contribution plan with matching provisions by the District. The District also contributes to the Middlesex County Retirement Fund, which operates on a "pay-as-you-go basis". The contribution for 1998 was \$50,487. The employees also pay 5%, 7%, 8% or 10% of their base pay, depending on when they entered the system.

The District's free cash as of June 30, 1998, was certified by the state at \$1,054.963. It is these funds, along with the annual water use revenue, that finance the annual operating budget including capital expenditures.

The District in anticipation of the beginning of sewage installation in 1999 in South Acton, and the breakage of water main repairs and replacement during this type of construction, has budgeted for the possible hire of 3 new employees during the calendar 1999.

Linda Larson, the Treasurer/Collector has completed a two year project, and the year 2000 computer upgrades are ready for fiscal year 1999. Well done Linda.

The committee appreciates the wise counsel of Mary Bassett-Stanford, the District's attorney. The efficient District management of Jim Deming, the guidance of the Commissioners and annual informative review of our Auditor, Maureen Waters Mara, of Scheid & Mara, PC.

Thank you Debbie Pyrro, for your faithful attendance, and for preparing the minutes of the Finance Committee meetings.

William L. Kingman, Chairman
Charles E. Bradley
Theodore Jarvis

WATER SUPPLY DISTRICT OF ACTON

FINANCIAL STATEMENTS

JUNE 30, 1998

WATER SUPPLY DISTRICT OF ACTON

FINANCIAL STATEMENTS

JUNE 30, 1998

C O N T E N T S

Independent Auditor's Report

Combined Statement of Assets, Liabilities and Fund Balances
- All Fund Types and Account Groups - Statutory Basis

Combined Statement of Revenues, Expenditures and Changes in
Fund Balances - All Governmental Fund Types
- Statutory Basis

Statement of Revenues, Expenditures and Changes in Fund Balances
- Budget and Actual - General Fund - Statutory Basis

Statement of Revenues, Expenditures and Changes in Fund Balance
- Fiduciary Fund Type - Statutory Basis

Notes to the Financial Statements

Supplemental Schedule of Capital Projects Fund Activity
- Statutory Basis

Supplemental Schedule of W.R. Grace Fiduciary Fund Activity
- Statutory Basis

SCHEID & MARA, PC
CERTIFIED PUBLIC ACCOUNTANTS

William E. Scheid, CPA
Maureen Waters Mara, CPA
Michael J. Walsh, CPA

INDEPENDENT AUDITOR'S REPORT

70 Junction Square Drive
Concord, MA 01742

TEL 978 369-9905
FAX 978 371-2931

Board of Water Commissioners
Water Supply District of Acton
Acton, Massachusetts

We have audited the financial statements of the Water Supply District of Acton as of and for the year ended June 30, 1998, as listed in the table of contents. These financial statements are the responsibility of the Water Supply District of Acton management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

As described in Note 2, the Water Supply District of Acton prepares its financial statements on a prescribed basis of accounting that demonstrates compliance with the laws of the Commonwealth of Massachusetts which is a comprehensive basis of accounting other than generally accepted accounting principles.

In our opinion, because of the Water Supply District of Acton's policy to prepare its financial statements on the basis of accounting discussed in the preceding paragraph, the financial statements referred to in the first paragraph do not present fairly, in conformity with generally accepted accounting principles, the financial position of the Water Supply District of Acton as of June 30, 1998, or the results of its operations or the changes in its fund balances for the year then ended.

However, in our opinion, the financial statements referred to in the first paragraph present fairly, in all material respects, the cash and investment balances of the Water Supply District of Acton as of June 30, 1998, and the revenues it received and expenditures it paid for the year then ended, on the basis of accounting described in Note 2.

Our audit was made for the purpose of forming an opinion on the financial statements taken as a whole. The Supplemental Schedules of Capital Projects Fund Activity and W.R. Grace Fiduciary Fund Activity are presented for purposes of additional analysis and are not a required part of the financial statements of the Water Supply District of Acton. Such information has been subjected to the auditing procedures applied in the audit of the financial statements, and is fairly presented, in all material respects, in relation to the financial statements taken as a whole on the basis of accounting described in Note 2.

Scheid & Mara, PC
Scheid & Mara, PC
Concord, Massachusetts
July 24, 1998

WATERSHED DISTRICT OF ACTON
Combined Statement of Assets, Liabilities and Fund Balances -
All Fund Types and Account Groups - Statutory Basis
June 30, 1998

	GOVERNMENTAL FUND TYPE		FIDUCIARY FUND TYPE	ACCOUNT GROUP	TOTAL
	GENERAL FUND	CAPITAL PROJECTS	W.R. GRACE FUND	GENERAL LONG TERM DEBT	(MEMO ONLY)
<i>ASSETS</i>					
Cash	\$1,257,858	\$718,884	\$248,753		\$2,225,495
Investments			2,710,585		2,710,585
Accounts Receivable	51,729				51,729
Less Reserve For Uncollectible Receivables	(51,729)				(51,729)
Due From General Fund		202,895			202,895
Amount To Be Provided For Long Term Debt				\$1,325,000	1,325,000
Total Assets	\$1,257,858	\$921,779	\$2,959,338	\$1,325,000	\$6,463,975

LIABILITIES AND FUND BALANCES

LIABILITIES

Long Term Debt				\$1,325,000	\$1,325,000
Due to Capital Projects Fund	\$202,895				202,895
Total Liabilities	202,895	0	0	1,325,000	1,527,895

FUND BALANCES

Unreserved	1,054,963				1,054,963
Reserved For Capital Projects		\$921,779			921,779
Reserved For W.R. Grace			\$2,959,338		2,959,338
Total Fund Balances	1,054,963	921,779	2,959,338	0	4,936,080
Total Liabilities and Fund Balances	\$1,257,858	\$921,779	\$2,959,338	\$1,325,000	\$6,463,975

SEE ACCOMPANYING NOTES AND ACCOUNTANT'S REPORT.

WATER SUPPLY DISTRICT OF ACTON**Combined Statement of Revenues, Expenditures and Changes in Fund Balances -**

All Governmental Fund Types - Statutory Basis

For the Year Ended June 30, 1998

	<i>GENERAL FUND</i>	<i>CAPITAL PROJECTS</i>	<i>TOTAL (MEMO ONLY)</i>
<i>REVENUES</i>			
Water Rates	\$1,426,626		\$1,426,626
Water Services	314,302		314,302
Interest Income	61,484	\$1,558	63,042
Total Revenues	1,802,412	1,558	1,803,970
<i>EXPENDITURES</i>			
Salaries and Wages	511,337		511,337
Capital Project Expenditures	0	484,318	484,318
Maturing Debt and Interest	276,275		276,275
Lights, Power and Fuel	115,000		115,000
Health and Life Insurance	92,704		92,704
Maintenance and Operations	85,000		85,000
Middlesex Retirement	50,487		50,487
Chemicals	38,000		38,000
Reserve Fund	33,306		33,306
Insurance	25,970		25,970
Permanent Paving	24,000		24,000
Legal	20,000		20,000
Telephone	18,000		18,000
Meters	15,000		15,000
Audit	13,000		13,000
Office Supplies	11,771		11,771
Auto, Maintenance and Fuel	11,350		11,350
Engineering	10,000		10,000
Hydrants	10,000		10,000
Postage	9,766		9,766
Education	8,759		8,759
Laboratory Analysis	7,436		7,436
D.E.P. Withdrawal	4,358		4,358
Cross Connection	2,653		2,653
Water Works Notice	2,000		2,000
Miscellaneous	560		560
Accounting	550		550
Bank Fees	5		5
Total Expenditures	1,397,287	484,318	1,881,605
<i>REVENUES OVER (UNDER) EXPENDITURES</i>	405,125	(482,760)	(77,635)
<i>OTHER FINANCING SOURCES (USES)</i>			
Transfers from General Fund to Capital Projects Fund	(283,000)	283,000	0
Transfers from Capital Projects Fund to General Fund	61,234	(61,234)	0
Proceeds from Bond Financing		800,000	800,000
Net Other Financing Sources (Uses)	(221,766)	1,021,766	800,000
Excess of Revenues and Other Sources Over Expenditures and Other Uses	183,359	539,006	722,365
Fund Balance - Beginning of Year	871,604	382,773	1,254,377
Fund Balance - End of Year	\$1,054,963	\$921,779	\$1,976,742

SEE ACCOMPANYING NOTES AND ACCOUNTANT'S REPORT.

Statement of Revenues, Expenditures and Changes in Fund Balances -
 Budget and Actual - General Fund - Statutory Basis
 For the Year Ended June 30, 1998

	ACTUAL	BUDGET	VARIANCE FAVORABLE (UNFAVOR- ABLE)
<i>REVENUES</i>			
Water Rates	\$1,426,626	\$1,303,150	\$123,476
Water Services	314,302	166,125	148,177
Interest Income	61,484	0	61,484
Total Revenues	1,802,412	1,469,275	333,137
<i>EXPENDITURES</i>			
Salaries and Wages	511,337	550,000	38,663
Maturing Debt and Interest	276,275	276,275	0
Lights, Power and Fuel	115,000	115,000	0
Maintenance and Operations	85,000	85,000	0
Health and Life Insurance	92,704	110,000	17,296
Middlesex Retirement	50,487	50,500	13
Chemicals	38,000	38,000	0
Insurance	25,970	35,000	9,030
Auto, Maintenance, and Fuel	11,350	16,500	5,150
Meters	15,000	15,000	0
Legal	20,000	20,000	0
Accounting	550	5,000	4,450
Telephone	18,000	18,000	0
Audit	13,000	13,000	0
Office Supplies	11,771	12,000	229
Engineering	10,000	10,000	0
Postage	9,766	10,000	234
Hydrants	10,000	10,000	0
Permanent Paving	24,000	24,000	0
Laboratory Analysis	7,436	11,000	3,564
Education	8,759	9,000	241
Reserve Fund	33,306	57,970	24,664
D.E.P. Withdrawal	4,358	6,000	1,642
Cross Connection	2,653	5,000	2,347
Water Word Notice	2,000	2,000	0
Miscellaneous	560	1,000	440
Equipment Rent	0	3,000	3,000
Bank Fees	5	1,000	995
Total Expenditures	1,397,287	1,509,245	111,958
Revenues Over (Under) Expenditures	405,125	(39,970)	445,095
Net Transfers Between General Fund and Capital Projects Fund	(221,766)	(221,766)	0
Excess of Revenues Over (Under) Expenditures and Net Transfers	183,359	(261,736)	445,095
Fund Balance - Beginning of Year	871,604	871,604	0
Fund Balance - End of Year	\$1,054,963	\$609,868	\$445,095

SCHEID & MARA, P.C.
 CERTIFIED PUBLIC ACCOUNTANTS

SEE ACCOMPANYING NOTES AND ACCOUNTANT'S REPORT.

WATER SUPPLY DISTRICT OF ACTON

Statement of Revenues, Expenditures and Changes in Fund Balance -

Fiduciary Fund Type - Statutory Basis

For the Year Ended June 30, 1998

W.R. GRACE
FUND*REVENUES*

Dividend and Interest Income	\$110,973
Net Increase in the Fair Value of Investments	<u>516,903</u>
Total Revenues	<u>627,876</u>

EXPENDITURES

Maintenance and Operations	106,964
Air Stripper	9,621
Clapp/Whitcomb Well Expenses	36,930
Investment Management Fees	<u>23,471</u>
Total Expenditures	<u>176,986</u>
Revenues Over Expenditures	450,890
Fund Balance - Beginning of Year	<u>2,508,448</u>
Fund Balance - End of Year	<u><u>\$2,959,338</u></u>

SEE ACCOMPANYING NOTES AND ACCOUNTANT'S REPORT.

NOTE 1 – GENERAL STATEMENT AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Water Supply District of Acton ("the District") is a municipality incorporated in the Commonwealth of Massachusetts with the purpose of providing water and related services to the residents and businesses of Acton. The District is a separate municipality, distinct from the Town of Acton. Inhabitants of the Town of Acton who are qualified to vote in elections and town affairs are eligible to vote on matters concerning the District and to act on articles of the District. The basic operations of the District are financed by water rate and services charges. In the Combined Statement of Revenues, Expenditures and Changes in Fund Balances, these operations are reflected in the General Fund.

Summary of Significant Accounting Policies

The accounting and reporting policies of the District relating to the funds and account groups included in the accompanying financial statements conform with the Commonwealth of Massachusetts' uniform reporting system. The following significant accounting policies were applied in the preparation of the accompanying financial statements:

Basis of Presentation: Fund Accounting

The accounts of the Water Supply District of Acton are organized on the basis of funds and account groups, each of which is a separate entity with its own self-balancing accounts that comprise its assets, liabilities, fund balances, revenues, and expenditures. Resources are accounted for in individual funds based upon the purposes for which they are to be spent and the restrictions, if any, on the spending activities. The District uses the following generic fund types to record its activities:

Governmental Fund Types

General Fund - accounts for all financial resources of the District that are not required to be accounted for in another fund.

Capital Projects - accounts for all resources used for the acquisition or construction of capital projects, facilities, or studies.

Fiduciary Fund Type

W.R. Grace Fund - accounts for activity of the W.R. Grace Settlement and is restricted to cover expenditures for treatment and maintenance of the water system.

Account Group

General Long-Term Debt Account Group - accounts for all long-term obligations of the District, which consist of bonds payable for capital projects.

WATER SUPPLY DISTRICT OF ACTON

Notes to the Financial Statements

June 30, 1998

NOTE 1 - GENERAL STATEMENT AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Reporting Entity and Basis of Accounting

The District's financial statements include the accounts of all District operations.

The accounts of all funds and general long-term debt group of accounts are maintained and presented in accordance with the Commonwealth of Massachusetts' uniform reporting system. Under this method, revenues are recorded when received and expenditures are recorded when they are paid. Accounts receivable are fully reserved until they are collected and recorded as income.

Property, plant and equipment are not recorded on the Combined Statement of Assets, Liabilities and Fund Balances of the District. Funds used to acquire property, plant and equipment are accounted for as expenditures in the Capital Projects Fund in the fiscal year payment is made. Appropriation balances of capital projects are carried forward in the Capital Projects Fund until completion of the project or until unexpended balances are transferred to the General Fund by approval of the Annual Meeting.

Budgets and Budgetary Accounting

The District's annual budget is a legally adopted budget that is approved at the District's Annual Meeting. Appropriations for the Capital Projects Fund and the W.R. Grace Fiduciary Fund are also approved at the Annual Meeting. Any budget overrides must be approved at a specially called District Meeting.

Total Columns on Combined Statements

Total columns on the Combined Statements are captioned "Memo Only" to indicate that they are presented only to facilitate financial analysis. Data in these columns do not present financial position, results of operations, or changes in financial position in conformity with generally accepted accounting principles. Neither is such data comparable to a consolidation.

NOTE 2 - DEPARTURES FROM GENERALLY ACCEPTED ACCOUNTING PRINCIPLES

As indicated in Note 1, the District prepares its financial statements using the Commonwealth of Massachusetts' uniform reporting system which is a comprehensive basis of accounting other than generally accepted accounting principles. Although the Commonwealth of Massachusetts' uniform reporting system is not in conformity with generally accepted accounting principles, cities, towns and other municipal entities use it extensively throughout the Commonwealth.

NOTE 2 - DEPARTURES FROM GENERALLY ACCEPTED ACCOUNTING PRINCIPLES
(continued)

The District uses the Commonwealth of Massachusetts' uniform reporting system whereby revenues are recorded when received and expenditures are recorded when they are paid. Under generally accepted accounting principles, the District's General Fund would be accounted for on the accrual method of accounting whereby revenues are recognized in the accounting period in which they are earned and become measurable and expenses are recognized in the accounting period incurred.

The District also uses the Commonwealth of Massachusetts' uniform reporting system whereby the costs of property, plant and equipment are reported as expenditures from the Capital Projects Fund. Under generally accepted accounting principles, the property, plant and equipment would be capitalized on the balance sheet and depreciated over the useful lives of the various assets.

NOTE 3 - INVESTMENTS

The W. R. Grace Fund includes investments that are managed by the firm Brown Brothers Harriman and Co. The investments are reported at fair value. During the year ended June 30, 1998, the District realized a net gain of \$267,744 from the sale of investments. The calculation of realized gains is independent of the calculation of the net increase in the fair value of investments. The net increase in the fair value of investments during the year was \$516,903. This amount takes into account all changes in fair value (including purchases and sales) that occurred during the year. The unrealized gain on investments held at year-end was \$249,159.

NOTE 4 - GENERAL LONG-TERM DEBT

General Long-Term Debt consists of the following general obligation bonds at June 30, 1998:

<u>Description</u>	<u>Original Amount</u>	<u>Interest Rate</u>	<u>Date of Issue</u>	<u>Date of Maturity</u>	<u>Balance 6/30/98</u>
Conant Well II	\$800,000	4.75%	06/15/98	06/15/05	\$800,000
Walsh Rsrvr	<u>2,100,000</u>	6.70%	06/01/89	06/01/01	<u>525,000</u>
Total	<u>\$2,900,000</u>				<u>\$1,325,000</u>

WATER SUPPLY DISTRICT OF ACTON

Notes to the Financial Statements

June 30, 1998

NOTE 4 - GENERAL LONG-TERM DEBT (continued)

During the year ended June 30, 1998, \$225,000 of principal and \$51,275 of interest were paid on the bonds, for a total of \$276,275. This total is reported as "Maturing Debt & Interest" in the Combined Statement of Revenues, Expenditures and Changes in Fund Balances - All Governmental Fund Types. The annual requirements to amortize all debt outstanding as of June 30, 1998 are as follows:

Fiscal Year Ending June 30,

1999	\$275,000
2000	280,000
2001	280,000
2002	115,000
2003	120,000
2004	125,000
2005	<u>130,000</u>
Total	<u>\$1,325,000</u>

NOTE 5 - RETIREMENT PLAN

Substantially all employees of the District are members of the Middlesex County Retirement Fund. The retirement system is funded by both employer and employee contributions. The District's annual contributions to the retirement system are determined on a "pay-as-you-go" basis by the State Division of Insurance and are estimates of pensions actually payable during an accounting period. In addition, employees contribute 5%, 7%, 8% or 10% of their base pay depending on when they entered the system. The District's contributions for the year ended June 30, 1998, were \$50,487.

NOTE 6 - COMMITMENTS

The District has entered into certain contracts for well construction, for upgrading water services and meters to existing homes, for improvements to existing water lines, and for improving water quality.

CONCLUDED.

Supplemental Schedule of Capital Projects Fund Activity - Statutory Basis
For the Year Ended June 30, 1998

	BEGINNING BALANCE 06/30/97	TRANSFERS FROM GENERAL FUND	TRANSFERS TO GENERAL FUND	PROCEEDS FROM BOND FINANCING	INTEREST INCOME	PAYMENTS MADE	ENDING BALANCE 06/30/98
Assabet/Conant Cleaning 98	\$0	\$10,000				\$10,000	\$0
Burster Machine	3,997		\$3,997				0
Clapp Whitcomb 97	697						697
Clapp/Whitcomb Color	578						578
Cleaning Wells 96	2,704					2,704	0
Compressor 98	0	12,000				10,781	1,219
Computer Programs 97	5,583					5,583	0
Computer Progrms 98	0	5,000				5,000	0
Conant II Pump Station 97	75,000		1,335			73,655	10
Conant II Well	0			\$800,000	\$1,558	82,674	718,884
Conant Station Repairs 96	1,615					280	1,335
Conservation Schools/Muni 96	200		200				0
Dump Truck 97	100		100				0
Electronic Equipment 95	2,328					1,533	795
GIS Equipment 98	0	15,000				35	14,965
Large Meters 95	6,861					6,861	0
Leak Detection 94	3,000						3,000
Marshall Pumping Rehab 98	0	15,000				13,965	1,035
Meter Reading Equipment 95	7,989					4,570	3,419
Meter Replacement 97	50,000					50,000	0
Meter Replacement 98	0	100,000				26,682	73,318
Pick-up Truck 98	0	25,000				16,768	8,232
SCADA System 98	0	25,000					25,000
Small Tools 98	0	6,000				3,182	2,818
Telemetry 93	890					890	0
Trenching Box	2,439		2,439				0
Update Services 97	20,530					19,157	1,373
Vacuum Priming System 98	0	10,000				1,832	8,168
Water Main - RTE 2A 97	189,708		49,609			140,099	0
Water Main Break Repairs 98	0	30,000				3,067	26,933
Water Main/Bridge So Acton	692		692				0
Water Mains/Hydrants 98	0	30,000					30,000
Water Supply Plan 96	5,000					5,000	0
Whitcomb Well Study	2,862		2,862				0
	<u>\$382,773</u>	<u>\$283,000</u>	<u>\$61,234</u>	<u>\$800,000</u>	<u>\$1,558</u>	<u>\$484,318</u>	<u>\$921,779</u>

SEE ACCOUNTANT'S REPORT.

WATER SUPPLY DISTRICT OF ACTON

Supplemental Schedule of W.R. Grace Fiduciary Fund Activity - Statutory Basis
For the Year Ended June 30, 1998

	<i>BEGINNING BALANCE 6/30/97</i>	<i>APPROPRIA- TIONS PER ANNUAL MEETING</i>	<i>EXPENDI- TURES OVER (UNDER) REVENUES</i>	<i>ENDING BALANCE 6/30/98</i>
Maintenance and Operations	\$72,833	\$75,000	(\$106,964)	\$40,869
Air Stripper	11,857	13,000	(9,621)	15,236
Clapp Whitcomb Well	350,000	245,000	(36,930)	558,070
Unappropriated	2,073,758	(333,000)	355,246	2,096,004
	<u>\$2,508,448</u>	<u>\$0</u>	<u>\$201,731</u>	<u>\$2,710,179</u>

SEE ACCOUNTANT'S REPORT.

WATER SUPPLY DISTRICT OF ACTON

Abstract of the proceeding of the Annual Meeting of the Water Supply District of Acton, held at the Acton-Boxborough Junior High School library, Charter Road at Massachusetts Avenue, Acton.

Wednesday, March 18, 1998 at 7:30 PM.

Article 1

VOTED to fix the salaries of the elected officials as follows:

Chairman of the Commissioners:	\$1,200	per year
Two Commissioners:	\$1,000	per year
Moderator	\$50.	Per meeting
Clerk	\$600	per year

UNANIMOUS

Article 2

VOTED to accept the reports of the Commissioners, the Treasurer and other officers and committees of the District.

UNANIMOUS

Article 3

VOTED that the District authorize the Treasurer, with the approval of the Commissioners, to borrow in anticipation of the revenue of the fiscal year beginning July 1, 1998 in accordance with the provisions of General Laws, Chapter 44 section 4, and to renew any note of notes as may be given for a period of less than one year, in accordance with the provisions of the General Laws, Chapter 44, Section 17.

UNANIMOUS

Article 4 VOTED that the District raise and appropriate to defray the usual expenses of the District.

UNANIMOUS

Article 5 VOTED that the District transfer from Receipts Reserve for Appropriation Account (W>R> Grace settlement), the sum of \$75,000 for the maintenance and operation, carbon replacement and power costs at the various treatment plants operated by the District.

UNANIMOUS

Article 6 VOTED that the District authorize the Treasurer, with the approval of the Commissioners to transfer to Surplus Revenue Account the following unexpended balances remaining after completion of projects authorized by vote of the District.

A. Unexpended balance in the sum of \$49,608.51 for project completed under Article #9 of the Annual Meeting of March 19, 1997, which approved installing approximately 3600 feet of water mains and appurtenances along Route 2A.

B. Unexpended balance in the sum of \$692.18 for project completed under Article 16, of the Annual Meeting of March 20, 1996, which approved installing a new water main in the new proposed bridge in South Acton.

C. Unexpended balance in the sum of \$2,862.18 for project completed under Article 14 of the Annual Meeting of March 21, 1984 for a feasibility study to determine the most effective method of treating the Whitcomb Well in West Acton for color.

D. Unexpended balance in the sum of \$1335.02 for the project completed under Article 11 of the Annual Meeting of March 20, 1996 to replace the roof and some cement blocks on the Conant Pumping Station building, located off Main Street (Route 27) in Acton.

UNANIMOUS

Article 7 VOTED that the District transfer from Surplus Revenue the sum of \$100,000 to continue the replacement of current water meters.

UNANIMOUS

Article 8 VOTED that the District transfer from Surplus Revenue the sum of \$30,000 for the purpose of replacing old water mains to the property line and to replace several outdated fire hydrants.

UNANIMOUS

Article 9 VOTED to transfer from Surplus Revenue the sum of \$12,000 to purchase a new compressor and associated tools.

UNANIMOUS

Article 10 VOTED to transfer from Surplus Revenue \$6,000 to purchase various small tools, including but not limited to a 2" trash pump and pavement cutter.

UNANIMOUS

Article 11 VOTED to transfer from Surplus Revenue the sum of \$25,000 to purchase a 4x4 pick-up with plow and utility body and to authorize the Commissioners to trade or sell a 1993 Ford Ranger.

UNANIMOUS

Article 12 VOTED to transfer from Receipts Reserve for Appropriation Account (W>R> Grace settlement) the sum of \$245,000 to supplement the appropriation under Article 13 of the Annual Meeting March 19, 1997 to build a treatment facility for the Clapp and Whitcomb wells.

UNANIMOUS

Article 13 VOTED to appropriate a bond or borrow an amount not to exceed \$80,000 pursuant to M>G>L> c.44, section 8 for all construction costs, legal costs, bond issue expenses, publication expenses and other development costs associated with the new Conant II well and pumping station on property owned by the District located off Main Street (Route 27) in Acton.

UNANIMOUS

Article 14 VOTED to transfer from Surplus Revenue \$25,000 to begin the implementation of SCADA systems to monitor and control water quality and quantity at well sites.

UNANIMOUS

Article 15 VOTED to transfer from Surplus Revenue \$10,000 to replace the vacuum priming systems at Scribner, Marshall and Clapp wells.

UNANIMOUS

Article 16 VOTED to authorize the Commissioners to offer to eligible District employees, as an additional employee benefit, an employer contribution to the current employee retirement plan that matches a certain percentage of the employee contribution and to terminate or change the percentage of the contribution from year to year.

UNANIMOUS

A TRUE COPY ATTEST;

JANE A. CUTLER, CLERK

SPECIAL MEETING OF THE WATER SUPPLY DISTRICT OF ACTON HELD AT 693 MASS. AVENUE, ACTON, MASSACHUSETTS ON MONDAY, DECEMBER 7, 1998. THE MEETING WAS CALLED TO ORDER BY MODERATOR RICHARD O'BRIEN AT 7:00 PM. THE VOTES WERE AS FOLLOWS:

ARTICLE I: VOTED that the District transfer from Surplus Revenue the sum of \$250,000 to purchase and implement a supervisory control and data acquisition system (SCADA) to control and monitor the District's water sources and storage facilities. PASSED UNANIMOUSLY.

ARTICLE II: VOTED that the District transfer from Surplus Revenue the sum of \$60,000 for salaries, wages and benefits for the planned hiring of three (3) new District employees for the balance of fiscal 1999. PASSED UNANIMOUSLY.

ARTICLE III: VOTED that the District transfer from Surplus Revenue the sum of \$5,300 to pay for a preliminary engineering study to evaluate the potential of the Great Hill water storage facility property at 211 Main Street to support a new and larger water storage facility. PASSED UNANIMOUSLY.

ARTICLE IV: VOTED that the District transfer within the Receipt Reserve for Appropriation Account (W.R. Grace Settlement Account) the sum of \$30,000 for the maintenance, operation and power costs at various treatment plants operated by the District. PASSED UNANIMOUSLY.

ARTICLE V: VOTED that the District authorize the Treasurer, with the approval of the Commissioners to transfer to the Surplus Revenue Account the unexpended balance in the sum of \$8,231.79 for project completed under Article 11 of the Annual Meeting of March 31, 1998, which approved the purchase of a new 4 X 4 pick-up truck with plow. PASSED UNANIMOUSLY.

It was voted unanimously to adjourn at 7:15 PM.

A TRUE COPY ATTEST:

WATER MEETING

Abstract of the proceedings of the annual election of
officers of the Water Supply District of Acton:

Tuesday, March 31, 1998

held at the five (5) Precincts of the Town of Acton.
(The polls were open from 7AM to 8PM)

Total number of ballots cast: 2592

Commissioner for 3 years:

Ronald R. Parenti 1935

Moderator for 1 year:

Richard O'Brien 1988

Clerk for 1 year:

Jane A. Cutler 1966

A TRUE COPY ATTEST:


JANE A. CUTLER, CLERK

WATER SUPPLY DISTRICT OF ACTON
RULES, REGULATIONS AND RATES
Amended February 9, 1998

The following Rules and Regulations shall be considered a part of the Contract with every person using the water.

- A. All applications for the use of water are available at the Water District office, 693 Massachusetts Avenue. Demand charge schedule is set forth as follows:

<u>PIPE SIZE</u>	<u>DEMAND CHARGE</u>
1 inch	2520.00
1 1/2 inch	7440.00
2 inch	15840.00
Over 2 inch	20000.00
Multi-dwelling (per apt. or each living unit)	1200.00

SPRINKLER DEMAND CHARGES

Buildings up to 20,000 square feet	500.00
Buildings between 20,000 square feet and 40,000 square feet	1000.00
Buildings between 40,000 square feet and 60,000 square feet	1500.00
Buildings between 60,000 square feet and 80,000 square feet	2000.00
Buildings over 80,000 square feet	2500.00

1. The demand charges are payable prior to meter installation. Pipe size and type of any installation will be determined by the Water Commissioners or their agents. Costs of installation service will be charged to applicant separate of the demand charge. Costs will be paid before the water is turned on.
2. Costs of new service installations from the water main into the unit, including meter, will be paid for by the owner or applicant before water will be turned on.
3. No person will connect, or cause to be connected, any service pipe with the main or any distributing pipes, except by order of the Water Commissioners made on such application for new service. Permanent outside sprinkler system may be installed in conformance with regulations adopted as of September 8, 1997.
4. Periodic inspection of pipes to the meter may be made by the Water District personnel. When equipment is found defective all payment for the necessary repairs between the property line and the meter will be assessed to the owner. Persons allowing their meter to be damaged by frost or otherwise will be held responsible therefore. The District will keep meters in repair from ordinary derangements.
5. All apparatus and all places supplied with water must be accessible at all reasonable times to the inspection of the Commissioners or their agents.

6. Any alteration made to any service within the Acton Water District may only be made by the Acton Water District, or authorized agents of the Water District.
7. The Water District will not in any way, nor under any circumstances, be held liable or responsible to any person or persons for any loss or damage from any excess or deficiency in the pressure, volume or supply of water, due to any cause whatsoever. The Water District will undertake to use all reasonable care and diligence to avoid interruptions and fluctuations in the service, but cannot and does not guarantee that such will not occur.
8. The Water District will not be responsible for damages caused by dirty water resulting from the opening or closing of any gates for repairs or any other reasons, the use of hydrants, or the breaking of any supply lines.
9. The Water District will endeavor to give due notice to as many of the consumers affected as time and character of the work permit whenever it may be necessary to shut off the supply from any section of the District to make repairs or changes or because of broken main, and will as far as practicable, use every effort to prevent damage or inconvenience; but failure to give such notice will not involve the Water District in any responsibility or liability for damage arising from the shutting off of any supply or any subsequent conditions arising therefrom.
10. The Water District reserves the right at any time without notice to shut off the water supply for purpose of making repairs, extensions, or other reasons, and all consumers having boilers or other appliances on their premises are hereby warned against danger of collapse from these sources and are urged to provide safety devices for their own protection. In any event the District expressly stipulates that there shall be no liability for damages resulting therefrom.
11. The Water District will not assume any liability for conditions in the consumer's plumbing or appliances, which may be the cause of trouble, coincident with, or following repairs made to any part for the supply system by the District.
12. Service pipes or fixtures of any description, that are connected with the mains of the Water District, will not under any circumstances be connected with any other sources of water supply.
13. The Water Commissioners, or their agent reserve the right to shut off water for the purpose of making alterations or repairs. A water service may be shut off from any taker for non-compliance with the Rules and Regulations, for non-payment of the water rates and for violation of Massachusetts General Laws relating to water supply. When water has been shut off because of disregard of rules or non-payment of rates it will be turned on again when the Commissioners, or their agent are satisfied that there will be no further cause of complaint and on the payment of twenty-five dollars. With the approval of the Department of Environmental Quality Engineering (Chapter 40, Section 41A of the Massachusetts General Laws), the Commissioners, or their agent reserve the right to restrict the use of water if necessary in any manner deemed appropriate.
14. The fire department will have control of the hydrants in case of fires and for necessary practice. In no other case will any persons be allowed to handle hydrants or other waste apparatus without permission of the Water Commissioners, or their agent.
15. No water taker will be allowed to supply water to others, except by special permit from the Board of Water Commissioners, or their agent and found doing so without a permit, the supply will be shut off.

16. Owners should notify the Water District to shut off water if the building becomes vacant. Water will be turned on again when the owner notifies the Water District, and upon the payment of twenty-five dollars for turn-on.
17. Water bills and repairs of existing services, must be paid in full within 30 days of the billing date. All bills for new installations, including supplies and labor must be paid in full prior to the water service turn-on.
18. The water may be turned off with proper notice when bills for water remain unpaid for fifteen days after they become due, thirty days from the date of issue. Owners of premises will be held responsible for the water bills of their tenants. Unpaid water bills are a lien on real estate, and collections may be made on the sale of the property: Massachusetts Legislature, Acts of 1923, Chapter 391.
19. Any person who shall remove, change, alter or willfully damage or injure any meter will be liable for all damages. Any change in meter location will be done under the direction of the District Manager or authorized District personnel.
20. Voted: That the District amend the By-Laws by adding a new section ten which reads as follows: "Any person violating any order restricting water use imposed by a vote of the Commissioners will be fined not more than \$200.00 for each offense, which will inure to the District for such uses as the Commissioners may direct. Fines will be recovered by the indictment or on a complaint before the District Court, or by non-criminal disposition in accordance with section twenty-one D of Chapter 40 of the General Laws. Every day that such violation continues constitutes a separate offense.
21. The District Manager, or his authorized agent, will be empowered by the Commissioners to confer with the owner to establish the number of units, measured by a given meter, to which the following rate structure will apply. The break points of the inclining block rate structure will then be multiplied by the agreed upon number of units to determine the appropriate charges.
22. Beginning July 1, 1997, the Acton Water District will be issuing two (2) bills per year. Meter reading will begin the first week in September and the first week in March. Bills will be mailed as soon as reading is complete, but no later than the first week in October and the first week in April. All bills will be based upon actual readings and all minimum charges have been eliminated. The following inclining block rate structure has been adopted, and will go into effect immediately following the final billing cycle under the old system which will be completed in April of 1997.

0 -	500 cu. ft.	billed at	.015 pr cu. ft.
501 -	5000 cu. ft.	billed at	.022 pr cu. ft.
5001 -	10000 cu. ft.	billed at	.024 pr cu. ft.
10001 -	and up cu. ft.	billed at	.025 pr cu. Ft.

All owners having used less than 100 cubic feet of water will be billed at the next actual water billing cycle.

There is a minimum charge of \$5.00 for closing costs on property transfers where there has been no water use from the date of the last actual water bill.

Water rates, demand charges, rental fees, hydrants and sprinklers and other charges imposed by the District will be determined by vote of the Commissioners at a regular or special meeting of the Commissioners.

23. If a meter is out of order and fails to register, the consumer will be charged at the average daily consumption as shown by the meter when in order. An average will be taken of the last three (3) corresponding readings.
24. Any and all penalties for violations of these regulations or arrearages for non-payment of water rates or charges may be collected as authorized by law in a civil action.
25. The Commissioners will regulate the use of water in such manner as they deem for the best interest of the District, fix and collect prices and rates for the use thereof, prescribe the time and manner of the payment of such prices and rates. The Commissioners will have exclusive charge and control of the water department and water system, subject to all lawful by-laws, and subject to such instructions as the District may from time to time impose by its vote.
26. The Water District will have an inspector on sites where new water main and necessary fittings are installed in new developments, private roads, business and commercial sites. The Water District will charge an hourly fee which will be paid to the Water District by the owner, contractor or developer. All materials used will meet the specifications of the Water Supply District of Acton.
27. No person will turn on or tamper with a water main or hydrant or other device used for water supply. Any person violating said section will be fined not more than \$200.00 for each offense, which will inure to the District or recovered by indictment or on complaint before the District Court or by non-criminal disposition in accordance with Section 21D of Chapter 40 of the General Laws. Every day that such violation continues will constitute a separate offense. This section will not curtail the fire department or Water District in the normal course of providing fire protection or water supply.
28. Any person making application for water use having a design demand in excess of 5,000 gallons per day, will submit a concept plan with sufficient information so that the Water District can generate a Water Impact Report. This report will: 1) define the plans impact on the District's current/future water demand and existing water supply system, and 2) stipulate conditions that the applicant will meet to mitigate the effects of this impact. The Water Impact Report will be reviewed and approved by the Water Commissioners. Costs associated with generating the Water Impact Report will be borne by the applicant.
29. All new Industrial and Commercial Establishments attached to the Acton Water System may be required to install, at the service entrance and immediately downstream of the meter, a Reduced Pressure (RP) Back Flow Device. A survey of the new industrial or commercial establishment will determine the need for said device. The device must be approved by the Acton Water District, and all costs will be paid by the owner/s, and or the person/s to whom the bills are so assigned.
30. Effective September 8, 1997, the Board of Water Commissioners voted to remove the moratorium on underground lawn sprinkler systems.
31. Underground Lawn Sprinkler Regulations Effective September 8, 1997
 - i. All automatic lawn watering systems, connected to the public water supply, must be equipped with a timing device that can be set to make the system conform to the District's odd/even outdoor watering restrictions.
 - ii. All automatic lawn watering systems must be equipped with some type of moisture sensing device that will prevent the system from starting automatically when not needed.

- iii. All automatic lawn watering systems must be installed with an approved backflow prevention device (Watts 800 or equal). Said device will be inspected initially by the plumbing inspector, and may be inspected periodically after that by water district employees.
 - iv. Any person who now has, or who intends to install an automatic lawn watering system, must notify the Water District office of the existence of said system, or of their intention to install a new system prior to the actual installation. All systems, those currently in existence, as well as any installed in the future, must comply with all the Rules and Regulations adopted on this date.
 - v. Any system not in conformance with the above criteria may be disconnected from the public water supply system.
32. Any new water service or fire line from the water main to a dwelling, building or structure will be in a separate, underground trench. No other utility (i.e., gas, electric, telephone, cable TV) will be in the same trench unless the District Manager determines that the ground conditions prevent a separate trench. In such cases, a suitable plan prepared by a registered professional engineer will be submitted to the District Manager and DigSafe for approval to insure safety and accessibility for repair, replacement or inspection of the lines located in the same trench.
33. Insufficient fund checks will be charged as provided by Section 44 of Chapter 69, Massachusetts General Laws, and the "Rules and Regulations" of the District as adopted December 12, 1994.

By Order of The Acton Water Commissioners
Leonard A. Phillips, Chairman
Stephen C. Stuntz
Ronald R. Parenti

WATER FILTERS

The Acton Water District has adopted a guideline concerning the public use of filter devices on the water supply system. This is based on a general policy promulgated by the D.E.Q.E. (DWS Policy 88-07), advising water purveyors to prohibit the use of such devices on the drinking water supply. Although properly designed barrier filters have proven effective on screening contaminants out of influent streams, concern exists regarding an efficiently implemented maintenance program to assure successful and continued operation. A clogged or abused water filter could foster potential conditions for bacteria to thrive, thus contributing to in-line contamination of the drinking water supply.

WATER FILTER GUIDELINES

The Water Supply District of Acton prohibits the installation by public water consumers of any device in the domestic water supply, including, but not limited to Point of Entry or Point of Use filters that are utilized within the confines of the consumer's premises. Regulatory Agencies, including the Department of Environmental Quality Engineering and the Department of Health are not recommending these systems for utilization in the drinking water supply system. Such devices are considered potentially deleterious to Public Health, because they promote the proliferation of bacterial and viral growth and development.

UNDERGROUND LAWN SPRINKLER REGULATIONS EFFECTIVE SEPTEMBER 8, 1997

1. All automatic lawn watering systems, connected to the public water supply, must be equipped with a timing device that can be set to make the system conform to the District's odd/even outdoor watering restrictions.
2. All automatic lawn watering systems must be equipped with some type of moisture sensing device that will prevent the system from starting automatically when not needed.
3. All automatic lawn watering systems must be installed with an approved backflow prevention device (Watts 800 or equal). Said device will be inspected initially by the plumbing inspector, and may be inspected periodically after that by water district employees.
4. Any person who now has, or who intends to install an automatic lawn watering system, must notify the Water District office of the existence of said system, or of their intention to install a new system prior to the actual installation. All systems, those currently in existence, as well as any installed in the future, must comply with all the Rules and Regulations adopted on this date.
5. Any system not in conformance with the above criteria may be disconnected from the public water supply system.

**BY-LAWS TO REGULATE THE NOMINATION AND
ELECTION OF OFFICERS OF THE DISTRICT**

- i The purpose of the By-Laws hereinafter set forth are to regulate the nomination and election of officers for the District so that the voters of the District may have knowledge of the candidate prior to an election.
- ii All elections to any office in the District shall be by means of a printed ballot. This ballot shall be caused to be printed by the Commissioners acting as election officers from information furnished to them by the Clerk of the District as provided hereinafter.
- iii No person's name shall be printed on the ballot unless he or someone on his behalf has submitted nomination papers signed by fifty registered voters of the District, setting forth the office for which he is a candidate and containing a statement signed by the candidate that he will accept the office, if elected. Nomination papers of a candidate for office of the District shall be filed with the Clerk of the District in accordance with Chapter 53, Section 10 of General Laws, Submission to the Registrar of Voters shall be in accordance with Chapter 41, Section 115 of the General laws.
- iv Nothing herein shall be construed as preventing a vote by stickers or writing in the name of a candidate, all as provided in the General Laws, except that not such sticker or write-in candidate shall be deemed to be elected unless he has received valid votes equivalent to 1% of the total of the number of registered voters in the District, as hereinafter determined.
- v The Commissioners, acting as election officers, shall prepare as of twenty (20) days prior to the Annual Election, a list of eligible voters from the official voting list of the Town of Acton as of that time. This list will remain closed until after the Annual Meeting of the District. The list will then be reviewed and revised for all subsequent Special Meetings, up to the day of the Special Meeting. These lists will then be used to determine the right of any person to vote at any election or any meeting of the District.
- vi All candidates elected to offices in the District will be sworn to the performance of their duties by the Clerk of the District, except in the case of the Clerk, who will be sworn by any of the Commissioners. The Clerk will record the facts in the minutes of the meeting.
- vii Elections and Nominations of District officers will be conducted in accordance with chapters fifty-six, inclusive, of the General Laws so far as applicable, except as otherwise provided in sections one hundred and fourteen to one hundred and seventeen of Chapter 41 of the General Laws, inclusive, and except as otherwise provided by the District By-Law.

BY-LAWS
(as adopted and amended to March, 1994)

- i The Annual Meeting of the Water Supply District will be held on the third Wednesday of March, of each year for the transaction of the necessary business connected with the District, and Election of Officers will be held on the last Tuesday of March of each year. The time and place of holding such election and vote shall be stated in the warrant for the Annual Meeting and such election and vote shall will deemed part of the Annual District Meeting.
- ii All meetings may be called by a majority of the Board of Water Commissioners, directed to the Clerk, or as specified in Chapter 326 of the Acts of 1912, Section 8.
- iii All warrants shall be posted at least fourteen (14) days before the time of the meeting.
- iv The Clerk will preside at each meeting until a Moderator is chosen.
- v At each Annual Election Day there will be elected by ballot, one Commissioner for a term of three years, a Clerk and a Moderator who will serve for one year.
- vi If a vacancy should occur for any cause in the office of Clerk, Treasurer, or any other officer of the District except the Board of Water Commissioners, it may be filled for any such unexpired term by the Water Commissioners.
- vii The Board of Commissioners will annually in the report of the District, give an estimated budget for the ensuing year.
- viii
 - a) The Moderator will appoint a Finance Committee to advise the Commissioners. The Committee will consist of three voters of the District and will be appointed in the following manner:
 - One member will be appointed for one year;
 - One member will be appointed for two years; and
 - One member will be appointed for a term of three years.

Thereafter, each appointment will be for a term of three years.
 - b) No member of the Finance Committee may serve any other standing committee of the District or the Town of Acton having to do with expenditure of funds.
 - c) The Finance Committee will review the budget for the Annual Meeting and will make recommendations to the Commissioners on any matters of a financial nature arising out of an Annual or Special Meeting, and will make recommendations as to the long range fiscal plans of the District.
- ix The Commissioners will appoint annually a Treasurer/Collector, which office will have all the powers and duties conferred by law upon a Collector of Taxes and District Treasurer.
- x Any person violating any order restricting water use imposed by vote of the Commissioners will be fined not more than \$200.00 for each offense, which will inure to the District for such uses as the Commissioners may direct. Fines will be recovered by indictment or on a complaint before a District Court, or by non-criminal disposition in accordance with section Twenty-one D of Chapter 40 of the General Laws. Every day that such violation continues will constitute a separate offense.

- xi a) A five member Water-Land Management Advisory Committee is hereby established. Two members to be appointed by the Commissioners for a term of three years, two members to be appointed by the Moderator of the District for a term of two years, one member to be appointed by the Selectmen for a term of one year. Thereafter, each appointment will be for a term of three years.
- b) The Advisory Committee will review and make recommendations to the Commissioners on matters relating to water and land management policies of the District, and will make recommendations to the Commissioners on any matter relating to agreement authorized under the "By-Law to Regulate the Removal of Sale, of Sand and Gravel, from Lands in District Use", and will undertake such other tasks related to water and land management as the Commissioners deem appropriate.
- xii No person will turn on or tamper with a water main or hydrant or other device used for water supply or install a bypass around a water meter without first procuring a written permit to do so from the Manager of the Water District. Any person violating said section will be fined not more than \$200.00 for each offense, which will inure to the District for such uses as the Commissioners may direct. Fines will be recovered by the indictment, on complaint before the District Court, or by non-criminal disposition in accordance with Section 21D of Chapter 40 of the General Laws. Every day that such violation continues will constitute a separate offense. This section will not curtail the fire department or Water District in the normal course of providing fire protection or water supply.
- xiii a) No person will maintain upon premises which they own or occupy, a physical cross connection between distribution system of a public water supply, the water which is being used for drinking, domestic, or culinary purposes, and the distribution system of any unapproved water supply, unless the installation has been reviewed and approved by the Water District and permits have been issued in accordance with the Drinking Water Regulations of the Department of Environmental Quality Engineering.
- b) That the Water District will have the authority to terminate any water source to any facility where cross connections are maintained without required backflow prevention devices which have been approved by the District.
- c) That the Commissioners will enact such Cross Connection Control Program and Regulations as are necessary to protect the public potable water supply served by the District from the possibility of contamination or pollution by isolating within its customer's internal distribution system, such contaminants or pollutants which could backflow or back-siphon into the public water system; and to promote the elimination or control of existing cross connections between its customers; in-plant potable water system, and non-potable water system; and to provide for maintenance of a continuing program of cross connection control which will effectively prevent the contamination or pollution of all potable water systems by cross connection.
- xiv The District authorizes the Commissioners to establish quarterly due dates for payment of water charges and bills, and authorizes the Commissioners to fix a rate of interest which shall accrue if such charges or bills remain unpaid after such due rates, provided, however, such rate of interest may not exceed the rate of interest which may be charged on tax bills under the provision of Section 57 of Chapter 59, Massachusetts General Laws, as amended.
- xv Section 1 - Authority:
- This By-Law is adopted by the District under Chapter 326 of the Acts of 1912, its police powers to protect public health and welfare and its specific authorization under Massachusetts General Laws Ch. 41, Section 69B: Ch. 40 Section 41A.
- Section 2 - Purpose:

The purpose of this By-Law is to protect, preserve, and maintain the public health, safety and welfare whenever there is a state of water supply emergency in force, by providing for enforcement of any duty imposed restrictions, requirements, provisions or conditions imposed by the District or by the Department and included in the District's plan approved by the Department of Environmental Protection to abate the emergency.

Section 3 - Definitions:

For the purpose of the By-Law: Enforcement authority will mean the District's Board of Water Commissioners having the responsibility for the operation and maintenance of the water supply; the Town police, special police, and any other locally designed body having police powers.

State of water supply emergency means a state of water supply emergency declared by the Department of Environmental Protection pursuant to G.L.c.21G, Section 15, 16, 17:G.L.c111, Section 160, or by the Governor.

Section 4 -

The following applies to all users of water supplied by the District. Following notification by the District of the existence of a state of water restriction included in a plan approved by the Department of Environmental Protection which has as its purpose the abatement of a water supply emergency. Notification of any provision, restriction, requirement, or condition with which users of water supplied by the District are required to comply to abate a situation of water emergency will be sufficient for purposes of this By-Law if it is published in a newspaper of general circulation within the Town of Acton or by such users of the District Supply.

Section 5 - Penalty:

Any person or entity who violates this By-Law, shall be liable to the District in the amount of \$50.00 for the first violation and \$100.00 for each subsequent violation which will inure to the District for such uses as the Board of Water Commissioners may direct. Fines will be recovered by indictment or on complaint before the District court, or by non-criminal disposition in accordance with Section 21D of Chapter 40 of the General Laws. Each separate instance of noncompliance following the issuance of any warning or citation pursuant to this section shall constitute a separate violation.

Section 6 - Right of Entry:

Agents of the enforcement authority may enter any property, except the interior of a domicile, for the purpose of inspection or investigating any violation of the By-Law or enforcing against the same.

Section 7 - Severability:

The invalidity of any portion or provision of this By-Law shall not invalidate any other portion, provision or section hereof.

xvi By-Law to Regulate Underground Water Sprinklers

a) No person shall install, repair, replace, or alter a permanent outdoor underground water sprinkler connected to the public water supply except as provided by this By-Law.

b) Applications to the District for the installation and use of permanent outdoor underground lawn sprinklers will be signed by the owner(s) of the premises where it is desired, or by a duly authorized agent, and will be made in writing. The application will contain such information as shall be prescribed by the Commissioners.

c) The Commissioners will make such rules and regulations relating to the installation, repair, maintenance, replacement or alteration of permanent outdoor underground lawn sprinklers, which rules and regulations may specifically prohibit the installation of same, or may regulate such maintenance replacement or alteration; and may provide for design criteria which includes, but are not limited to, rain gauges, automatic timers, back-flow devices, shut-off devices, electric controls, and the like, and will include fees to be paid to the District by the applicant or owner.

d) The Commissioners will have the authority and the duty to adopt, issue and administer rules and regulations, for the administration and operation of permanent outdoor underground lawn sprinklers connected to the public water supply.

e) No permit granted prior to the effective date of this By-Law will be deemed invalid because of having been granted either by the Board of Health of the Town of Acton, or the District Manager, or both; provided, however, it will be the responsibility of the owner(s) to produce written evidence of the same. Any permanent underground water sprinkler legally installed prior to the effective date of this By-Law which becomes defective or requires replacement or repair will be subject to this By-Law and the rules and regulations adopted by the Commissioners from time to time.

f) If the Commissioners find that any provision of this By-Law is being violated, the Commissioners will notify in writing the person(s) deemed responsible for such violation, indicating the nature of the violation, and ordering the necessary to correct it.

g) Any person violating this By-Law will be fined not more than \$200.00 for each offense, which will inure to the District for such uses as the Commissioners may direct. Fines will be recovered by indictment or on complaint before the District Court or by non-criminal disposition in accordance with 21D of Chapter 40 of the General Laws. Every day that such violation continues will constitute a separate offense. This section will not curtail the Board of Health or Plumbing Inspector, Town of Acton, from seeking enforcement under other applicable provisions of law.

h) The provisions of this By-Law, as amended from time to time, are separable. If any provisions of the By-Law, or any amendments thereto, is held invalid, the other provisions of the By-Law will not be affected thereby. If the applicant of such provision, or any amendments thereto, is held invalid the applications of such provision to other person and circumstance will be affected thereby.

xvii Addition to By-Laws

The owner of property supplied will be charged for all water furnished to the premises during ownership of the premises. When ownership changes, the name and mailing address of the new owner will be given to the Treasurer/Collector of the District, at once, so that bills may be properly rendered.

The property owner must keep the water meter on the premises easily accessible for reading at all times, and will not tamper with the meter in any way. Each ownership must be separately served and metered so that each water user can be denied water service without disrupting service to other owners.

All new construction will require separate service lines and meters.

xviii By-Law as amended March 16, 1994 (Article 28)

Section One:

By-Law to reduce the local daily and seasonal peak water use.

Section Two:

The purpose of this By-Law is to implement a number of water efficiency and conservation measures and by so doing provide reductions in overall demand in the District's service area. The goal is to achieve maximum water efficiency in the local public water system, domestic and non-domestic users. The overall objectives are:

- a) To make water conservation a priority in all water related decision making at the local level.
- b) To reduce or eliminate the waste of water through appropriate water supply management practices.
- c) To promote conservation of all water resources by all consumers through the introduction of technology, methods and procedures designed to increase the efficient use of water.
- d) To encourage innovations in technology, policy and management.
- e) To maximize the efficient use of existing supplies prior to allocating additional resources.
- f) To promote public awareness of the long term economic environmental benefits of conserving water by implementing practical measures within the District's service area.
- g) To monitor consumption and facilitate accurate annual billing of users and collection of water rates.

Section Three:

Definition:

For the purpose of this By-Law: Enforcement authority will mean the District's Board of Water Commissioners, or District Manager, having the responsibility for the operation and maintenance of the water supply; the Town police, special police and other locally designated bodies having police powers.

Section Four:

- a) The following applies to all users of water supplied by the District. Following appropriate notification of the District of the necessity to impose water restrictions, including, but not limited to, regulating the outside use of water for any purpose, the Commissioner may impose restrictions by a vote of the Commissioners at a regular or special meeting of the Board.
- b) Notification of any restriction, requirement or condition to conserve water will be sufficient for the purpose of this By-Law if it is published in a newspaper of general circulation within the Town of Acton, or by such other notice as is reasonably calculated to reach and inform users of the District's supply.

Upon notification to the water takers, violators will be subject to lawful order of the Commissioners, including, but not limited to, shutting off the water meter or at the curb cock, or by other means as the case may be, during drought, hurricane, conflagration or other disaster which in the opinion of the Commissioner's may exist.

Section Five:

Penalty:

Any person or entity who violates this By-Law, or order or notification, will be liable to the District in the amount of \$300.00 which will inure to the District for such use as the Commissioners may direct. Fines will be recovered by indictment or upon complaint before the District Court or by non-criminal disposition in accordance with Section 21D of Chapter 40 of the General Laws as amended. Each separate instance of non-compliance following issuance of a warning or citation pursuant to this section will constitute a separate violation.

Section Six:

Permanent Orders of the Commissioners:

Unless discontinued, or modified, in whole or in part, the following orders will be considered in effect as of March 16, 1994:

- a) Outside use of water will be restricted between May 1st and October 1st each year on such terms as the Commissioners may determine.
- b) All final water bills requested by owners, purchasers, or others, serviced by the District's authorized personnel will require an inside meter reading by authorized District personnel.

Section Seven:

Right of Entry:

Except as provided in Section 6(b), Agents of the enforcement authority may enter any property, except the interior of a domicile, for the purpose of inspecting or investigating any violation of the By-Law or enforcing against the same.

Section Eight:

Severability:

The invalidity of any portion or provision of the By-Law will not invalidate any other portion, provision or section thereof.

xix Regulate the Removal and Sale of Sand and Gravel from Lands in District Use

Section 1. The purpose of this By-Law is to regulate the removal of sand and gravel on lands owned or leased by the District so as to promote safe and sound economic development, improvement and management of said land; and protect and preserve the purity of the water supply, wells and aquifers.

Section 2. The Commissioners will fix a reasonable time for a public hearing on any proposal for removal and sale of sand and gravel from land in District use. Notice of the public hearing will be given at least two weeks prior to the hearing in a local newspaper, and by mailing a copy of said notice to the owners of all property within five hundred (500) feet of the property line of the District land as they appear on the most recent applicable tax list. Included in the list of owners shall be abutters, owners of land directly opposite on any public or private street, and abutters to abutters within the five hundred (500) feet aforesaid.

The public hearing will be held no later than 21 days prior to the business meeting of the District which includes an appropriate warrant article for action by voters of the District. Action by voters of the District on any article permitting the Commissioners to enter into a written contract for removal and/or sale of earth materials from lands of the District shall require a two-thirds vote. At the public hearing the Commissioners will present evidence of the need for excavation; a site specific map of wetlands,

limits of 100 year flood plain, vegetation, surface waters, topography (before and after), property lines and adjacent land uses; and estimation of high water table on the land.

Section 3. In entering into a written contract not to exceed one year, the Commissioners will impose conditions and specifications including but not limited to the following:

- A. A detailed plan showing limits and phases of excavation.
- B. Specific and reasonable hours of operation, including truck arrival and departure.
- C. Required stockpiling of topsoil for use in restoration.
- D. Prohibition of excavation within 10 feet of the annual high water table.
- E. Prohibition of removal within 100 feet of property lines and existing public ways.
- F. Limitation of work faces to 10 vertical feet and requirement that all faces will be broken down to their natural angle of repose at the end of each working day. Any existing non-complying faces will be reduced as fast as safety and practical engineering permit.
- G. Maintenance of natural vegetation on undisturbed land for screening and noise reduction purposes, and provision for dust suppression on the site.
- H. A requirement that restoration be carried on simultaneously with excavation, so that when any three acres operation area has been excavated, at least two acres will be restored before work commences on the next contiguous three acres, so that at no time, will anymore than four acres be unrestored.
- I. Provisions to grade slopes safely, loam and revegetate all disturbed areas.
- J. Removal of debris, stumps, boulders, etc. from the site and dispose of in an approved location or in the case of inorganic matter, buried and covered with at least two feet of soil.
- K. A requirement that all retained subsoil and topsoil be spread over the disturbed area and seeded. Trees or shrubs of prescribed species will be planted to provide screening and reduce erosion during the establishment period.
- L. A requirement that final restoration work be completed within 60 days, weather permitting, after completion of excavation operations.
- M. A requirement of posting of surety bond, performance and payment bond, or other adequate security to insure compliance with terms of the contract.
- N. Regular inspection by the Commissioners or their agent at reasonable hour to insure that contract provisions are being adhered to, and provision for halting operation for any violation.
- O. Other appropriate conditions, limitations and safeguards as the Commissioners deem necessary for the protection of the public health, safety, convenience and welfare, and for protection and preservation of the purity of the water.

**REGULATIONS
FOR THE
CONTROL OF BACKFLOW AND CROSS-CONNECTIONS
WATER SUPPLY DISTRICT OF ACTON
JUNE 11, 1990**

SECTION 1. CROSS-CONNECTION CONTROL AUTHORITY

As provided in the Federal Safe Drinking Water Act of 1974 (Public Law 93-523); and under the provisions of Massachusetts General Laws, Chapter 41, Section 69B; Massachusetts Drinking Water, Regulations, 310 C.M.R., Section 22.22; and Section 13, of the By-Laws of the Water Supply District of Acton, the water purveyor, has the primary control and responsibility for preventing water from unapproved sources, or any substances, from entering the public potable water system. The said Water Supply District of Protection, "As Corrected", is acting as the Department's designee as provided in 310 C.M.R., Section 22.22.

SECTION 2. CROSS-CONNECTION CONTROL - GENERAL POLICY

2.1 **Purpose** The purpose of this regulation is:

2.1.1 To protect the public potable water supply of the area served by the Water Supply District of Acton (hereinafter referred to as Water Supply District) from the possibility of contamination or pollution by isolating within its customer's internal distribution system(s) or its customer's private water system(s) such contaminants or pollutants which could backflow or backsiphon into the public water supply system; and

2.1.2 To promote the elimination or control of existing cross-connections, actual or potential, between its customer's in-plant potable water system(s) and nonpotable systems, plumbing fixtures and industrial piping systems; and

2.1.3 To provide for the maintenance of a continuing program of cross-connection control which will systematically and effectively prevent the contamination or pollution of all potable water systems by cross-connection.

2.2 **Responsibility** The Manager of the Water Supply District of Acton (hereinafter referred to as District Manager) will be responsible for the protection of the public potable water distribution system from contamination or pollution due to the backflow or backsiphonage of contaminants or pollutants through the water service connection. If, in the judgement of said District Manager an approved backflow prevention device is required, at the District's water service connection to any customer's premises, for the safety of the water system, the District Manager or his designated agent will give notice in writing to said customer to install such an approved backflow prevention device at each service connection to his premises. The customer will, within 30 days, install such approved device or devices at his own expense, and failure, refusal or inability on the part of the customer to install said device or devices within 30 days constitutes grounds for discontinuing water service to the premises until such device or devices have been properly installed.

SECTION 3. DEFINITIONS

3.1 **District Manager** The District Manager, or his designated agent, in charge of Water District is invested with the authority and responsibility for the implementation of an effective cross-connection control program and for the enforcement of the provisions of this ordinance.

3.2 **Approved** Accepted by the District Manager as meeting an applicable specification stated or cited in this regulation, or as suitable for the proposed use.

3.3 **Auxiliary Water Supply** Any water supply on or available to the premises other than

the purveyor's approved public potable water supply.

3.4 **Backflow** The flow of water or other liquids, mixtures, or substances under pressure into the distributing pipes of a potable water supply system from any source or sources other than its intended source.

3.5 **Back-siphonage** The flow of water or other liquids, mixtures, or substances into the distribution pipes of a potable water supply system from any source other than its intended source caused by the sudden reduction of pressure in the potable water supply system.

3.6 **Backflow Preventer** A device or means designed to prevent backflow or siphonage.

3.6.1 **Air-Gap** The unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, or other device and the flood rim of said vessel. An approved air-gap shall be as required by Water District standards.

3.6.2 **Reduced Pressure Principle Device** An assembly of two independently operating approved check valves with an automatically operating differential relief valve between the two check valves, tightly closing shut-off valves on either side of the check valves, plus properly located test cocks for the testing of the check and relief valves.

3.6.3 **Double Check Valve Assembly** An assembly of two independently operating approved check valves with tightly closing shut-off valves on each side of the check valves, plus properly located test cocks for the testing of each check valve.

3.6.4 **Pressure Vacuum Breaker** A device containing one or two independently loaded check valves and an independently operating loaded air inlet valve located on the discharge side of the check or checks.

3.7 **Contamination** Means an impairment of the quality of the potable water by sewage, industrial fluids or waste liquids, compounds or other materials to a degree which creates an actual hazard to the public health through poisoning or other serious health effects or otherwise be hazardous to the health and safety, or through the spread of disease.

3.8 **Cross-Connection** Any physical connection or arrangement of piping or fixtures between two otherwise separate piping systems one of which contains potable water and the other non-potable water, or industrial fluids of questionable safety, through which, or because of which, backflow or back-siphonage may occur into the potable water system.

3.9 **Cross-Connections - Controlled** A connection between a potable water system and a non-potable water system with an approved backflow prevention device properly installed that will continuously afford the protection commensurate with the degree of hazard.

3.10 **Cross-Connection Control by Containment** The installation of any approved backflow prevention device at the water service connection to any customer's premises, or the installation of an approved backflow prevention device on the service line leading to and supplying a portion of a customer's water system where there are actual or potential cross-connections which cannot be effectively eliminated or controlled at the point of cross-connection.

3.11 **Hazard, Degree of** The term is derived from an evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water system.

3.11.1 **Hazard - Health (High Hazard)** Any condition, device, or practice in the water supply system and its operation which could create, or, in the judgement of the Water District Manager, may create a danger to the health and well being of the water consumer.

3.11.2 **Hazard - Plumbing (High Hazard)** A plumbing type cross-connection in a consumer's potable water system that has not been properly protected by a vacuum breaker, air-gap separation or backflow prevention device. Unprotected plumbing type cross-connections are considered to be a health hazard.

3.11.3 **Hazard - Pollution (Low Hazard)** An actual or potential threat to physical properties of the water system or to the potability of the public or the consumer's potable water system, but which would constitute a nuisance or be aesthetically objectionable, or could cause damage to the system or its appurtenances, but would not be dangerous to health.

3.12 **Industrial Fluids System** Any system containing a fluid or solution which may be chemically biologically, or otherwise contaminated or polluted in a form or concentration such as would constitute a health, system, pollutional or plumbing hazard if introduced into an approved water supply.

3.13 **Pollution** Means the presence of any foreign substance (organic, inorganic, or biological) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health, but which does adversely and unreasonably affect such waters for domestic use.

3.14 **Water - Potable** Water from a source which has been approved by the Massachusetts Water Supply and Pollution Control Commission for human consumption.

3.15 **Water - Non-Potable** Water which is not safe for human consumption, or which is of questionable potability.

3.16 **Water - Service Connections** The terminal end of a service connection from the public potable water system; i.e., where the water purveyor loses jurisdiction and sanitary control over the water at its point of delivery to the customer's water system. If a meter is installed at the end of the service connection, then the service connection will mean the downstream end of the water. Service connection shall also include water service connection from a fire hydrant and all other temporary or emergency water service connections from the public potable water system.

3.17 **Water - Used** Any water supplied by a water purveyor from a public potable water system to a consumer's water system after it has passed through the point of delivery, and is no longer under the sanitary control of the water purveyor.

SECTION 4. REQUIREMENTS

4.1 Water System

4.1.1 The water system will be considered as made up of two parts; the utility system and the customer system.

4.1.2 Utility system shall consist of the source facilities and the distribution system; and will include all those facilities of the water system under the complete control of the utility, up to the point where the customer's system begins.

4.1.3 The source will include all components of the facilities utilized in the production treatment, storage, and delivery of water to the distribution system.

4.1.4 The distribution system will include the network of conduits used for the delivery of water from the source to the customer's system.

4.1.5 The customer's system will include those parts of the distribution system which provide domestic drinking water to all internal areas of the customer's facilities. The customer's system begins at the end of the Water District's distribution providing potable water.

4.2 Policy

4.2.1 No water service connection to any premises will be installed or maintained by the Water

District unless the water supply is protected as required by Massachusetts State Law, and this regulation. Service of water to any premises will be discontinued by the Water District if a backflow prevention device required by this regulation is not installed, tested and maintained, or if it is found that a backflow prevention device has been removed, by-passed, or if an unprotected cross-connection exists on the premises. Service will not be restored until such conditions or defects are corrected.

4.2.2 The customer's system should be open for inspection at all reasonable times to authorized representatives of the Water District to determine whether cross-connections or other structural or sanitary hazards, including violations of this regulation exist. When such a condition becomes known, the District Manager shall deny or immediately discontinue service to the premises by providing for a physical break in the service line until the customer has corrected the condition(s) in conformance with state and local statutes relating to plumbing and water supplies and the regulations adopted pursuant thereto. All expenses relating to the disconnection and reconnection will be at the customer's expense.

4.2.3 An approved backflow prevention device where required in accordance with Section 2.2 above, will be installed on each service line to a customer's water system at or near the property line or immediately inside the building being served; but, in all cases, before the first branch line leading off the service line wherever the following conditions exist:

4.2.3A In the case of premises having an auxiliary water supply which is not or may be of safe bacteriological or chemical quality and which is not acceptable as an additional source by the Water District or Department of Environmental Protection, or the Acton Board of Health, the public water system will be protected against backflow from the premises by installing a backflow prevention device in the service line appropriate to the degree of hazard.

4.2.3B In the case of premises on which any industrial fluids or any other objectionable substance is handled in such a fashion as to create an actual or potential hazard to the public water system, the public water system will be protected against backflow from the premises by installing a backflow prevention device in the service line appropriate to the degree of hazard.

4.2.3C In the case of premises having (1) internal cross-connection that cannot be permanently corrected and controlled or (2) intricate plumbing and piping arrangements, or where entry to all portions of the premises is not readily accessible for inspection purposes, making it impracticable or impossible to ascertain whether or not dangerous cross-connections exist, the public water system will be protected against backflow from the premises by installing a backflow device in the service line.

4.2.4 The type of protective device required under subsections 4.23A, B, C will depend upon the degree of hazard which exists as follows:

4.2.4A In the case of any premises where there is an auxiliary water supply as stated in subsection 4.23A of this section; or

4.2.4B Where there is any material dangerous to health which is handled in a fashion as to create an actual or potential hazard to the water system; or

4.2.4C Where there are "uncontrolled" cross-connections, either actual or potential, the public water system will be protected by an approved air-gap separation or an approved reduced pressure principal backflow prevention device at the service connector.

4.2.4D In the case of any premises where there is water or substance that would be objectionable but not hazardous to health, if introduced into the public water system, the public water

4.2 Policy

4.2.1 No water service connection to any premises will be installed or maintained by the Water District unless the water supply is protected as required by Massachusetts State Law, and this regulation. Service of water to any premises will be discontinued by the Water District if a backflow prevention device required by this regulation is not installed, tested and maintained, or if it is found that a backflow prevention device has been removed, by-passed, or if an unprotected cross-connection exists on the premises. Service will not be restored until such conditions or defects are corrected.

4.2.2 The customer's system should be open for inspection at all reasonable times to authorized representatives of the Water District to determine whether cross-connections or other structural or sanitary hazards, including violations of this regulation exist. When such a condition becomes known, the District Manager shall deny or immediately discontinue service to the premises by providing for a physical break in the service line until the customer has corrected the condition(s) in conformance with state and local statutes relating to plumbing and water supplies and the regulations adopted pursuant thereto. All expenses relating to the disconnection and reconnection will be at the customer's expense.

4.2.3 An approved backflow prevention device where required in accordance with Section 2.2 above, will be installed on each service line to a customer's water system at or near the property line or immediately inside the building being served; but, in all cases, before the first branch line leading off the service line wherever the following conditions exist:

4.2.3A In the case of premises having an auxiliary water supply which is not or may be of safe bacteriological or chemical quality and which is not acceptable as an additional source by the Water District or Department of Environmental Protection, or the Acton Board of Health, the public water system will be protected against backflow from the premises by installing a backflow prevention device in the service line appropriate to the degree of hazard.

4.2.3B In the case of premises on which any industrial fluids or any other objectionable substance is handled in such a fashion as to create an actual or potential hazard to the public water system, the public water system will be protected against backflow from the premises by installing a backflow prevention device in the service line appropriate to the degree of hazard.

4.2.3C In the case of premises having (1) internal cross-connection that cannot be permanently corrected and controlled or (2) intricate plumbing and piping arrangements, or where entry to all portions of the premises is not readily accessible for inspection purposes, making it impracticable or impossible to ascertain whether or not dangerous cross-connections exist, the public water system will be protected against backflow from the premises by installing a backflow device in the service line.

4.2.4 The type of protective device required under subsections 4.2.3A, B, C will depend upon the degree of hazard which exists as follows:

4.2.4A In the case of any premises where there is an auxiliary water supply as stated in subsection 4.2.3A of this section; or

4.2.4B Where there is any material dangerous to health which is handled in a fashion as to create an actual or potential hazard to the water system; or

4.2.4C Where there are "uncontrolled" cross-connections, either actual or potential, the public water system will be protected by an approved air-gap separation or an approved reduced pressure principal backflow prevention device at the service connector.

4.2.4D In the case of any premises where there is water or substance that would be objectionable but not hazardous to health, if introduced into the public water system, the public water system will be protected by an approved double check valve assembly.

4.2.4E In the case of any premises where, because of security requirements or other prohibitions or restrictions, it is impossible or impractical to make a complete implant cross-connection survey, the public water system will be protected against backflow or back-siphonage from the premises by the installation of a back-flow prevention device in the service line. In this case, maximum protection will be required; that is, an approved air-gap separation or an approved reduced pressure principle backflow prevention device will be installed in each service to the premises.

4.2.5 Any backflow prevention device required herein will be of a mode and size approved by the District Manager. The term "approved backflow prevention device" will mean a device that is on the "approved list of backflow preventers and double check valves" as described in the Drinking Water Regulations of Mass., (310 C.M.R., 22.22) Department of Environmental Protection, as the same may be amended from time to time. Said approval lists have been adopted by the District Manager.

4.2.6 It will be the duty of the customer-user at any premise where backflow prevention devices are installed to have certified inspections and operational tests made at least once per year as required under Mass. regulations and this regulation. The Water District will conduct testing on these devices twice a year. The owner of the device will be charged for these tests. The Water District may have these tests performed by a designated representative.

In those instances where the District Manager deems the hazard to be great enough, he may require certified inspections at more frequent intervals. These inspections and tests will be at the expense of the water user and will be performed by Water District personnel, or by a certified tester approved by the District Manager, and approved by the State of Massachusetts. It will be the duty of the District Manager to see that these timely tests are made. The District Manager will notify the customer-user in advance when the tests are to be undertaken so that he or his representatives may witness the test if so desired. These devices will be repaired, overhauled, or replaced at the expense of the customer-user whenever said devices are found to be defective. Records of such tests shall be kept by the District Manager.

4.2.7 All presently installed backflow prevention devices which do not meet the requirements of this section, but were approved devices for the purposes described herein at the time of installation and which have been properly maintained, will, except for the inspection and maintenance requirements under subsection 4.2.6, be excluded from the requirements of these rules, so long as the District Manager is assured that they will satisfactorily protect the utility system. Whenever the existing device is moved from the present location or requires more than the maintenance, or when the District Manager finds that the maintenance constitutes a hazard to health, the unit will be replaced by a backflow prevention device meeting the requirements of this section.

4.2.8 All industrial and commercial establishments attached to the Water District are required to install at the service entrance immediately downstream of the meter, a reduced pressure (RP) backflow device.

4.2.9 All decisions relating to determination of backflow devices will be made by the Commissioners or District Manager. Failure to comply with any directive from this office will result in termination of service.

5.1 All testing and or maintenance performed on backflow devices by the Water District or its agent will be charged to the owner of the device.

Rules and Regulations adopted by the Commissioners of the Water Supply District of Acton, June 11, 1990, at a Regular meeting of said Commissioners.

Leonard A. Phillips
Stephen C. Stuntz
Ronald R. Parenti

**Fee Schedule for Backflow and
Cross-Connections
June 11, 1990**

A. Survey Fees

\$55.00 - first hour or part thereof (minimum)
\$26.00 - each additional hour - chargeable in
 one-quarter hour installments

B. Testing Fees (During normal work hours.)

The fee schedule is as follows:

1 or 2 Devices	\$50.00 per device	} provided the multiple devices are located at the same address.
3 to 5 Devices	\$45.00 per device	
6 or more Devices	\$40.00 per device	

**C. If testing cannot be conducted during regular work
hours (Monday - Friday), a fee of one and one-half
the above will be charged.**

Adopted by the Commissioners of the Water Supply
District of Acton, May 11, 1998, at a regular meeting
of said Commissioners.

Leonard A. Phillips
Stephen C. Stuntz
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