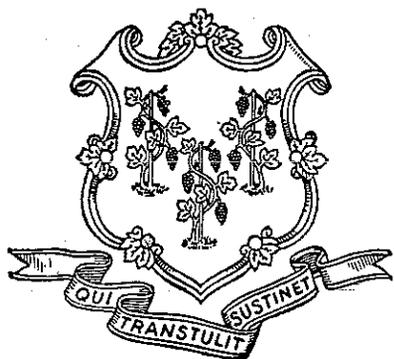


DEPARTMENT OF PUBLIC
UTILITY CONTROL REGULATION
OF WATER COMPANIES

Connecticut
General Assembly



LEGISLATIVE
PROGRAM REVIEW
AND
INVESTIGATIONS
COMMITTEE

December 1993

**CONNECTICUT GENERAL ASSEMBLY
LEGISLATIVE PROGRAM REVIEW AND INVESTIGATIONS COMMITTEE**

The Legislative Program Review and Investigations Committee is a joint, bipartisan, statutory committee of the Connecticut General Assembly. It was established in 1972 to evaluate the efficiency, effectiveness, and statutory compliance of selected state agencies and programs, recommending remedies where needed. In 1975, the General Assembly expanded the committee's function to include investigations, and during the 1977 session added responsibility for "sunset" (automatic program termination) performance reviews. The committee was given authority to raise and report bills in 1985.

The program review committee is composed of 12 members. The president pro tempore of the senate, the senate minority leader, the speaker of the house, and the house minority leader each appoint three members.

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DEPARTMENT OF PUBLIC UTILITY CONTROL:
REGULATION OF WATER COMPANIES

LEGISLATIVE PROGRAM REVIEW AND INVESTIGATIONS
COMMITTEE

DECEMBER 1993

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EXECUTIVE SUMMARY

In Connecticut, individuals and businesses get their water supply in a variety of ways. Eighty-five percent of Connecticut households receive their water from public water supply systems, while the remaining 15 percent are served by individual wells. Likewise, commercial water users either operate their own systems or are customers of public water systems.

Public water systems consist generally of: private investor-owned companies; municipal, district, or regional water authorities; or ancillary systems (like homeowner associations and mobile home parks). In total, it is estimated that 700,000 customers obtain water from public water supply systems: 400,000 are served by publicly-owned water utilities and 300,000 by private companies.

Public water supply is the focus of several different policy perspectives, including public health, environmental protection, and economic development. Each perspective translates into a different regulatory structure. The policymakers and implementers are at every level of government and, at the state level in Connecticut, spread across agency lines.

Within this complex of interests, the powers and duties of the Department of Public Utility Control (DPUC) with respect to the economic regulation of private water suppliers of a certain size carve out a specific sphere of influence. During 1993, the Legislative Program Review and Investigations Committee undertook a study of how DPUC regulates private water companies. The study was intended to examine the current DPUC regulatory framework and how it was actually working with respect to water utilities. However, a primary motive for the study was concern about water rate variability, a feature caused by many forces outside the control of DPUC. Because of this focus, to the extent possible, these outside factors were brought into the study's analysis.

In its review the committee found great variance among water supplier rates. The committee determined that if rate variance was seen as an equity issue, or symptomatic of other policy deficiencies, two approaches could be taken. First, the state could establish a policy that all water supply be consolidated by a certain date. Alternatively, acknowledging recent trends toward consolidation, various tools could be strengthened to accelerate the movement.

The committee found that forced consolidation of all water suppliers at this time would be a clear change in policy direction for the state, which only relatively recently formally adopted coordination as its policy, implemented through planning and information-gathering efforts. While the concept of consolidating water suppliers has appeal, the committee believed a mandatory takeover program at this time was premature. While the committee believed water supply consolidation should be a goal of the state, in order to maximize economies of scale, at present a more incremental approach should be taken, with a clearer policy on distributing the costs of consolidation.

Many of these steps involve fully implementing tools put in place during the 1980s, whose total impact has not been realized for a variety of reasons. These provisions include statewide water supply planning, the DPUC acquisition statute, and the DPUC excessive rate provision, which are the subject of the committee recommendations listed below. The committee also proposed a structured economic viability screening process for small water companies and the imposition of a fee on public water suppliers to assist in acquisition costs.

RECOMMENDATIONS

- 1. The Department of Public Health and Addiction Services (DPHAS) shall comply with the annual report requirement on statewide water supply planning, which shall also be submitted to the Energy and Public Utilities Committee.**
- 2. Amend C.G.S. Secs. 16-29 and 16-32b to require municipal and regional water entities to submit current rate information to DPUC along with their annual reports. DPUC shall submit a report on the rates of both public and private providers to the Energy and Public Utility Committee on or before the second Wednesday after the convening of each regular session of the general assembly.**
- 3. The DPUC, in consultation with DPHAS, shall establish a schedule to assess all class C companies for economic viability, based on performance measures of technical, financial, and managerial assets developed by DPUC. A finding of economic nonviability shall be grounds for acquisition by a public or private water utility under Sec. 16-262o.**
- 4. Amend C.G.S. Sec. 16-10a(b) to include all water companies regulated by DPUC and require DPUC to promulgate regulations to implement the provisions of the excessive rate statute.**
- 5. Amend C.G.S. Sec. 16-262o to require DPUC to consider the current rates among the candidates for the most suitable entity.**
- 6. An annual fee shall be paid by municipal and regional water suppliers to assist with the costs attendant to the acquisition process for water companies under C.G.S. Sec. 16-262o, including rehabilitation costs, and the economic viability assessment recommended earlier. The fee shall be equivalent to the utility gross earnings tax paid by private water suppliers.**
- 7. The Office of Policy and Management (OPM) shall develop a matrix of overlapping regulatory authority in the chapters indicated in C.G.S. Sec. 4-67e, and assess whether a Memorandum Of Understanding (MOU) in any of those areas is needed.**

OPM should report its findings from that review to the legislative committees of cognizance by January 1, 1995.

INTRODUCTION

The Legislative Program Review and Investigations Committee authorized a study of the regulation of private water companies by the Department of Public Utility Control (DPUC) in February 1993. The powers and duties of the Department of Public Utility Control with respect to the economic regulation of private water suppliers of a certain size carve out a specific sphere of influence within the complex of public water supply.

Public water supply is the focus of several distinct policy perspectives, including public health, environmental protection, and economic development. Each perspective translates into a regulatory structure. The policymakers and implementers are at every level of government and, at the state level in Connecticut, spread across agency lines. The purpose of the program review study of DPUC regulation of water companies was to examine the current DPUC regulatory framework and how it actually worked with respect to water utilities. How DPUC responsibilities fit into the larger realm of public water supply was also reviewed, with a specific focus on water rate variability.

During the study, committee staff reviewed state and federal statutes, regulations, and various DPUC decisions. Information produced by industry groups was reviewed as well as relevant public policy journals. DPUC staff were interviewed, as well as representatives from both public and private water suppliers. Selected portions of plans produced under the statewide water supply planning process (known as the Connecticut Plan) were reviewed, as well as data for the state Department of Public Health and Addiction Services and the federal Environmental Protection Agency. Finally, a public hearing was held in August 1993 to elicit testimony from interested parties.

This report contains four chapters. Chapter I provides background on the characteristics of water suppliers in Connecticut. Chapter II describes the roles of other state agencies with respect to water supply. Chapter III outlines DPUC responsibilities and authorities. Chapter IV contains findings and recommendations.

CHAPTER I

WATER SUPPLIERS IN CONNECTICUT

In Connecticut, individuals and businesses get their water supplies in a variety of ways. Eighty-five percent of Connecticut households receive their water from public water supply systems, while the remaining 15 percent are served by individual wells. Likewise, commercial water users either operate their own systems or are customers of public water systems.

Public water systems consist generally of: private investor-owned companies; municipal, district, or regional water authorities; or ancillary systems (like homeowners associations and mobile home parks). In total, it is estimated that 700,000 customers obtain water from public water supply systems: 400,000 are served by publicly-owned water utilities and 300,000 by private companies.

The water industry looks very different from the other utility providers of electricity, gas, and telecommunications. In Connecticut, there are three private, regulated electric companies and five municipal electric companies, three private, regulated natural gas companies, and three private, regulated telephone companies. In contrast, there are over 600 public water suppliers, ranging from large to small, publicly-owned and unregulated by DPUC, privately owned and DPUC-regulated, or privately owned and unregulated by DPUC. Connecticut's experience with size and ownership variety is mirrored across the country, as Table 1 shows.

The Department of Public Health and Addiction Services (DPHAS) maintains an inventory of community water systems, which are defined to mean physically separate systems serving at least 15 service connections or at least 25 people daily. As of July 1993, there were 646 community water systems in Connecticut.

Of the 646, 114 (18 percent) are owned by the 59 private companies regulated by DPUC. Forty-one (6 percent) are owned by the 31 municipalities that operate waterworks; 23 (4 percent) are owned by 23 special districts; 12 (2 percent) by the 3 regional water authorities; 9 (2 percent) by eight state facilities; and 1 (less than one percent) by the federal government. The remaining 446 water supply systems (69 percent) are privately owned and are ancillary to a mobile home park, condominium development, homeowners' association, or apartment building, or provide water to under 50 customers (service connections).

System Differences

The community water systems vary in many ways, including:

- ownership (public or private);
- number of customers;

Table 1. Type of Ownership of Community Water Systems Nationwide

Type of Ownership	Serving < 3,300 pop. (a)		Serving > 3,300 pop. (a)		Systems	Pct.
	Number	Pct.	Number	Pct.		
Public						
Local, municipal government	17,978	30.5	8,082	13.7	26,060	44.3
Federal government	434	.7	158	.3	592	1.0
On Indian land	139	.2	3	.0	142	.2
Subtotal	18,551	31.5	8,243	14.0	26,794	45.5
Private						
Investor-owned						
Financially independent	6,528	11.1	999	1.7	7,528	12.8
Financially dependent (b)	899	1.5	204	.3	1,105	1.9
Homeowners' Association (c)	6,651	11.3	259	.4	6,908	11.7
Other	633	1.1	108	.2	741	1.3
Not available	156	.3	44	.1	200	.3
Subtotal	14,865	25.3	1,615	2.7	16,481	28.0
Ancillary						
Mobile Home Parks	11,379	19.3	0	.0	11,379	19.3
Institutions	600	1.0	0	.0	600	1.0
Schools	502	.9	11	.0	513	.9
Hospitals	102	.2	0	.0	102	.2
Other	2,958	5.0	0	.0	2,958	5.0
Not available	35	.1	0	.0	35	.1
Subtotal	15,573	26.5	11	.0	15,585	26.5
ALL SYSTEMS	48,989	83.2	9,871	16.8	58,860	100.0

Source: National Regulatory Research Institute

- sources of water (surface, groundwater, and purchased);
- population density served;
- age of infrastructure;
- financial and managerial capacity;
- availability and cost of capital;
- tax status; and
- geography of area served.

To the extent these differences affect cost, they will affect the cost of water to the consumer and, in the case of the regulated companies, the rates set by DPUC.

Table 2 shows the distribution of regulated water companies by consumer size.

Table 2. Numbers of Regulated Companies By Customers (Service Connections)

Customers	No. of Companies
Less than 100	11
100 - 200	13
201 - 500	9
501 - 1000	5
1001 - 5000	10
5001 - 10,000	4
10,000 - Up	4

Source: 1991 Water Company Annual Reports Submitted to DPUC

Table 3 shows all regulated and public water suppliers by the towns they serve, and shows the different rates charged by the entities, which will be discussed in more detail in Chapter IV. Forty-five towns are served by a mix of regulated private and public water suppliers.

Table 3. Regulated and Municipal Water Companies By Town as of January 1, 1993

City or Town	Company Name	Quarterly Domestic Charge	Quarterly Industrial Charge
Andover	(1)		
Ansonia	Ansonia-Derby Water Co.	\$ 68.81	\$1,227.70
Ashford	(1)		
Avon	Avon Water Co.	66.39	1,356.28
	Avon Water Co. (Farmington Woods Div.)	93.97	1,856.71
	Conn. Water Co. (Collinsville Div.)	113.07	2,340.46
	Unionville Water Co.	58.22	738.00
Barkhamsted	(1)		
Beacon Falls	Bridgeport Hydraulic Co.	66.73 (2)	1,101.93
	Conn. Water Co. (Naugatuck Div.)	113.31	2,344.14
Berlin	Berlin Water Control Commission.		
	Kensington Fire District		
	Meriden Water Department	92.84 (3)	2,422.04
	New Britain Water Department	29.09 (3)	661.37
	Worthington Fire District		
Bethany	Conn. Water Co. (Naugatuck Div.)	113.31	2,344.14
	South Central Conn. Reg. Wtr. Auth.	60.70	1,028.58
Bethel	Bethel Consolidated Inc.	61.68	1,480.83
	Bethel Water Department	35.20	932.40
Bethlehem	(1)		
Bloomfield	Metropolitan District Water Bureau	32.09	712.39
Bolton	(1)		
Bozrah	Norwich Public Utilities Department		
Branford	South Central Conn. Reg. Wtr. Auth.	60.70	1,028.58
Bridgeport	Bridgeport Hydraulic Co.	66.73 (2)	1,101.93
Bridgewater	New Milford Water Co.	78.92	1,015.50
Bristol	Plainville Water Co.	41.78	537.08
	Bristol Water Department	45.45	995.32
Brookfield	Candlewood Shores Tax District	103.54	(4)
	Dancon Corp.	38.76	(4)
	Rural Water Co.	97.62	(4)
Brooklyn	Crystal Water Co.	79.60	867.00
Burlington	Bristol Water Department (3)	68.18	1,492.98
	Conn. Water Co. (Collinsville Div.)	113.07	2,340.46
Canaan	Canaan Water Department	55.00 (5)	
Canterbury	(1)		
Canton	Conn. Water Co. (Collinsville Div.)	113.07	2,340.46
Chaplin	(1)		
Cheshire	Meriden Water Department	92.84 (3)	2,422.04
	South Central Conn. Reg. Wtr. Auth.	60.70	1,028.58
	Southington Water Works Department	72.12 (3)	1,442.01
Chester	Conn. Water Co. (Guilford-Chester Div.)	113.07	2,340.46
Clinton	Conn. Water Co. (Guilford-Chester Div.)	113.07	2,340.46
Colchester	Colchester Water Department		
Colebrook	(1)		
Columbia	(1)		
Cornwall	Bridgeport Hydraulic Co.	66.84 (2)	1,103.10

Coventry	Aqua Treatment (Coventry Hills Div.)	116.46		(4)
	Aqua Treatment (Pilgrim Hills Div.)	158.58		(4)
	Conn. Water Co. (Rockville Div.)	113.07		2,340.46
	South Coventry Water Co.	91.43		(5)
Cromwell	Cromwell Fire District Water Division			
Danbury	Bethel Water Department	22.50	(3)	646.88
	Danbury Public Utilities Department	38.95		1,384.32
	Dancon Corp.	38.76		(4)
	Rural Water Co.	97.62		(4)
	Topstone Hydraulic Co.	125.70		(4)
	Tyler Lake (Indian Field Div.)	47.04		(4)
	Darien	Conn.-American Wtr. Co. (G-N Dist.)(6)	87.19	
Deep River	Norwalk Second Tax Dist. Wtr. Dept.	54.45	(3)	1,330.50
	Conn. Water Co. (Guilford-Chester Div.)	113.07		2,340.46
Derby	Ansonia-Derby Water Co.	68.81		1,227.70
Durham	(1)			
Eastford	(1)			
East Granby	Conn. Water Co. (Northern Div.)	113.31		2,344.14
	Old Newgate Ridge Water Co.	117.60		(4)
	Village Water Co.	41.06		684.16
East Haddam	(1)			
East Hampton	Conn.-American Wtr. Co. (M-V Dist.)(6)	119.67		1,855.30
East Hartford	Metropolitan District Water Bureau	32.09		712.39
East Haven	South Central Conn. Reg. Wtr. Auth.	60.70		1,028.58
East Lyme	East Lyme Water and Sewer Comm.	53.95	(5)	
Easton	Bridgeport Hydraulic Co.	66.73	(2)	1,101.93
East Windsor	Conn. Water Co. (Northern Div.)	113.31		2,344.14
	Ellsworth Estates Water Co.	31.07		(4)
Ellington	Conn. Water Co. (Rockville Div.)	113.07		2,340.46
	Ellington Acres Water Co.	43.62		915.00
Enfield	Conn. Water Co. (Northern Div.)	113.31		2,344.14
	Hazardville Water Co.	48.53		600.60
Essex	Conn. Water Co. (Guilford-Chester Div.)	113.07		2,340.46
Fairfield	Bridgeport Hydraulic Co.	66.73	(2)	1,101.93
Farmington	Avon Water Co. (Farmington Woods Div.)	93.97		1,856.71
	Metropolitan District Water Bureau	32.09		712.39
	New Britain Water Department	29.09	(3)	661.37
	Plainville Water Co.	41.78		537.08
	Unionville Water Co.	58.22		738.00
Franklin	(1)			
Glastonbury	Manchester Water Department	101.84	(3)	2,457.89
	Metropolitan District Water Bureau	44.75	(7)	758.01
Goshen	(1)			
Granby	Village Water Co.	41.06		684.16
Greenwich	Conn.-American Wtr. Co. (G-N Dist.)(6)	87.19		1,458.42
Griswold	Bay Mountain Water Co.	55.06		(4)
	Jewett City Water Co.	62.85		834.08
	Conn.-American Wtr. Co. (M-V Dist.)(6)	119.67		1,855.30
Groton	Groton Utilities Department	45.54		891.34
	Noank Water Department (1)			
	Eastern Division, SCWA			
Guilford	Conn. Water Co. (Guilford-Chester Div.)	113.07		2,340.46
Haddam	(1)			
Hamden	South Central Conn. Reg. Wtr. Auth.	60.70		1,028.58
Hampton	(1)			
Hartford	Metropolitan District Water Bureau	32.09		712.39

Hartland	(1)		
Harwinton	(1)		
Hebron	(1)		
Kent	Kent Water Co.	171.52	2,766.34
Killingly	Crystal Water Co.	79.60	867.00
	Crystal Water Co. (Williamsville Div.)	86.00	1,221.00
Killingworth	(1)		
Lebanon	Conn.-American Wtr. Co. (M-V Dist.)(6)	119.67	1,855.30
Ledyard	Barrett Division, SCWA		
	Ferry View Heights Division, SCWA		
	Gray Farms Division, SCWA		
	Tower Division, SCWA		
	Town of Ledyard Lifetime Homes Sys.		
Lisbon	Jewett City Water Co.	62.85	834.08
Litchfield	Bridgeport Hydraulic Co.	63.56	(2) 1,013.77
Lyme	(1)		
Madison	Conn. Water Co. (Guilford-Chester Div.)	113.07	2,340.46
Manchester	Aqua Treatment (Redwood Farms Div.)	143.10	(4)
	Manchester Water Department	67.89	1,638.59
	Metropolitan District Water Bureau	32.09	712.39
Mansfield	Willimantic Water Department		
Marlborough	(1)		
Meriden	Meriden Water Department	61.89	1,614.69
Middlebury	Heritage Village Water Co.	59.29	922.57
Middlefield	(1)		
Middletown	Middletown Water Department		
Milford	South Central Conn. Reg. Wtr. Auth.	60.70	1,028.58
Monroe	Bridgeport Hydraulic Co.	66.73	(2) 1,101.93
Montville	Mohegan Division, SCWA		
	Montville Division, SCWA		
	New London Water Department		
	Norwich Public Utilities Department		
Morris	(1)		
Naugatuck	Conn. Water Co. (Naugatuck Div.)	113.31	2,344.14
New Britain	New Britain Water Department	19.39	440.91
New Canaan	New Canaan Water Co.	86.58	1,724.92
New Fairfield	Dancon Corp.	38.76	(4)
	Rural Water Co.	97.62	(4)
New Hartford	New Hartford Water Department		
New Haven	South Central Conn. Reg. Wtr. Auth.	60.70	1,028.58
Newington	Metropolitan District Water Bureau	32.09	712.39
	New Britain Water Department	29.09	(3) 661.37
New London	New London Water Department		
New Milford	Camelot Estates Water Co.	65.00	(4)
	Indian Ridge Water Co.	90.72	(4)
	New Milford Water Co.	78.92	1,015.50
Newtown	Newtown Water Co.	91.86	1,350.95
Norfolk	Bridgeport Hydraulic Co.	66.84	(2) 1,103.10
North Branford	South Central Conn. Reg. Wtr. Auth.	60.70	1,028.58
North Canaan	Bridgeport Hydraulic Co.	66.84	(2) 1,103.10
North Haven	South Central Conn. Reg. Wtr. Auth.	60.70	1,028.58
North Stonington	North Stonington Division, SCWA		
Norwalk	Conn.-American Wtr. Co. (G-N Dist.) (6)	87.19	1,458.42
	Norwalk First Tax Dist. Water Dept.		
	Norwalk Second Tax Dist. Water Dept.	36.30	887.00

Norwich	Norwich Public Utilities Department		
Old Lyme	(1)		
Old Saybrook	Conn. Water Co. (Guilford-Chester Div.)	113.07	2,340.46
Orange	South Central Conn. Reg. Wtr. Auth	60.70	1,028.58
Oxford	Bridgeport Hydraulic Co.	66.73	(2) 1,101.93
	Heritage Village Water Co.	59.29	922.57
Plainfield	Brookside Water Co.	110.88	(4)
	Gallup Water Co.	73.45	1,884.95
	Crystal Water Co.(Plainfield Div.)	65.84	841.75
Plainville	New Britain Water Department	29.09	(3) 661.37
	Plainville Water Co.	41.78	537.08
Plymouth	Conn. Water Co. (Terryville Div.)	113.07	2,340.46
Pomfret	(1)		
Portland	Portland Water Works Department	74.25	1,225.40
Preston	Country Squire Water Co.	86.88	(4)
	Norwich Public Utilities Department		
Prospect	Conn. Wtr. Co. (Naugatuck Div.)	113.31	2,344.14
Putnam	Putnam Water Department	56.90	2,015.80
Redding	(1)		
Ridgefield	Ridgefield Water Co.	51.09	1,186.53
	Rural Water Co.	97.62	(4)
	Topstone Hydraulic Co.	125.70	(4)
Rocky Hill	Metropolitan District Water Bureau	32.09	712.39
Roxbury	(1)		
Salem	(1)		
Salisbury	Bridgeport Hydraulic Co.	66.84	(2) 1,103.10
Scotland	(1)		
Seymour	Ansonia-Derby Water Co.	68.81	1,227.70
	Bridgeport Hydraulic Co.	66.73	(2) 1,101.93
Sharon	Sharon Water and Sewer Commission		
Shelton	Bridgeport Hydraulic Co.	66.73	(2) 1,101.93
Sherman	(1)		
Simsbury	Avon Water Co.	66.39	1,356.28
	Tariffville Fire District (1)		
	Village Water Co.	41.06	684.16
Somers	Conn. Water Co. (Northern Div.)	113.31	2,344.14
Southbury	Heritage Village Water Co.	59.29	922.57
Southington	Meriden Water Department	92.84	(3) 2,422.04
	Plainville Water Co.	41.78	537.08
	Southington Water Works Department	48.08	961.34
South Windsor	Conn. Water Co. (Northern Div.)	113.31	2,344.14
	Manchester Water Department	101.84	(3) 2,457.89
	Metropolitan District Water Bureau	38.21	(8) 739.08
Sprague	Sprague Water and Sewer Authority	51.99	863.43
Stafford	Conn. Water Co. (Northern Div.)	113.31	2,344.14
Stamford	New Canaan Water Co.	86.58	1,724.92
	Stamford Water Co.	50.93	1,102.00
Sterling	Sterling Municipal Water Co.	42.40	580.00
Stonington	Classee Water Co.	147.00	(4)
	Conn.-American Wtr. Co. (M-V Dist.)(6)	119.67	1,855.30
	Lords Point Association Water Dept.(1)		
	Lantern Hill Division, SCWA		
	Mason's Island Water Co.	107.76	(9)
	Westerly Water Dept. Pawcatuck Section		
Stratford	Bridgeport Hydraulic Co.	66.73	(2) 1,101.93
Suffield	Conn. Water Co. (Northern Div.)	113.31	2,344.14

	West Service Corp.	49.75		(4)
Thomaston	Conn. Water Co. (Thomaston Div.)	113.31		2,344.14
Thompson	Crystal Water Co. (Thompson Div.)	71.68		1,100.25
	Putnam Water Department	71.13	(10)	2,519.75
Tolland	Conn. Water Co. (Rockville Div.)	113.07		2,340.46
	Tolland Water Dept.	81.00		(4)
Torrington	Torrington Water Co.	44.58		632.88
	Torrington Water Department			
Trumbull	Bridgeport Hydraulic Co.	66.73	(2)	1,101.93
Union	(1)			
Vernon	Conn. Water Co. (Northern Div.)	113.31		2,344.14
	Conn. Water Co. (Rockville Div.)	113.07		2,340.46
Voluntown	(1)			
Wallingford	Meriden Water Department	92.84	(3)	2,422.04
	Wallingford Water Department			
Warren	(1)			
Washington	Judea Water Co.	137.70	(5)	
Waterbury	Conn. Water Co. (Naugatuck Div.)	113.31		2,344.14
	Waterbury Water Bureau	46.04		1,145.01
Waterford	New London Water Department			
	Waterford Village Water Co.	35.88		(4)
Watertown	Watertown Fire District	41.54		1,071.76
	Watertown Water and Sewer Authority			
Westbrook	Conn. Water Co. (Guilford-Chester Div.)	113.07		2,340.46
West Hartford	Metropolitan District Water Bureau	32.09		712.39
West Haven	South Central Conn. Reg. Wtr. Auth.	60.70		1,028.58
Weston	Bridgeport Hydraulic Co.	66.73	(2)	1,101.93
Westport	Bridgeport Hydraulic Co.	66.73	(2)	1,101.93
Wethersfield	Metropolitan District Water Bureau	32.09		712.39
Willington	(1)			
Wilton	Bridgeport Hydraulic Co.	66.73	(2)	1,101.93
	Norwalk Second Tax Dist. Water Dept.	54.45	(3)	1,330.50
Winchester	Winchester Water Department	56.99		952.15
Windham	Willimantic Water Department			
Windsor	Metropolitan District Water Bureau	32.09		712.39
Windsor Locks	Conn. Water Co. (Northern Div.)	113.31		2,344.14
Wolcott	Tyler Lake Water Co. (Clearview Div.)	60.28		(4)
	Tyler Lake Water Co. (Woodrich Div.)	112.62		(4)
Woodbridge	South Central Conn. Reg. Wtr. Auth.	60.70		1,028.58
Woodbury	Woodbury Water Co.	106.50		1,903.42
Woodstock	Putnam Water Department			

- (1) No known regulated or municipal water systems with metered rates.
- (2) Charges do not include Construction Work In Progress (CWIP) Surcharge.
- (3) Assumed 50% surcharge for serving outside town limits.
- (4) Company provides only 5/8" metered residential service. No non-residential customers currently served. No rates for large meters.
- (5) No meter rates for 3/4" and larger meters.
- (6) (G-N Dist.) refers to Greenwich-Noroton District, (M-V Dist.) refers to Mystic-Valley District.
- (7) Reflects non-member town and capital improvement surcharge.
- (8) Reflects non-member town surcharge.
- (9) No meter rates for 1 1/2" and larger meters.
- (10) Assumed 25% surcharge for serving outside town limits.

Note: Municipal Water rates are not required to be filed with DPUC - charges for Municipal systems are based on the most current rates in DPUC files and may not reflect the current rates in effect.

* Or 2,400 Cubic Feet per quarter

** Or 66,667 Cubic Feet per quarter

Source: 1993 DPUC Report on Comparative Billing for Metered Water Use (Based on domestic water use with 5/8" meter of 18,000 gallons per quarter, and industrial water use with 2" meter at 500,000 gallons per quarter)

CHAPTER II

WATER SUPPLY: STATE AGENCY ROLES

The water companies regulated by DPUC are also subject to the jurisdiction of other state agencies. Summary information about the responsibilities of the primary agencies is provided in this chapter.

Department of Public Health and Addiction Services. The health department has jurisdiction over:

...all matters concerning the purity and adequacy of any source of water..used by any municipality, public institution or water...company¹ for obtaining water, the safety of any distributing plant and system for public health purposes, the adequacy of methods used to assure water purity, and any such matters relating to the construction and operation of such distributing plant and system as may affect public health.

Any requirements imposed by DPHAS on water suppliers will impact rates sought by regulated companies from DPUC to cover their costs. Further, as will be discussed, DPUC and DOHS have joint responsibility for certain areas.

DPHAS administers the federal Safe Drinking Water Act. By all accounts, the 1986 amendments requiring implementation of stringent water testing and treatment will prove very costly to water suppliers, with a particular impact on smaller companies.

Other DPHAS duties include:

¹ For DPHAS, a water company is:

any individual, partnership, association, corporation, municipality or other entity (or the lessee thereof) who ...owns, maintains operates, manages, controls or employs and pond, lake, reservoir, well, stream or distributing plant or system for the purpose of supplying water to 2 or more consumers or to 25 or more persons on a regular basis.

A consumer means "any private dwelling, hotel, motel, boardinghouse, apartment, store, office building institution, mechanical or manufacturing establishment or other place of business or industry to which water is supplied by a water company".

- acting as lead agency for the water supply coordinated plan (the Connecticut plan, discussed below);
- exercising authority over water treatment plant operators;
- exercising authority over disposal of watershed land;
- adopting physical, chemical, radiological, and microbiological standards for the quality of public drinking water: minimum treatment standards (taking into account costs), including guidelines for the design and operation of treatment facilities (to serve as basis for approval of water supply plans);
- adopting minimum standards to assure the long term purity and adequacy of the public drinking supply to all state residents;
- collecting and testing water samples when requested to do so by a water company, for which DPHAS is to collect fees to recover costs;
- issuing orders declaring a moratorium on the expansion or addition to any existing public water supply system that DPHAS deems incapable of providing new services with a pure and adequate water supply; and
- in consultation with DEP and DPUC, the DPHAS commissioner may declare a public drinking water supply emergency when a public water supply emergency exists or is imminent; and
- ordering the sale, supply or taking of any waters or the temporary interconnection of water mains for the sale and transfer or water among water companies.

Connecticut Plan. DPHAS is the lead agency for the statutory procedure to coordinate public water supply planning, known as the Connecticut Plan. The Connecticut Plan was a recommendation from the Water Resources Task Force, a 17-member panel established in 1982 by the legislature. The charge to the panel was to evaluate and make recommendations concerning:

- the authority of state agencies in the management of water resources for public water supplies;
- institutional structure, franchise and operational areas of water utilities;

- the state's water supply system, including sources, present and future demands, and rate structures;
- conservation of water resources; and
- groundwater supply problems.

The task force members represented the pertinent subject matter state agencies and legislative committees, as well as small and large private water companies and municipal and regional water authorities.

The task force noted in its report the hundreds of water supply systems, which "vary greatly in size, adequacy of service, quality of water, financial resources, design and engineering standards, and accountability to customers as well as regulators".

While the task force noted that generally the quality of water in Connecticut was high, "significant problems remain with small utilities serving less than 1000 customers. While not true of all small systems, many small companies have problems of quality, service, planning, maintenance, repair, and design. These problems are often a result of a lack of financial resources and technical expertise. Many small systems lack even the most basic managerial skills to apply for rate increases."

In enacting the Connecticut Plan process, the legislature made the following finding in statute:

The general assembly finds that an adequate supply of potable water for domestic, commercial, and industrial use is vital to the health and well-being of the people of the state. Readily available water for use in public water systems is limited and should be developed with a minimum of loss and waste. In order to maximize efficient and effective development of the state's public water systems and to promote public health, safety and welfare, the department of health services shall administer a procedure to coordinate the planning of public water supply systems.

Under the plan, the DPHAS commissioner, in consultation with DPUC, the Department of Environmental Protection, and the Office of Policy and Management, divided the state into seven public water supply management areas. The commissioner established priorities for planning based on the existence and severity of issues in each area. The Housatonic, Upper Connecticut, and South Central areas were designated as the first through third priorities. In each of these areas, a Water Utility Coordinating Committee (WUCC) was formed. (See page 53 for map of areas.)

A WUCC is made up of: one representative from each public water system with a source of supply or a service area within the management area; and one representative from each

regional planning agency within the area, elected by a majority vote of the chief elected officials from municipalities that are members of the regional planning agency. The committee elects a chair.

Each WUCC is to develop a preliminary assessment of water supply conditions and problems within each public water supply management area and prepare a coordinated water system plan. The plan is to promote cooperation among water supply systems and include provisions for:

- integration of public water systems consistent with the protection and enhancement of public health and well being;
- integration of water company plans;
- exclusive service areas;
- joint management or ownership of services;
- satellite management services;
- interconnections between public water systems;
- integration of land use and water system plans;
- minimum design standards; and
- impact on other uses of water resources.

The individual water company plans mentioned as the second item is a requirement also established as an outgrowth of the 1982 water resources task force. Every water company (as defined under DPHAS statutes) supplying water to 1000 or more persons or 250 or more consumers (service connections) must submit a water supply plan to the commissioner of health service for approval with the concurrence of the DEP commissioner. The plan is to "evaluate the water supply needs in the company's service area, and propose a strategy to meet these needs." The plan is to include:

- a description of existing water supply systems;
- an analysis of future water supply demands;
- an assessment of alternative water supply sources which may include sources receiving sewage;

- contingency procedures for public drinking water supply emergencies, including emergencies concerning the contamination of water, the failure of a water supply system or the shortage of water; and
- a recommendation for new water system development.

DPUC approval is required for plans from regulated companies. The plans are to be revised every three to five years, or whenever the company or DPHAS decides it is needed. The plan is to be reviewed by many entities, including DEP and DPUC, which is to comment on the cost-effectiveness of the plan.

Status of Connecticut Plan. The 1985 legislation gave the DPHAS commissioner the authority to enter into one contract per year with a consultant to provide service to a WUCC. The three WUCCs convened completed their portion of the coordinated water system plans. However, not all the individual water supply plans that are to be part of the coordinated plan have been finalized. With respect to the individual plans, according to DPHAS, as of July 1993, 87 utilities were required to submit plans (this includes both public and regulated private utilities). Eighty-five have been submitted, with 77 plans reviewed. Of those reviewed, 22 plans have been approved.

DPHAS had recommended that no new WUCCs be established until all individual water supply plans have been finalized. As of December 1993, DPHAS was in the process of selecting the next area in which to convene a water utility coordinating committee and hiring a consultant to prepare the area plan beginning July 1, 1994.

Department of Environmental Protection. The Department of Environmental Protection is the prime enforcer of water pollution laws, which obviously have an impact on water supply. The department shares with DPHAS and OPM responsibility for the statewide long-range water resources management plan. In many other ways, DEP plays a role in water supply, including its role in the Connecticut Plan process, handling well contaminations, and is responsible for carrying out the state's aquifer protection program. A particular duty is DEP's permitting authority over water diversions set out in the Connecticut Diversion Policy Act.

When establishing the act, the legislature pronounced:

In recognition that the waters of Connecticut are a precious, finite and invaluable resource upon which there is an ever increasing demand for present, new and competing uses; and in further recognition that an adequate supply of water for domestic, agricultural, industrial and recreational use and for fish and wildlife is essential to the health, safety and welfare of the people of Connecticut, it is found and declared that the diversion of the waters of the state shall be permitted only when such diversion is found to be necessary, is compatible with long-range water resource planning, proper management and use of the water resources of

Connecticut and is consistent with Connecticut's policy of protecting its citizens against harmful interstate diversions and with the state plan of conservation and development ...; and that therefore the necessity and public interest for the [Connecticut Water Diversion Policy Act] and the protection of the water resources of the state is declared a matter of legislative determination.

Many actions a water supplier might take to increase water production or produce water from a different site could require a diversion permit from DEP. An applicant for a diversion permit must supply specified information to the department, and may go through a hearing process. The commissioner's decision is based on several criteria set out in statute.

Office of Policy and Management. OPM has general responsibility to coordinate all the activities of DEP, DPUC, and DPHAS with respect to the state's water resources policy. This policy, also enacted into statute by the General Assembly, provides:

The following are declared to be the goals and policies of the state: 1) to preserve and protect water supply watershed lands and prevent degradation of surface water and groundwaters; 2) to protect groundwater recharge areas critical to existing and potential drinking water supplies; 3) to make water resources conservation a priority in all decisions; 4) to conserve water resources through technology, methods and procedures designed to promote efficient use of water and to eliminate the waste of water; 5) to prevent the contamination of water supply sources or reduction in the availability of future water supplies; 6) to balance competing and conflicting needs for water equitably and at a reasonable cost to all citizens and 7) to reduce or eliminate the waste of water through water supply management practices.

Specifically, OPM is responsible for coordinating, through memoranda of understanding, requirements for water conservation plans or emergency contingency plans and coordination of water regulatory practices.

CHAPTER III
DPUC REGULATION OF WATER COMPANIES

Why Water Companies Are Regulated

One regulatory research agency notes:

Water systems have many of the characteristics of monopolies. They typically face little or no competition at the operating level because duplicating service would be costly and inefficient. Their product has no substitute, although there are alternative methods of delivery as well as levels of water quality. Perceptions of market failure--for technological, economic or public health reasons--reinforce the provision of water service mainly by publicly owned or regulated privately owned water utilities.²

Further, it is noted that:

economic regulation by state commissions is aimed at giving monopolistic utility providers an opportunity to earn a "fair return" on their investment through "just and reasonable rates". In return, regulated utilities must meet certain obligations to serve, which is to say they cannot discriminate in providing service within their franchised area and must meet standards of quantity, quality, safety and reliability. In short, a regulatory compact exists between the states and their jurisdictional public utilities.³

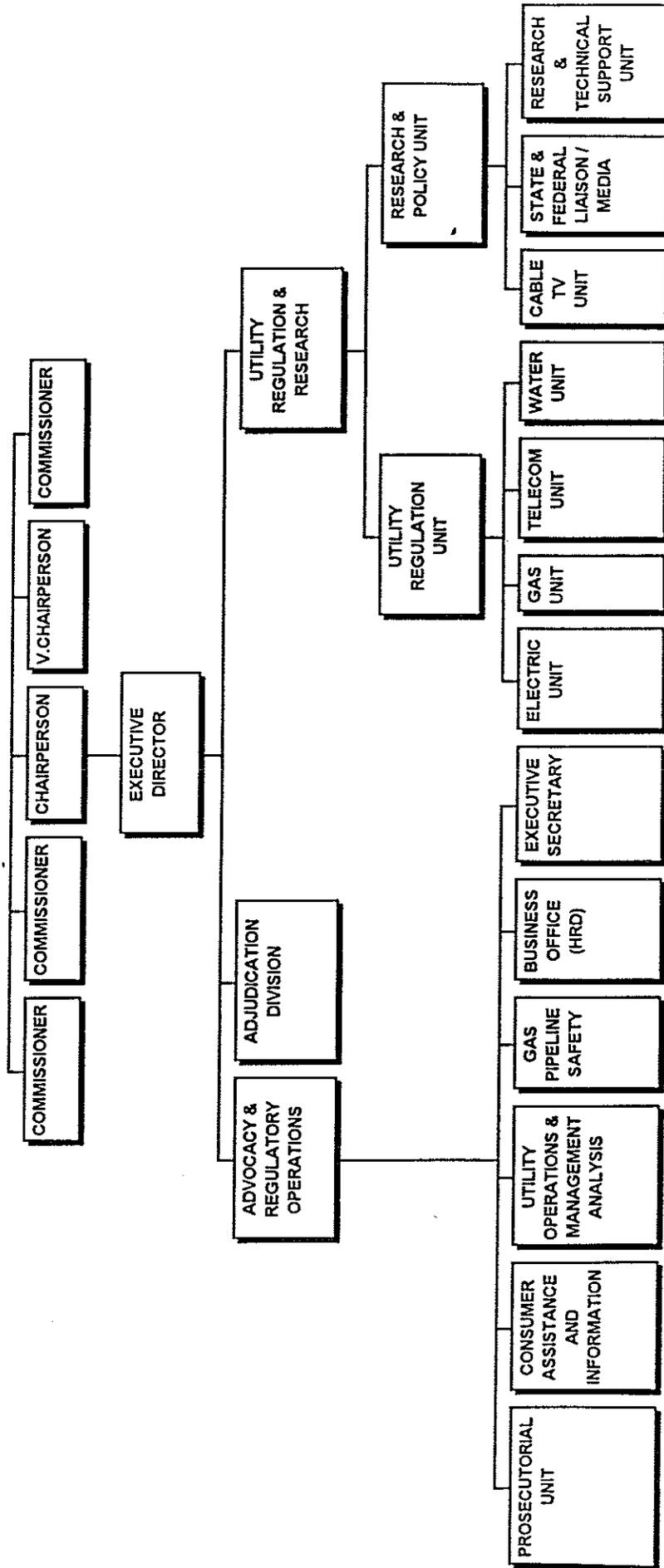
DPUC Organization. Figure 1 depicts the current organization of DPUC. The department is headed by five commissioners, who are collectively the Public Utility Control Authority. The authority elects one of the commissioners to be chair. The department has three main divisions: Advocacy and Regulatory Operations; Adjudication; and Utility Regulation and Research (URR). The Water Section is in the Utility Regulation Unit of URR.

Water Section. The Water Section consists of: one supervisor, five engineers, two rate specialists, two utility examiners, one accountant and a secretary. A utility finance specialist position is vacant.

² Cost Allocation and Rate Design for Water Utilities, The National Regulatory Research Institute, (Dec. 1990), p. 22.

³ Ibid.

FIGURE 1.
STATE OF CT DPUC ORGANIZATION CHART



Water unit staff provide technical expertise in all areas related to the economic regulation of water companies. They analyze data presented in rate proceedings, requests for capital expansions, and proposals to issue new debt or equity capital. Water section staff also handle, in coordination with DPHAS, applications for certificate of need, investigate companies for failure to provide adequate service, and propose acquisitions to the DPUC commissioners. Other DPUC staff assist in water cases. Attorneys from the adjudications division provide legal advice and serve as hearing officers.

Budget. The Department of Public Utility Control is funded through assessments on the utilities. The appropriations for DPUC (excluding Connecticut Siting Council monies) for the last three fiscal years are: FY 91, \$6,115,244; FY 92, \$6,316,320; and FY 93, \$7,352,370.

Powers and Duties

The department's duty is "to set rates that assure safe reliable service at the lowest possible cost and that allow utilities to maintain their financial integrity." A water company is a public service company, and therefore under DPUC jurisdiction if it is one of the following:

...every corporation, company, association, joint stock association, partnership or person, or lessee thereof, owning, leasing, maintaining, operating, managing or controlling any pond, lake, reservoir, stream, well, or distributing plant or system employed for the purpose of supplying water to fifty or more consumers.

(A consumer means any private dwelling, boardinghouse, apartment, store, office building, institution, mechanical or manufacturing establishment or other place of business or industry to which water is supplied by a water company).

For DPUC jurisdictional purposes, water companies **do not** include:

- homeowners, condominium associations providing water only to their members, homeowners associations providing water to customers at least 80 percent of whom are members of such associations;
- municipal waterworks systems;
- a district, metropolitan district, municipal district or special services district established under any general statute or any public or special act which is authorized to supply water; or
- any other waterworks system owned, leased, maintained, operated, managed, or controlled by any unit of local government under any general statute or any public or special act.

The department has regulatory authority over all aspects of private water company operations that affect a company's ability to supply water at a reasonable price. Described below are the areas over which DPUC regulates.

Franchises. The department does not grant water company franchises, which is the purview of the legislature. DPUC does have control over the continuation of a franchise, though. C.G.S. Sec. 2-20a sets out the requirements for a water company franchise through a special act of the General Assembly. Written reports from DPUC, DPHAS, and DEP are supposed to accompany any proposed bill for the incorporation and franchise of a water company.

The statute suggests that all regulated water companies hold a franchise from the legislature. Indeed, several companies have their franchise roots in legislative action of the late 19th century. However, not all companies are actually franchised by special act, but, by virtue of their size, have grown to come under DPUC's jurisdiction.

The revocation of a franchise is a tool available to DPUC under certain circumstances. If a franchised water company "fails to provide service which is adequate to serve the public convenience and necessity of any specific place for a period of five years from the date of such franchise", DPUC may investigate the situation and hold a hearing, either on its own initiative, a complaint from a town, or from a consumer petition.

If DPUC finds the franchise holder has failed to provide adequate service, and there is an immediate need for such service, the agency may revoke the franchise. It may also order the company to take certain actions. Failure to comply with the orders could subject the company to another hearing on inadequacy of service. (Water company acquisition is another tool available to DPUC to address service problems. This provision is discussed later in this chapter.)

Rates. A major function of the water section is to set rates for regulated water companies. The rates are to cover the revenue needs of the companies, including operating expenses, capital depreciation, and a rate of return for the investors. As Table 3 showed, water rates vary, reflecting the particular circumstances of each company. A set of principles established in statute pertain to the level and structure of rates and are as follows:

- there is a clear public need for the service being proposed or provided;
- the public service company shall be fully competent to provide efficient and adequate service to the public in that such company is technically, financially and managerially expert and efficient;
- the department and all public service companies shall perform all of their respective public responsibilities with economy, efficiency and

care for the public safety, and promote economic development within the state with consideration for energy and water conservation, energy efficiency and the development and utilization of renewable sources of energy and for the prudent management of the natural environment;

- the level and structure of rates shall be sufficient, but no more than sufficient, to allow public service companies to cover their operating and capital costs, to attract needed capital and to maintain their financial integrity, and yet provide appropriate protection to the relevant public interests, both existing and foreseeable;
- the level and structure of rates charged customers shall reflect prudent and efficient management of the franchise operation; and
- the rates, charges, conditions of service and categories of service of the companies shall not discriminate against customers which utilize renewable energy sources or cogeneration technology to meet a portion of their energy requirements.

The rate setting process begins when the company files an application containing information on its operations, expenses, capital expenditure requirements, any construction plans, and its request for a revenue increase. The department has to act on the rate application within 150 days (a 30 day extension is possible if needed).

When the application is received, it is assigned a docket number and the water section staff review it. The company bases its expenses on a test year, which is a recently concluded 12-month period. Any additional information needed by DPUC is requested in the form of interrogatories. DPUC technical staff in each of the specific areas -- engineering, accounting, finance, and rates -- review the material. Engineering staff conduct a site inspection to examine the systems. As part of the review, DPUC staff assess compliance with any previous orders made by it in earlier proceedings.

Public hearings are held on the proposed revenue and rate increases. Based on all information gathered, the DPUC rate staff review the proposed revenue requirements and analyze them for legitimacy to determine whether they should be included in expenses to be recovered through rates. The DPUC financial staff assess the appropriate rate of return to the investors based on the rate base, which consists of capital assets used to provide service.

DPUC staff also assess the rate structure proposed by the company, including fixed or service charges and actual consumption rates. Types of customers may be distinguished also for rate setting, based on their water use habits (e.g., domestic vs. industrial users.) Ultimately, the staff draft proposed findings and a decision for consideration by the commissioners, who

then approve, disapprove, or modify staff recommendations. In calendar years 1988 through 1992, an average of 12 rate cases a year have been filed by water companies with DPUC.

DPUC efforts have been underway for the last couple of years to revamp the application data requirements, including simplification of the application process for smaller companies. Further, legislation was enacted in 1993 to allow for a modified hearing process for rate adjustments based on certain cost changes: purchased water, electric, and gas price changes based on rate adjustments for other companies; tax changes; and any governmental fee adjustments. If the adjustment results in a greater rate of return for the company than was authorized at its latest rate proceeding, the company has to refund the money. Under another 1993 enactment, water companies who supply water to manufacturers join electric and gas utilities in the requirement to develop innovative and flexible rates to promote manufacturing.

Excessive rates. A statutory provision enacted in 1989 allows DPUC to review smaller water company rates for excessiveness. For a company with fewer than 5000 customers, DPUC on its own initiative, a complaint by a local official, or by a consumer petition, may conduct a hearing about whether a company's rates for the preceding five years are excessive. Excessiveness is to be assessed in comparison to rates charged by other public service companies providing the same or similar service. DPUC determines if the rates "inhibit the economic development of the area in which the company is authorized to furnish service or impose an unreasonable cost on the customers of the company."

The statute provides that in making the determination, the department may conduct such further investigations as it deems necessary and may consider whether the rates, if excessive, are the result of such factors as:

- the overall size, stability and financial condition of such company;
- the organization, including technical and managerial expertise and efficiency, of the company; and
- the physical condition and capacity of the company's plant.

Under the statute, if DPUC finds the company is unable or unwilling to provide service to its customers at a reasonable cost, as determined by DPUC, it may (1) make orders necessary to provide such service or (2) revoke the franchise held by the company. Because of the five-year requirement in the statute, the first time such an investigation could have been initiated for a water company is October 1, 1994.

Financing. A regulated water company, like any other utility, must obtain approval from DPUC before it enters into any kind of debt or equity financing, or alters its current financial status. An average of 10 finance cases were filed each year from 1988 through 1992.

Water company mergers. DPUC approval must be granted for a water company to change its corporate status by merging with another company or transferring some part of its assets to another. Land sales also come under the jurisdiction of DPUC.

Receivership. The department, as well as municipalities and water company consumers, may petition the courts to place a water company in receivership if, after notice and a hearing, DPUC believes the company was unable or unwilling to provide "adequate" service to its customers. The assets of the company are attached and placed under the control of a receiver. The receiver is appointed by the court, and operates the company to preserve its assets and to serve the best interests of its consumers.

DPUC's reach in the area of receivership is wider than its normal regulatory control. The law provides that any company serving 25 consumers on a regular basis is subject to the receivership provision, as opposed to the 50 customer threshold that defines water companies for normal regulation.

DPUC determines the asset value of the water company at the time the receiver is appointed and immediately prior to return of the assets to the company. The owner's claim is limited to the assets as determined at the time of the receiver appointment. Further, the assets are to be returned to the owner after full restitution has been made to the receiver for the value of any improvements made to the system.

New or expanded water systems. No water company may begin construction or expansion of a community water supply system without obtaining a certificate of public convenience and necessity jointly from DPUC and DPHAS. For purposes of this certificate process, water companies include individuals, corporations, municipalities or other entities supplying water to 15 to 250 service connections, or 25 to 1000 persons on a regular basis. This definition expands the reach of DPUC to smaller water suppliers not under the normal regulatory control of the department, as well as to municipal suppliers.

The DPUC, with DPHAS, is to issue a certificate upon finding that:

- no feasible interconnection with an existing system is available to the applicant⁴;
- the applicant meets all state and federal standards for community water supplies;

⁴ Effective October 1, 1993, pursuant to legislation passed during the 1993 session, this criterion and the last one listed is not applicable in the case of a publicly owned or proposed community water system.

- the construction or expansion will be within engineering standards established by the department;
- the applicant has the financial, managerial and technical resources to operate the proposed water system in a reliable and efficient manner and to provide continuous adequate service to consumers served by the system; and
- the proposed construction or expansion will not result in a duplication of water service in the applicable service area.

A version of this certificate process has been in place since 1981. The 1982 water resources task force discussed earlier promoted an amendment in 1984 that included DPHAS in the process and added the first two criteria.

Extensive regulations drafted by both DPUC and DPHAS flesh out the certificate process. These regulations set out the certification process as well as minimum standards for design, construction, and operation of waterworks facilities of new small water systems. A significant provision in the regulations is that if a system is developed without a certificate, the town in which it is located will be responsible for the future operations of the system. This provision prompts the referral of all developers seeking local building permits to DPUC.

The regulations divide the process into three main phases: IA, IB, and II. To receive Phase IA approval, an initial determination must be made that no water main extension is feasible from an existing supplier. (Per regulation, an existing water supplier is one who is within one lineal mile of the proposed development. Feasibility is a measure of how much each proposed service connection would cost; under \$5000 is feasible.)

If no main extension is feasible, the next determination is whether an existing water supplier (within one mile) is willing to maintain the final new system as a non-connected "satellite" system. If the main extension and satellite options are not feasible, the applicant can withdraw the application and seek permission from the town for individual wells. If the town will not grant individual wells, the applicant, to proceed with the development, will have to prove that the ultimate owner of the system will have the technical, managerial, and financial resources to operate the system in a "reliable and efficient manner and will provide continuous adequate service to the proposed consumers of the system." The criteria against which the abilities of owner are assessed are set out in detail in regulations.

Still in Phase IA, once the feasibility issue is determined, DPHAS engineers examine the proposed community well sites. If they are approved, DPUC issues a Phase IA letter of

approval. With this the developer may get a well drilling permit from the town to begin well exploration and development.⁵

Phase IB approval entails an examination by both DPUC and DPHAS engineering staff of what the wells actually yield to determine the appropriate design for the water system (e.g., pumping capability and treatment needs). DPUC is interested from the perspective of future adequacy of service; DPHAS is concerned about water quality as well as adequacy for health reasons.

After approval of Phase IB, the applicant may apply for building permits from the locality for site preparation and initial building construction. With Phase II approval, the certificate is granted, which allows the applicant to construct the water system.

In practice, DPUC monitors project development after the certificate has been granted to ensure the system as built matches the system approved. Depending on the nature of the facility, DPUC may never have regulatory authority over the system again.

Water company acquisition. Another tool generated by the 1982 Water Resources Task Force permits the involuntary acquisition of water companies under certain circumstances. Like the certificate of need process, this also is a joint procedure between DPUC and DPHAS.

The process begins when a water company fails to comply with an order issued by DPUC or DPHAS concerning the availability or potability of water or provision of water at adequate volume and pressure. DPUC and DPHAS may conduct a hearing to determine the actions that they may order, and the expenditures that may be required to correct the problems.

One action specifically permitted is the acquisition of the troubled water company by the most suitable public or private entity. Water companies that may be suitable for taking over a troubled company are made parties to the acquisition proceeding. Both municipal and private companies are potential acquiring companies. They present information on what they think the costs, both short and long-term, would be to improve the troubled system to an acceptable level. They each also state what they think is the value of the system. The office of consumer counsel may be a party, and state which company it feels would best serve the customers of the system.

DPUC, in consultation with DPHAS, determines if the company should be acquired and if so, "orders the acquisition by the most suitable public and private entity". The statutory criteria for the selection are:

- The geographic proximity of the acquiring entity to the water company;

⁵ There may be other DPHAS and DEP requirements, such as obtaining a diversion permit, that must be met that are independent of the certificate process.

- whether the acquiring entity has the financial, managerial, and technical resources to operate the water company in a reliable and efficient manner to provide continuous adequate service to the persons served by the company; and
- any other factors the department deems relevant.

The decision includes what DPUC determines to be the value of the acquired system. The reasonable costs of necessary improvements were also assessed by DPUC; 1993 legislation provides that it is up to the acquiring company to decide what are necessary improvements. DPUC may extend the franchise area of the acquiring water company to the service area of the water company acquired.

In the case of any proposed acquisition of a water company, the department may, to encourage and facilitate an acquisition, and must, if it orders an acquisition, permit the acquiring company to implement a rate surcharge applied to the rates of the acquired water company or of both the acquiring water company and the acquired water company. The surcharge amount is intended to recover all acquisition costs and needed improvements to the acquired water company's system on a current basis. (1993 legislation establishes that it is up to the governing body of any public entity, not DPUC, involved in an acquisition to determine how its rates will reflect the acquisition costs.)

Under the statute, the surcharge can be designed to recover all of the revenues necessary to provide a net after-tax return on investment actually made in the acquisition and improvement of the acquired water company, at a rate of return equivalent to that authorized for the acquiring water company in its last general rate proceeding.

Since 1988, 20 acquisition proceedings have been filed. Eleven takeovers have been ordered; ten have gone to private companies, with one to a municipal water department. Three of the 20 cases closed with no takeover occurring. One was closed for insufficient evidence, and the remainder are open.

Task Force on the Consolidation of Water Services. The tools available to DPUC that could result in a change in who provides water service in a particular area are triggered by findings of inadequate service. In 1987, the legislature established an 18-member task force to study the consolidation of water service in towns served by both publicly and privately owned water companies. As its final report noted, the creation of the task force was based in part on dissatisfaction with the disparity between rates of different utilities with the town of South Windsor.

The task force found "tremendous variation across the state in terms of cost of and levels of service, sources, and adequacy of supply, and other managerial and technical aspects of water system operation and maintenance." The group concluded:

...consolidation may be feasible and advantageous in some cases, however due to the complexity and potential impacts of such an action, each case must be considered separately. No generic recommendation can be made regarding the feasibility of consolidation.

The group developed a list of factors to be addressed in considering water system consolidation and a methodology for calculating a just and reasonable purchase price. A group within the task force issued a minority report proposing legislation that would provide a municipal referendum on consolidation.

Other responsibilities. DPUC has many other authorities and responsibilities with respect to water companies. These include:

- receiving annual reports from all regulated water companies and municipal entities;
- testing water meters upon request;
- investigating and resolving individual consumer claims that a particular water company is denying service;
- resolving water main extension issues;
- reviewing water company conservation plans; and
- conducting generic studies on water issues.

Publicly Owned Water Suppliers

DPUC does not regulate publicly owned waterworks. However, a significant portion of Connecticut residents are customers of publicly owned water suppliers, and in the discussion of rate variation, public rates are noted. So brief background on the statutory provisions related to public water providers is set out here.

Municipal Systems. Thirty-one municipalities have their own waterworks systems. Connecticut statutes set out provisions related to municipal waterworks.

Any town may acquire, construct, or operate a municipal water supply system where there is no existing private water system or where the owners of an existing system are willing to sell the system to the town. A town may pay for the construction or purchase of a waterworks facility through general obligation or revenue bonds. The local legislative body sets the rates after a public hearing. The rates are to be "just and equitable" and sufficient in each year for the expense of the operation, repair, replacements and maintenance of such system.

The statutes provide that any delinquent rate payments constitute a lien on the property to which water is supplied. The liens collect interest and take precedent over all other liens except tax liens.

Special districts. Within a town, a special district can be established to provide water service. The rates are set by the district residents. There are 23 special districts providing water. These districts may raise capital and enforce service payments through liens like a municipality.

Metropolitan districts. Connecticut statutes provide that a central city and any surrounding towns may form a metropolitan district to provide any municipal function any town can provide individually. Three such metropolitan districts are organized for the provision of water services: the Metropolitan District Commission, the South Central Connecticut Regional Water Authority, and the Southeastern Connecticut Regional Water Authority.

Each district is governed by a charter, which sets out the operations and structure of the district. The rates are set by the governing body of the district as set out in the charter. Unless prohibited by its charter, each district also has the powers granted to each of its member towns.

CHAPTER IV

FINDINGS AND RECOMMENDATIONS

The previous chapter outlined the major responsibilities of DPUC with respect to water company regulation. Many DPUC decisions, of course, have an impact on the rates ultimately paid by consumers. There are factors beyond DPUC control, though, that also impact rates, and rate variability. A primary motive for the study was concern about water rate variability, and so to the extent possible, these outside factors were brought into the committee's analysis.

This chapter discusses factors behind rate variability and provides additional rate comparison information. It then discusses the nature of rate variability as a public policy issue, and sets out two alternative approaches to address the issue. The chapter concludes with a discussion of interagency coordination in the area of water supply regulation.

Rate Variability

As noted earlier, the public delivery of water evokes many different concerns, including those related to public health and the environment. The state departments of public health and environmental protection establish and/or monitor standards related to those areas for all public water suppliers.

Another facet of public water supply is the cost to the consumer. State jurisdiction for establishing rates is not centralized, as it is in the health and environmental regulatory areas. DPUC approves rates for certain private water companies, while the various municipal, regional and special district water supply rates are set by their individual governing bodies.

Theoretically, the goal in pricing water consumption for all water suppliers is for the customer to pay for the total cost of service. Thus, water rates should reflect the individual operational characteristics found within the jurisdictional bounds of each water supplier, and one would expect rates to differ.

In general, private water companies have additional costs that public suppliers do not, based in part on public policy decisions at the state and federal level. Private companies pay local, state, and federal taxes not paid by their municipal counterparts. In addition, in recognition that the private companies are in competition with other endeavors for investor dollars, the companies are allowed to pay returns on equity.⁶

⁶ The impact of these two distinctions may lessen for smaller water companies. Tax liabilities for small private water companies may be diminished because of operating losses. Additionally, some have little or no capital equity and therefore their rates do not cover a return on investment.

Rate Comparisons

Tables 4 and 5 show the different rates charged by different water suppliers. A word of caution about rate comparisons must be made at the outset. First, the rates presented in the table are all residential, and thus do not depict nonresidential rate variation at all. Water suppliers charge different rates for commercial, manufacturing, and industrial users, if the particular supplier has those kinds of customers. Second, comparing residential rates provides information on the relative impact on water users, but does not necessarily substitute as a precise cost comparison. As a vice-president of a large, national water company noted:

When rates are compared [between private and municipal suppliers], one is not comparing apples with apples...There can be differences in rates that result from the accounting methods used by municipalities that do not fully allocate overhead and indirect costs to the utility operation...⁷

To the extent rates do reflect the costs of providing service, there are many factors that affect cost. DPUC cited some of these factors in its most recent rate decision for the Connecticut Water Company (CWC). In and around the South Windsor area are customers served by the Metropolitan District Commission (MDC), the Connecticut Water Co. and the Hazardville Water Co. The different rates charged by these companies was an issue at a public hearing held by DPUC during the 1990 CWC rate proceeding:

Many of the [47 members of the public] who spoke [at the hearing] raised questions about the difference in rates among the Connecticut Water Company, the Metropolitan District Commission and the Hazardville Water Company. The Authority is sympathetic to the concerns of these customers but notes that comparisons between utilities are of limited value. Rates are set considering the particular revenue requirements of each water provider, whether that provider is a public authority or is privately owned. Some factors to be considered in determining revenues are taxes, cost of debt, number of customers, type of water, and the age and type of physical plant needed.⁸

Finally, one does not know how the rates reflect the status of any given system's physical plant, i.e., whether the rates are pre-or post-capital expenditures. With these caveats in mind, nevertheless, rates do show what consumers pay, for the same amount of water, to different suppliers, which is a significant perspective for public policymakers.

⁷ Limbach, Edward W., *Privatization of America's Water Infrastructure--A Century of Progress*, National Association of Water Companies Water, Fall 1993

⁸ Decision, DPUC, Docket 90-06-24, Application of Connecticut Water Company to Increase Its Rates to All Customers (3/27/91)

Table 4. DPUC Regulated and Public Water Utilities: Selected Data

COMPANY NAME	TYPE	QUARTERLY RATES (18,000 GALS)	REGION	NO. OF CUSTOMERS	ANNUAL REVENUES	MILES OF PIPE	EMPLOYEES (FT)	PLANT IN SERVICE
ANSONIA DERBY (now Birmingham)	AI	\$68.81	4	8,183	\$3,847,656	107	19	\$14,266,164
AQUA-T (CH) ¹	AI	\$116.46	2	1,344	\$390,758	28	6	\$954,153
AQUA-T (PH)	AI	\$159.00	2					
AQUA-T (RF)	AI	\$143.10	7					
AVON	AI	\$66.39	7	3,525	\$1,574,512	69	11	\$9,702,085
AVON (FW)	AI	\$93.97	7					
BRIDGEPORT	AI	\$81.16	6	103,996	\$51,793,247	1,633	239	\$249,187,007
CONNECTICUT AM. (GN)	AI	\$85.37	6	25,783	\$17,237,333	348		\$62,304,459
CONNECTICUT AM. (MV)	AI	\$112.90	5					
CONNECTICUT WATER	AI	\$113.07	4	58,968	\$37,454,597	948	184	\$171,264,590
CRYSTAL	AI	\$79.60	2	3,202	\$1,526,517	56	9	\$7,859,205
CRYSTAL (PD)	AI	\$65.84	2					
CRYSTAL (TD)	AI	\$71.68	2					
CRYSTAL (WD)	AI	\$86.00	2					
DANCON	AI	\$38.76	1	561	\$87,516	13	1	\$46,233
GALLUP	AI	\$73.45	2	568	\$303,024	9		\$1,014,103
HAZARDVILLE	AI	\$48.53	7	6,653	\$1,575,314	96	8	\$6,728,783
HERITAGE VIL.	AI	\$59.29	1	3,325	\$947,514	47	11	\$4,374,106

Table 4. DPUC Regulated and Public Water Utilities: Selected Data

COMPANY NAME	TYPE	QUARTERLY RATES (18,000 GALS)	REGION	NO. OF CUSTOMERS	ANNUAL REVENUES	MILES OF PIPE	EMPLOYEES (FT)	PLANT IN SERVICE
JEWETT CITY	A1	\$62.85	5	1,472	\$367,966	23	4	\$1,656,406
KENT	A1	\$171.52	3	311	\$216,676	5	1	\$1,295,843
NEW CANAAN	A1	\$86.58	6	3,206	\$1,905,227	54	10	\$7,231,071
NEW MILFORD	A1	\$78.92	1	2,443	\$1,358,346	46	11	\$7,411,828
NEWTOWN	A1	\$91.86	1	993	\$492,825	26	0	\$2,681,574
PLAINVILLE	A1	\$48.58	7	5,797	\$1,313,277	72	9	\$5,816,470
RIDGEFIELD	A1	\$51.09	1	2,445	\$762,767	42	10	\$2,889,924
RURAL	A1	\$97.62	1	953	\$319,169	19	2	\$796,345
STAMFORD	A1	\$50.93	6	19,328	\$12,287,395	267	43	\$48,270,209
TORRINGTON	A1	\$44.58	3	7,832	\$2,298,774	124	14	\$15,582,764
UNIONVILLE	A1	\$58.22	7	4,591	\$1,825,101	84	12	\$14,154,825
VILLAGE	A1	\$41.06	7	4,638	\$1,130,277	121	9	\$7,809,445
WOODBURY	A1	\$106.50	1	639	\$305,873	12	0	\$1,166,056
BETHEL CON.	B1	\$61.68	1	501	\$166,696	9	n/a	\$537,880
ELLINGTON ACRES	B1	\$43.62	7	625	\$146,893	19	n/a	\$1,119,549
TOPSTONE HYD	B1	\$125.70	1	350	\$165,421	8	n/a	\$512,917
BAY MOUNTAIN	C1	\$102.31	5	107	\$22,807	2	n/a	\$156,409
BROOKSIDE	C1	\$110.88	2	206	\$79,141	3	n/a	\$268,181

Table 4. DPUC Regulated and Public Water Utilities: Selected Data

COMPANY NAME	TYPE	QUARTERLY RATES (18,000 GALS)	REGION	NO. OF CUSTOMERS	ANNUAL REVENUES	MILES OF PIPE	EMPLOYEES (FT)	PLANT IN SERVICE
CLASSEE ²	C1	\$73.50	5	75	\$14,981	1	n/a	\$23,203
COUNTRY SQUIRE	C1	\$86.88	5	92	\$25,274	2	n/a	\$76,123
ELLSWORTH ESTATE	C1	\$31.07	7	82	\$10,980	1	n/a	\$68,326
FOREST HILLS	C1	\$50.00	1	99	\$18,033	1	n/a	\$70,622
HARBIL	C1		1	130	\$40,458	3	n/a	\$260,703
HAWKS NEST ³	C1	\$21.25	5	90	\$2,555	1	n/a	\$48,808
HAWKS NEST	C1	\$32.50	5					
HIVUE	C1	n/a	3	n/a	n/a	n/a	n/a	n/a
INDIAN RIDGE	C1	\$90.72	1	55	\$22,315	1	n/a	\$43,904
JUDEA	C1	\$137.70	3	122	\$65,365	2	n/a	\$56,246
LAKE HAYWARD ⁴	C1	\$126.76	5	252	\$63,887	6	n/a	\$116,229
LAKESIDE ⁵	C1	\$80.50	1	157	\$48,039	4	n/a	\$202,814
LAKESIDE	C1	\$97.50	1					
MASONS ISLAND	C1	\$107.76	5	165	\$63,126	4	n/a	\$130,805
OAKDALE	C1	\$35.88	5	112	\$15,918	2	n/a	\$80,636
OLD NEWGATE	C1	\$117.60	7	44	\$21,122	1	n/a	\$179,616

Table 4. DPUC Regulated and Public Water Utilities: Selected Data

COMPANY NAME	TYPE	QUARTERLY RATES (18,000 GALS)	REGION	NO. OF CUSTOMERS	ANNUAL REVENUES	MILES OF PIPE	EMPLOYEES (FT)	PLANT IN SERVICE
<i>OLMSTEAD⁶</i>	C1	\$89.16	1	119	\$39,109	2	n/a	\$127,915
<i>OLMSTEAD</i>	C1	\$133.74	1					
<i>PLEASANT ACRES</i>	C1	\$76.00	1	n/a	n/a	n/a	n/a	n/a
<i>POINT O WOODS⁷</i>	C1	\$97.85	5	370	\$72,830	4	n/a	\$270,113
<i>P&A MEMORIAL⁸</i>	C1	\$7.50	2	n/a	n/a	n/a	n/a	n/a
<i>RACING BROOK⁹</i>	C1	\$72.50	1	110	\$31,900	n/a	n/a	\$90,927
<i>SDC WATER</i>	C1	\$55.06	5	53	\$10,622	1	n/a	\$78,203
<i>SOUNDVIEW¹⁰</i>	C1	\$183.95	5	n/a	n/a	n/a	n/a	n/a
<i>SOUNDVIEW (OLS)</i>	C1	\$178.40	5	n/a	n/a	n/a	n/a	n/a
<i>SOUTH COV</i>	C1	\$91.43	2	98	\$31,134	2	n/a	\$137,009
<i>TIMBER TRAILS¹¹</i>	C1	\$70.00	1	n/a	n/a	n/a	n/a	n/a
<i>TYLER LAKE¹²</i>	C1	\$171.25	3	252	\$63,867	3	n/a	\$213,186
<i>TYLER LAKE</i>	C1	\$108.38	3					
<i>TYLER LAKE (ID)</i>	C1	\$47.04	3					
<i>TYLER LAKE (WC)</i>	C1	\$60.68	3					
<i>TYLER LAKE (WW)</i>	C1	\$112.62	3					

Table 4. DPUC Regulated and Public Water Utilities: Selected Data

COMPANY NAME	TYPE	QUARTERLY RATES (18,000 GALS)	REGION	NO. OF CUSTOMERS	ANNUAL REVENUES	MILES OF PIPE	EMPLOYEES (FT)	PLANT IN SERVICE
WEST SERVICE	C1	\$49.75	7	165	\$32,981	5	n/a	\$335,124
WHITE SAND ³	C1	\$57.60	5	148	\$18,614	2	n/a	\$33,651
BERLIN WCC	P	\$26.70	7	1,300	\$446,389	37	5	\$3,038,388
BETHEL WD	P	\$35.20	1	2,275	n/a	n/a	n/a	n/a
BRISTOL WD	P	\$50.46	7	16,263	\$5,102,233	204	39	\$16,583,862
CANAAN WD	P	\$55.00	4	105	\$20,663	n/a	n/a	n/a
CANDLEWOOD	P	\$86.44	3	467	\$161,328	7	n/a	\$630,098
COLCHESTER	P	\$65.35	5	1,350	\$340,287	n/a	n/a	\$1,994,515
CROMWELL FD	P	\$33.81	4	2,593	\$804,561	63	n/a	\$4,550,124
DANBURY	P	\$24.56	1	9,589	\$5,726,888	94	32	\$33,092,859
EAST LYME	P	\$49.45	5	5,000	\$1,514,499	83	9	\$12,448,518
GROTON	P	\$45.63	5	5,398	\$4,385,586	92	42	\$24,629,623
MANCHESTER	P	\$65.82	7	14,300	n/a	n/a	n/a	n/a
MDC	P	\$32.09	7	112,263	\$29,896,557	1,406	721	\$215,454,330
MERIDEN	P	\$65.29	4	16,556	n/a	n/a	n/a	n/a
MIDDLETOWN	P	\$46.26	4	10,000	n/a	n/a	n/a	n/a
NEW BRITAIN	P	\$25.94	7	17,300	\$4,633,711	207	48	\$23,525,632
NEW HARTFORD	P	\$66.07	7	343	n/a	n/a	n/a	n/a
NEW LONDON	P	\$32.62	5	12,000	\$3,635,421	104	40	\$20,366,424

Table 4. DPUC Regulated and Public Water Utilities: Selected Data

COMPANY NAME	TYPE	QUARTERLY RATES (18,000 GALS)	REGION	NO. OF CUSTOMERS	ANNUAL REVENUES	MILES OF PIPE	EMPLOYEES (FT)	PLANT IN SERVICE
NOANK FD	P	\$35.37	5	630	\$99,363	11	n/a	\$749,263
NORWALK 1ST	P	\$44.07	6	10,670	\$2,947,992	17	25	\$15,548,205
NORWALK 2ND	P	\$54.45	6	9,162	\$3,798,034	n/a	36	\$16,990,069
NORWICH	P	\$45.21	5	8,200	n/a	n/a	n/a	n/a
PORTLAND	P	\$33.44	4	2,000	n/a	n/a	n/a	n/a
PUTNAM	P	\$77.50	2	2,863	\$1,197,274	38	8	\$4,020,384
SCRWWA	P	\$67.13	4	100,044	\$52,282,064	1,494	314	\$228,429,510
SEASTRWA	P	\$75.96	5	2,410	\$651,204	41	n/a	\$4,020,384
SHARON	P	n/a	3	n/a	n/a	n/a	n/a	n/a
SOUTHINGTON	P	\$52.44	7	9,930	\$3,084,541	163	19	\$12,247,098
SPRAGUE	P	\$38.13	5	435	\$106,014	4	n/a	\$887,299
STERLING	P	n/a	2	n/a	n/a	n/a	n/a	n/a
TARIFFVILLE FD	P	n/a	7	498	\$83,701	5	n/a	\$626,224
TOLLAND	P	\$81.26	2	294	n/a	n/a	n/a	n/a
TORRINGTON WD	P	\$49.04	3	194	n/a	n/a	n/a	n/a
WALLINGFORD	P	\$64.60	4	11,107	n/a	n/a	n/a	n/a
WATERBURY	P	\$46.04	3	26,071	\$11,105,411	336	58	\$86,093,349
WATERFORD	P	\$34.36	5	4,000	n/a	n/a	n/a	n/a
WATERTOWN FD	P	\$41.68	3	2,000	\$606,896	30	6	\$2,929,918

Table 4. DPUC Regulated and Public Water Utilities: Selected Data

COMPANY NAME	TYPE	QUARTERLY RATES (18,000 GALS)	REGION	NO. OF CUSTOMERS	ANNUAL REVENUES	MILES OF PIPE	EMPLOYEES (FT)	PLANT IN SERVICE
WATERTOWN WSA	P	\$56.90	3	4,000	\$965,482	48	n/a	\$4,632,446
WINDHAM	P	\$36.68	2	4,455	n/a	n/a	n/a	n/a
WINSTED	P	\$55.89	3	2,560	\$1,074,148	37	n/a	\$4,414,550
WORTHINGTON FD	P	\$26.70	7	1,056	\$283,548	1	n/a	\$551,141
TOTAL		\$71		701,400	\$276,211,828			1,383,191,268

Source: DPUC Summary of 1992 Annual Reports of Private Water Companies, Municipal Annual Reports Submitted to DPUC, DPUC Summary of Regulated Company Rates as of August 31, 1993, and LPR&IC Staff Survey of Public Water Utilities

Note: Types A1, B1, and C1 are private companies, with "A" representing the large water companies and "C", the smallest companies. Type P represents the public companies.

Note: The regions, 1 through 7, designate the public water supply management areas within which particular companies are located or headquartered. (areas formed through the Connecticut Plan process discussed in Chapter II). See Figure 2 on page 53 for map.

1. The abbreviations in parentheses after company names indicate separate divisions, with different rates.

The rates recorded for Aqua-Treatment are for their divisions with metered rates. Aqua also has divisions, not shown in this table, that are charged by flat and fixture rates. (Fixture rates are based on the number of sinks, showers, toilets, etc. at a dwelling). Six other Class A companies have small numbers of customers billed at flat or fixture rates, which are not accounted for in this table.

2. Company operates on a seasonal basis. Seasonal rates typically are single rates charged for the period April through October (seven months). Amounts representing quarterly rates for comparison purposes were calculated by dividing the seasonal rate in half. In practice, customers typically have to pay the whole seasonal amount, regardless of usage.

3. Company has seasonal and annual rates.
4. Seasonal rate
5. Company has seasonal and annual rates.
6. Olmstead has an annual and seasonal flat rate. The first rate is the annual; the second listed is the seasonal.
7. Seasonal rate
8. Company charges annual flat rate of \$30.00.
9. Seasonal
10. Seasonal rate
11. Company charges annual flat rate
12. First two rates listed are based on seasonal and annual rates.
13. Seasonal

Table 5. DPUC Regulated and Public Water Utilities: Ranked by Rates

COMPANY	TYPE	QUARTERLY RATES (18,000 GALS)	REGION	NO. OF CUSTOMERS	ANNUAL REVENUES	PLANT IN SERVICE
<i>SOUNDVIEW</i>	C1	\$183.95	5	n/a	n/a	n/a
<i>SOUNDVIEW (OLS)</i>	C1	\$178.40	5	n/a	n/a	n/a
<i>KENT</i>	A1	\$171.52	3	311	\$216,676	\$1,295,843
<i>TYLER LAKE</i>	C1	\$171.25	3	n/a	n/a	n/a
<i>AQUA-T (PH)</i>	A1	\$159.00	2	1,344	\$390,758	\$954,153
<i>AQUA-T (RF)</i>	A1	\$143.10	7	n/a	n/a	n/a
<i>JUDEA</i>	C1	\$137.70	3	122	\$65,365	\$56,246
<i>OLMSTEAD</i>	C1	\$133.74	1	119	\$39,109	\$127,915
<i>LAKE HAYWARD</i>	C1	\$126.76	5	252	\$63,887	\$116,229
<i>TOPSTONE HYD.</i>	B1	\$125.70	1	350	\$165,421	\$512,917
<i>OLD NEWGATE</i>	C1	\$117.60	7	44	\$21,122	\$179,616
<i>AQUA-T (CH)</i>	A1	\$116.46	2	n/a	n/a	n/a
<i>CONNECTICUT WATER</i>	A1	\$113.07	4	58,968	\$37,454,597	\$171,264,590
<i>CONNECTICUT AM (MV)</i>	A1	\$112.90	5	25,783	\$17,237,333	\$62,304,459
<i>TYLER LAKE (WW)</i>	C1	\$112.62	3	252	\$63,867	\$213,186
<i>BROOKSIDE</i>	C1	\$110.88	2	206	\$79,141	\$268,181
<i>TYLER LAKE</i>	C1	\$108.38	3	n/a	n/a	n/a
<i>MASONS ISLAND</i>	C1	\$107.76	5	165	\$63,126	\$130,805
<i>WOODBURY</i>	A1	\$106.50	1	639	\$305,873	\$1,166,056
<i>BAY MOUNTAIN</i>	C1	\$102.31	5	107	\$22,807	\$156,409
<i>POINT O WOODS</i>	C1	\$97.85	5	370	\$72,830	\$270,113
<i>RURAL</i>	A1	\$97.62	1	953	\$319,169	\$796,345
<i>LAKESIDE</i>	C1	\$97.50	1	157	\$48,039	\$202,814
<i>AVON (FW)</i>	A1	\$93.97	7	n/a	n/a	n/a
<i>NEWTOWN</i>	A1	\$91.86	1	993	\$492,825	\$2,681,574
<i>SOUTH COVENTRY</i>	C1	\$91.43	2	98	\$31,134	\$137,009
<i>INDIAN RIDGE</i>	C1	\$90.72	1	55	\$22,315	\$43,904

Table 5. DPUC Regulated and Public Water Utilities: Ranked by Rates

COMPANY	TYPE	QUARTERLY RATES (18,000 GALS)	REGION	NO. OF CUSTOMERS	ANNUAL REVENUES	PLANT IN SERVICE
<i>OLMSTEAD</i>	C1	\$89.16	1	n/a	n/a	n/a
<i>COUNTRY SQUIRE</i>	C1	\$86.88	5	92	\$25,274	\$76,123
<i>NEW CANAAN</i>	A1	\$86.58	6	3,206	\$1,905,227	\$7,231,071
<i>CANDLEWOOD</i>	P	\$86.44	3	467	\$161,328	\$630,098
<i>CRYSTAL (WD)</i>	A1	\$86.00	2	3,202	\$1,526,517	\$7,859,205
<i>CONNECTICUT AM (GN)</i>	A1	\$85.37	6	n/a	n/a	n/a
<i>TOLLAND</i>	P	\$81.26	2	294	n/a	n/a
<i>BRIDGEPORT</i>	A1	\$81.16	6	103,996	\$51,793,247	\$249,187,007
<i>LAKESIDE</i>	C1	\$80.50	1	n/a	n/a	n/a
<i>CRYSTAL</i>	A1	\$79.60	2	n/a	n/a	n/a
<i>NEW MILFORD</i>	A1	\$78.92	1	2,443	\$1,358,346	\$7,411,828
<i>PUTNAM</i>	P	\$77.50	2	2,863	\$1,197,274	\$4,020,384
<i>PLEASANT ACRES</i>	C1	\$76.00	1	n/a	n/a	n/a
<i>SEASTRWA</i>	P	\$75.96	5	2,410	\$651,204	\$4,020,384
<i>CLASSEE</i>	C1	\$73.50	5	75	\$14,981	\$23,203
<i>GALLUP</i>	A1	\$73.45	2	568	\$303,024	\$1,014,103
<i>RACING BROOK</i>	C1	\$72.50	1	110	\$31,900	\$90,927
<i>CRYSTAL (TD)</i>	A1	\$71.68	2	n/a	n/a	n/a
<i>TIMBER TRAILS</i>	C1	\$70.00	1	n/a	n/a	n/a
<i>ANSONIA DERBY (now Birmingham)</i>	A1	\$68.81	4	8,183	\$3,847,656	\$14,266,164
<i>SCRWWA</i>	P	\$67.13	4	100,044	\$52,282,064	\$228,429,510
<i>AVON</i>	A1	\$66.39	7	3,525	\$1,574,512	\$9,702,085
<i>NEW HARTFORD</i>	P	\$66.07	7	343	n/a	n/a
<i>CRYSTAL (PD)</i>	A1	\$65.84	2	n/a	n/a	n/a
<i>MANCHESTER</i>	P	\$65.82	7	14,300	n/a	n/a
<i>COLCHESTER</i>	P	\$65.35	5	1,350	\$340,287	\$1,994,515
<i>MERIDEN</i>	P	\$65.29	4	16,556	n/a	n/a

Table 5. DPUC Regulated and Public Water Utilities: Ranked by Rates

COMPANY	TYPE	QUARTERLY RATES (18,000 GALS)	REGION	NO. OF CUSTOMERS	ANNUAL REVENUES	PLANT IN SERVICE
WALLINGFORD	P	\$64.60	4	11,107	n/a	n/a
JEWETT CITY	A1	\$62.85	5	1,472	\$367,966	\$1,656,406
BETHEL CON.	B1	\$61.68	1	501	\$166,696	\$537,880
TYLER LAKE (WC)	C1	\$60.68	3	n/a	n/a	n/a
HERITAGE VII.	A1	\$59.29	1	3,325	\$947,514	\$4,374,106
UNIONVILLE	A1	\$58.22	7	4,591	\$1,825,101	\$14,154,825
WHITE SAND	C1	\$57.60	5	148	\$18,614	\$33,651
WATERTOWN WSA	P	\$56.90	3	4,000	\$965,482	\$4,632,446
WINSTED	P	\$55.89	3	2,560	\$1,074,148	\$4,414,550
SDC WATER	C1	\$55.06	5	53	\$10,622	\$78,203
CANAAN WD	P	\$55.00	4	105	\$20,663	n/a
NORWALK 2ND	P	\$54.45	6	9,162	\$3,798,034	\$16,990,069
SOUTHINGTON	P	\$52.44	7	9,930	\$3,084,541	\$12,247,098
RIDGEFIELD	A1	\$51.09	1	2,445	\$762,767	\$2,889,924
STAMFORD	A1	\$50.93	6	19,328	\$12,287,395	\$48,270,209
BRISTOL WD	P	\$50.46	7	16,263	\$5,102,233	\$16,583,862
FOREST HILLS	C1	\$50.00	1	99	\$18,033	\$70,622
WEST SERVICE	C1	\$49.75	7	165	\$32,981	\$335,124
EAST LYME	P	\$49.45	5	5,000	\$1,514,499	\$12,448,518
TORRINGTON WD	P	\$49.04	3	194	n/a	n/a
PLAINVILLE	A1	\$48.58	7	5,797	\$1,313,277	\$5,816,470
HAZARDVILLE	A1	\$48.53	7	6,653	\$1,575,314	\$6,728,783
TYLER LAKE (ID)	C1	\$47.04	3	n/a	n/a	n/a
MIDDLETOWN	P	\$46.26	4	10,000	n/a	n/a
WATERBURY	P	\$46.04	3	26,071	\$11,105,411	\$86,093,349
GROTON	P	\$45.63	5	5,398	\$4,385,586	\$24,629,623
NORWICH	P	\$45.21	5	8,200	n/a	n/a
TORRINGTON	A1	\$44.58	3	7,832	\$2,298,774	\$15,582,764

Table 5. DPUC Regulated and Public Water Utilities: Ranked by Rates

COMPANY	TYPE	QUARTERLY RATES (18,000 GALS)	REGION	NO. OF CUSTOMERS	ANNUAL REVENUES	PLANT IN SERVICE
NORWALK 1ST	P	\$44.07	6	10,670	\$2,947,992	\$15,548,205
ELLINGTON ACRES	B1	\$43.62	7	625	\$146,893	\$1,119,549
WATERTOWN FD	P	\$41.68	3	2,000	\$606,896	\$2,929,918
VILLAGE	A1	\$41.06	7	4,638	\$1,130,277	\$7,809,445
DANCON	A1	\$38.76	1	561	\$87,516	\$46,233
SPRAGUE	P	\$38.13	5	435	\$106,014	\$887,299
WINDHAM	P	\$36.68	2	4,455	n/a	n/a
OAKDALE	C1	\$35.88	5	112	\$15,918	\$80,636
NOANK FD	P	\$35.37	5	630	\$99,363	\$749,263
BETHEL WD	P	\$35.20	1	2,275	n/a	n/a
WATERFORD	P	\$34.36	5	4,000	n/a	n/a
CROMWELL FD	P	\$33.81	4	2,593	\$804,561	\$4,550,124
PORTLAND	P	\$33.44	4	2,000	n/a	n/a
NEW LONDON	P	\$32.62	5	12,000	\$3,635,421	\$20,366,424
HAWKS NEST	C1	\$32.50	5	90	\$2,555	\$48,808
MDC	P	\$32.09	7	112,263	\$29,896,557	\$215,454,330
ELLSWORTH ESTATE	C1	\$31.07	7	82	\$10,980	\$68,326
WORTHINGTON FD	P	\$26.70	7	1,056	\$283,548	\$551,141
BERLIN WCC	P	\$26.70	7	1,300	\$446,389	\$3,038,388
NEW BRITAIN	P	\$25.94	7	17,300	\$4,633,711	\$23,525,632
DANBURY	P	\$24.56	1	9,589	\$5,726,888	\$33,092,859
HAWKS NEST	C1	\$21.25	5	n/a	n/a	n/a
P&A MEMORIAL	C1	\$7.50	2	n/a	n/a	n/a
TARIFFVILLE FD	P	n/a	7	498	\$83,701	\$626,224
STERLING	P	n/a	2	n/a	n/a	n/a
SHARON	P	n/a	3	n/a	n/a	n/a
HIVUE	C1	n/a	3	n/a	n/a	n/a
HARBIL	C1	n/a	1	130	\$40,458	\$260,703

Table 5. DPUC Regulated and Public Water Utilities: Ranked by Rates

COMPANY	TYPE	QUARTERLY RATES (18,000 GALS)	REGION	NO. OF CUSTOMERS	ANNUAL REVENUES	PLANT IN SERVICE
<i>TOTAL</i>		\$71		704,886	\$277,529,066	1,387,896,256

As Table 5 shows, the highest rate charged by any supplier for a quarterly consumption of 18,000 gallons of water is \$183.95 while the lowest is \$7.50. This is a range of \$176, with the average rate, \$71.

Separating the private companies and the public entities, the average rate for the public water suppliers is \$50, with the highest rate being \$86.44 and the lowest, \$24.56. For the private companies, the average is \$84.58. (Four of the highest ten rates represent seasonal charges).

Table 6 displays the rate spread for the regulated private companies and the municipal entities. Overall, private company rates tend to be higher than public rates.

Table 6. Quarterly Rate Spread for Private and Public Water Suppliers			
Quarterly Rate (18,000 Gals)	Private	Municipal	All
< \$10	1	0	1
\$11-\$30	1	5	6
\$31-\$50	12	16	28
\$51-\$70	13	12	25
\$71-\$90	14	4	18
\$91-\$110	11	0	11
\$111-\$130	8	0	8
\$131-150	3	0	3
\$151-\$170	1	0	1
\$171-\$190	4	0	4
TOTAL	68	37	105

Table 6 displays rate breakdowns for 105 water suppliers. However, the bulk of public water supply customers are served by a small number of water suppliers. Table 7 sets out the 13 public and private companies that account for 75 percent of the public water system customers. For these largest water suppliers, the highest rate is \$113 and the low is \$26, a spread of \$87.

Table 7. Thirteen Largest Private and Public Water Suppliers (Private Companies are Shaded)				
Entity	No. of Customers	Percent of Total Customers	Cumulative Total	Quarterly Rate
MDC	112,263	15.5	15.5	\$32 (\$39) for nonmember towns
Bridgeport Hydraulic	103,996	14.4	29.9	\$81
SCCRWA	100,044	13.8	43.7	\$67
Connecticut Water Company	58,968	8.2	51.8	\$113
Waterbury	26,071	3.7	55.6	\$46
Connecticut American	25,783	3.7	59.3	\$113/\$85
Stamford	19,328	2.8	62.1	\$51
New Britain	17,300	2.5	64.6	\$26
Meriden	16,556	2.4	67	\$65
Bristol	16,263	2.3	69.3	\$50
Manchester	14,300	2.0	71.3	\$66
New London	12,000	1.7	73	\$33
Wallingford	11,107	1.7	74.7	\$65

Some comparisons are interesting to note. For example, there are three regional water entities: MDC, South Central Connecticut Regional Water Authority (SCCRWA), and Southeastern Connecticut Water Authority, with quarterly rates of \$32, \$67, and \$75 respectively. MDC and SCRRWA are somewhat similar in size; the rate differentials at least indicate that there is something beyond the characteristic of being a large regional supplier of water that influences rates.

Nature of Water Rate Variability Issue

A threshold decision must be made about whether the water rate variability now present in Connecticut is inequitable, and thus requiring state action. The decision could be based on

the degree of variability, on a finding that a certain proportional difference is unfair. A decisive factor could be the cause of the difference, i.e., different tax treatment. Or the variance might be seen as evidence of too many public water suppliers in Connecticut, with ramifications not so much for fairness, but for water supply issues and economic efficiencies.

One could decide as a matter of policy that the variance is acceptable. There are different costs associated with location in many service delivery contexts. Town property rates vary, for example. Water consumers have choices about where to locate, with differing water costs just another factor to consider.

In considering the issue of rate variance, it is important to understand that cost of service is a concept that could apply at the individual customer level; ie., there could be rate variance between individual customers within a utility. In theory, every water customer could be charged a different rate because no two customers' costs are perfectly equal. As the American Waterworks Association notes:

The theoretically ideal solution to developing rates for water utility customers would be to assign cost responsibility to each individual customer served and develop rates to derive that cost. It is not economically practical or even possible to determine the cost responsibility and applicable rates for each individual customer served. In reality, no two customers have the same cost of service.⁹

As posed by one Connecticut utility (in the context of a single company): "...should a customer located at a higher elevation pay more because of the increased distribution and pumping costs? Should a customer served by a surface water supply pay more because of the extent of the treatment required?"¹⁰

Of course, one cost differential between two major categories of public water supply consumers--public versus private customers--is imposed by governmental tax policy. A major distinction between public water supply consumers is whether their rates reflect federal, state, and local tax payments, as private company customers, or not, as public entity customers. Simply put, in terms of the state general fund, private water customers are contributing to state revenues through their water rates where public water utility customers are not. In terms of local budgets, private water customers are paying additional property tax that public water utility customers are not.

DPUC has adopted a policy of rate equalization for rate setting within corporate jurisdictional lines. The policy ultimately requires a company to charge the same rates to all

⁹ Water Rates, American Water Works Association Manual of Water Supply Practices, Third Edition, p. 23

¹⁰ Connecticut Water Works Association Member Memo Submitted to LPR&IC Staff

customers regardless of any identifiable, different, intra-corporate costs. The rationale for the policy, if extrapolated beyond standing jurisdictional lines, highlights a problem with having so many water suppliers. In a recent rate case, DPUC commented on a company's proposal to set up a tiered rate schedule for its separate water divisions:

...the [tier system] takes a short term approach to solving the problem of unequal rates among separate divisions of one water company. While rate equalization often creates short-term winners and losers, ultimately all ratepayers benefit both generally from administrative economies of scale (lower total operating costs) and specifically because, when a new system eventually needs repair, the cost is spread over a larger customer base and the increase to any given ratepayer is therefore diluted. In the long run all ratepayers benefit...¹¹

In a rate proceeding, of course, DPUC takes corporate boundaries the way it finds them. What DPUC's rate equalization policy indicates is that if the corporate boundaries were enlarged now under present circumstances, meaning fewer separate companies, DPUC would move to equalize rates based on the above rationale.

Alternative Approaches

If rate variance is seen as a problem, or symptomatic of other policy deficiencies, two approaches may be taken to address it. First, the state could establish a policy that all water supply be consolidated by a certain date. Alternatively, acknowledging recent trends toward consolidation, various tools could be strengthened to accelerate the trend. These two approaches are discussed below.

Mandatory Consolidation of Water Delivery

Regionalization of water supply has been discussed for several years. A 1981 article in the American Water Works Association Journal noted:

Regionalization of water management offers many advantages over the presently highly fragmented organizational structure that characterizes the water industry in the United States. Economies and efficiencies of scale are particularly attractive. Local government is loath to initiate regional arrangements because

¹¹ Decision, DPUC Docket 92-06-29, Application of Aqua Treatment and Service, Inc. for Approval of Long-Term Financing, Rate Equalization and rate Adjustment for all Divisions, pg 12.

of the threat to local sovereignty...[s]tate government may be in the best position to stimulate the creation of regional institutions.¹²

Two different models of consolidation are: 1) a state-owned and operated public water system; or 2) state mandated regionalized public water authorities.

Central to any proposal for a public takeover of water supply systems is the status of water supply as an essential service. Further, any public takeover would have to enhance the delivery of the essential service. Obviously, consolidation would decrease rate variability (assuming the application of a rate equalization policy). What would be unknown, of course, would be the resulting rate levels.

Many considerations would be involved in a public takeover. Both models would require the exercise of eminent domain to form the new entities. As property taken through eminent domain requires just compensation, the cost of implementing either model would be unknown, but surely significant. While not representing this as a valid measure for compensation purposes, it can be noted that the total value of plant in service for the private regulated companies is almost \$650 million. (The municipal systems would have significant compensation costs also.)

An additional impact of a public takeover of private facilities would be lost tax revenue to the state and local governments. Another unknown that would require examination would be the extent to which all the various separate systems would interrelate, to take advantage of consolidated ownership.

Forced consolidation of all water suppliers would be a clear change in the direction of state policy, which only relatively recently formally adopted coordination as a policy, implemented through planning and information gathering efforts. While the concept of consolidating water suppliers has appeal, the program review committee believes a mandatory takeover program at this time is premature, and therefore does not recommend it.

Public ownership of electric companies was considered in 1984 by a special act, which required an independent consultant to study the feasibility of public ownership of electric companies serving at least 75,000 customers (i.e., CL&P and UI). The objective of the study was to determine the feasibility of a public acquisition of portions of or all assets of CLP and UI and to identify any advantages for the state's ratepayers from public ownership as contrasted with private ownership.

Without equating the electric industry to the water industry, some of the comments made in the 1984 report are instructive. In its conclusions, the study noted:

¹² Okun, Daniel, State Initiatives For Regionalization, American Water Works Association Journal, May 1981, p. 243.

Many believe that public acquisition of existing electric facilities is a rational decision based upon the perceived "market failure" of privately owned utilities. Publicly-owned utilities are believed to be capable of offering savings based on their access to lower cost capital and exemption from federal income taxes. The creation of publicly owned utilities has been controversial in large part because justification and ultimate governmental action has in some cases been based upon contentions rather than complete economic analyses incorporating 'identifiable externalities'.

It is contended by some that publicly owned utilities are more efficient, have lower costs, and are more responsive to public needs. However, valid comparisons must be made of all measurable cost differences, particularly when the comparisons are between public acquisitions and ownership versus an ongoing private utility.

...An economic analysis alone cannot adequately address the intangible factors or quantify the problems involved in replicating the privately owned power systems which have evolved and service Connecticut consumers over several decades.¹³

The report finally concluded that while "prospects for potential benefits from the development of a publicly-owned utility in Connecticut do exist,...[t]here are... many risk factors which are associated with a public ownership program." The report recommended a series of risk analyses to be completed. Such analyses would have to be performed with respect to a mandatory water supplier takeover.

Promoting Consolidation

While the committee believes water supply consolidation should be a goal of the state, in order to maximize economies of scale, the committee also believes a more incremental approach should be taken, with a clearer policy on distributing the costs of consolidation.

While mandated consolidation is too drastic an approach at this time, other steps may be taken to more affirmatively promote consolidation. Many of these steps involve fully implementing tools put in place during the 1980s, whose total impact has not been realized for a variety of reasons. These provisions include statewide water supply planning (the Connecticut Plan), the DPUC acquisition statute, and the DPUC excessive rate provision. In addition, committee staff proposes a structured economic viability screening process for small water companies and the imposition of a fee on public water suppliers to assist in acquisition costs.

¹³ Feasibility Study, Public Ownership of Electric Utilities in Connecticut, Daverman Associates, Inc., November 1984

Connecticut Plan. As noted earlier, the Connecticut Plan process was enacted in 1985 to "maximize efficient and effective development of the state's public water systems and to promote public health safety and welfare" via a process to "coordinate the planning of public water supply systems". The plan is to include provisions for:

- integration of public water systems consistent with the protection and enhancement of public health and well being;
- integration of water company plans;
- exclusive service areas;
- joint management or ownership of services;
- satellite management services;
- interconnections between public water systems;
- integration of land use and water system plans;
- minimum design standards; and
- impact on other uses of water resources.

A water utility coordinating committee (WUCC) is to be established in each of seven designated management areas. However, the legislation enacting the program provides funding for only one consultant contract per year to produce the areawide supplement portion of the coordinated water system plan.

Of the seven designated management areas, three have had areawide assessments completed; the status of the final coordinated plans in all those areas is in flux because not all the individual water supply plans have been approved. After a DPHAS moratorium on hiring consultants for any additional areas, DPHAS is now in the process of selecting the next area in which to convene a coordinating committee and hire a consultant to perform the areawide work, to begin July 1, 1994. Figure 2 shows the seven management areas. Region 1, the Housatonic Area, Region 4, the South Central Area, and Region 7, the Upper Connecticut River Area, are the areas for which areawide assessments have been conducted.

The terms of the Connecticut Plan process do not promote ownership consolidation as a tool of integration and coordination, but appear to envision coordination within existing ownership structures. One key concept for small water utilities is satellite management, where ownership is not relinquished, but aspects of a water supply system are run with the contracted help of another utility. However, as noted in two areawide assessments:

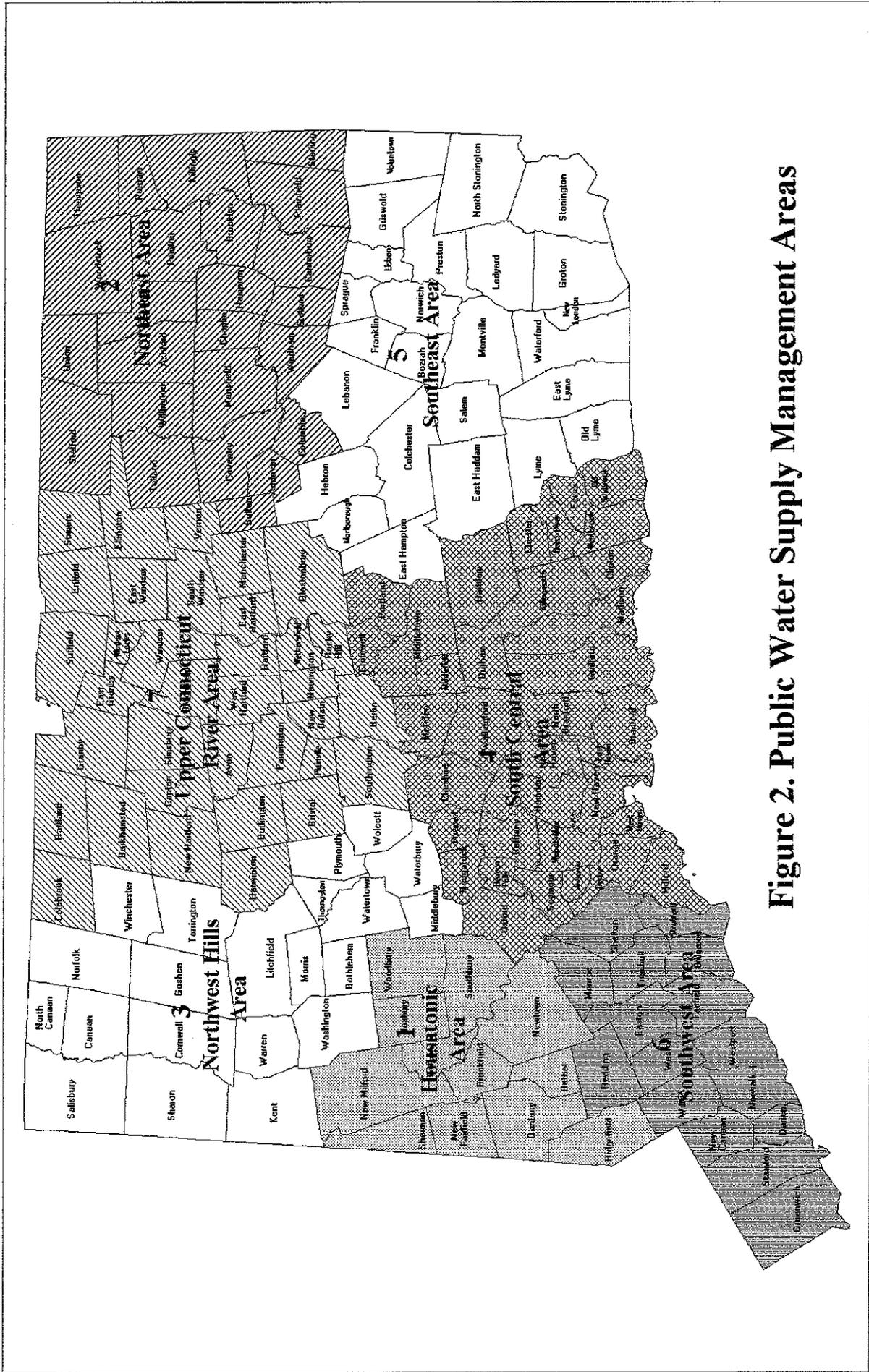


Figure 2. Public Water Supply Management Areas

It must be remembered that satellite management is but one of the alternatives for a small utility plagued by the problems of small utilities, particularly the lack of adequate working capital both for administration and for renewal of infrastructure. Such options as merging with adjacent small water utilities, formation of a water district, formation of regional water utilities and the like are possibilities not covered in this report...

The same reports noted:

...it was difficult to say with any degree of certainty the effect that these committees will have on the coalescence of smaller water utilities or in the satellite management program generally...Although the WUCC represents a certain degree of regionalization, its powers were not intended to go to the extent of providing satellite management...

As four of the water management areas have yet to have water utility coordinating committees established, and thus have no areawide, integrated planning documents, it is premature to make final conclusions about the plan's potential ramifications for consolidation efforts. However, the work done in the first three provide significant data about the status of the areas' water systems and the extent of interconnections and coordination already in existence. Once this information is developed for the whole state, decisions about mandating regionalization can be better made.

The program review committee supports the completion of the first round of the Connecticut Plan process as expeditiously as possible. In the meantime, continued awareness of the process should be maintained by the legislature. Under a 1989 public act, DPHAS is required to submit an annual report on the status of the Connecticut Plan to the environment committee, which has not yet occurred.

The program review committee recommends that DPHAS comply with the annual report requirement, which shall also be submitted to the Energy and Public Utilities Committee.

Annual comparative rate reporting. The Connecticut Plan process develops significant data related to water supply issues, but nowhere is information required about consumer costs, i.e. rates. With all the caveats about rate comparisons set out earlier, the program review committee believes periodic information about rates is important for state policymakers to be aware of. DPUC obviously maintains rate data for the companies it regulates; there is no current central location where public entity rates are maintained.

The program review committee recommends that C.G.S. Secs. 16-29 and 16-32b be amended to require municipal and regional water entities to submit current rate information to DPUC along with their annual reports. DPUC shall submit a report on the

rates of both public and private providers to the Energy and Public Utility Committee on or before the second Wednesday after the convening of each regular session of the general assembly.

Small water companies. As Table 4 shows, DPUC regulates several small water companies, designated as Class C companies. While the average rate charged by the Class C companies is not that much higher than the average rate of the larger water companies, many commentators note that undercharging and failure to maintain plant are common problems for small companies.

Anecdotal testimony to these phenomena is found in the case of the Ellsworth Estates company. This company was actually acquired by a larger utility in 1992, but appears in Table 1 because it was still operating for part of 1992. Its quarterly rate for 18,000 gallons was \$31.07. During the DPUC acquisition process, it was determined that if the costs of the required rehabilitations to the Ellsworth estate system were borne solely by the Ellsworth customers, their rates for the amount of water they were getting for \$31 would increase to \$240.

According to DPUC, these small companies have no or very little equity investment. This can happen because they originated as housing developments where all the original plant costs were borne by the homebuyers, or financial constraints have required heavy borrowing. Thus, there is no concept of providing a return on ownership investment, which is the cornerstone of rate base regulation. In a recent rate decision, DPUC stated it:

wants to move to full rate base regulation of all companies and away from the net income approach. Rate base regulation only provides a return to investors on the investor-supplied plant and other assets, providing the right incentive for equity infusions. An equity infusion can be equated to direct ownership interest in a company. The rate of return that a utility company is allowed is based upon the components of the cost of capital.

DPUC went on to say:

On the other hand, the net income approach can provide for a level of income with little or no investment from the owners. There is no incentive under the net income method to invest if the net income is simply determined as a percentage of revenue or specified to provide an adequate debt service coverage. Net income equates to management fees and in some instances it might be more appropriate to put out bid requests for the management services which could result in lower operating cost.

The question is whether the state should continue to facilitate financially troubled companies. By all accounts, these financial issues will only deepen as these companies try to meet new requirements of the federal Safe Drinking Water Act.

DPUC primarily monitors small water companies in the context of orders it makes in rate decisions. There is no formal process by which troubled companies are identified through performance measures, and no general plan to guide intervention.

The DPUC, in consultation with DPHAS, shall establish a schedule to assess all class C companies for economic viability, based on performance measures of technical, financial, and managerial assets developed by DPUC. A finding of economic nonviability shall be grounds for acquisition by a public or private water utility under Sec. 16-262o.

There are many models for determining economic viability, including those using various financial ratios. The committee believes it is appropriate for DPUC with its expertise to develop such standards, which should be promulgated as regulations.

The certificate of need process described in the briefing is a screening process for potential new systems. This recommendation takes the screening process a step further and establishes a system to proactively screen current systems. The National Regulatory Research Institute acknowledges that the "art of water utility performance and assessment is new and not well established", but notes that "performance assessment is a logical next step in developing viability policies."¹⁴

Prospect for growth is certainly a factor in assessing economic viability. Because of their small customer bases, small companies cannot take advantage of economies of scale. Optimization of such economies should be included in DPUC's viability analysis, acknowledging that economies might vary at different points in the water supply continuum.

As noted in another National Regulatory Research Institute study, economies of scale are often "expected to occur in monopolies and are apparent when the average cost of providing a single product or service decreases as output or volume of service increases." The study reports that "many analysts contend that water utilities enjoy significant economies of scale. According to recent research, economies of scale exist for treatment cost, but are somewhat less apparent for total system cost. By comparison, some diseconomies of scale are apparent regarding the distribution system".

The study further states based on its review of financial data, "the implication is that larger systems can produce water at a lower cost (in terms of both capital and operating expenses) and sell it at a lower price than smaller systems. More study is needed to determine whether declining ratios are related to the size or density of the population in utility service territories."

¹⁴ Viability Policies and Assessment Methods for Small Water Utilities, NRRI, June 1992, p.114

Excessive rate petitions. Another tool put into place during the late 1980s is the excessive rate provision, C.G.S. Sec. 16-10a(b). Initially enacted in 1987, the main focus during the original public hearing on the bill was the Bozrah Electric Company, which was charging higher rates than CL&P. As initially drafted, the provision applied to all public service companies serving 5000 customers or less.

By a floor amendment, cable television and water companies were specifically exempted from the excessive rate provision. In 1989, the Office of Consumer Counsel supported successful legislation lifting the exclusion for water companies.

The statute provides that DPUC is to conduct a hearing about whether a company's rates for the last five years are excessive, either on DPUC's own initiative or a consumer petition. Because of the five year review period, the soonest an action could be taken would be October 1, 1994.

Under the law, excessiveness is to be reviewed in comparison to rates charged by other public service companies providing the same or similar service. Specifically, DPUC is to determine if the rates "inhibit the economic development of the area in which the company is authorized to furnish service or impose an unreasonable cost on the customers of the company."

The statute provides that if DPUC finds the rates excessive, it may consider whether the rates are the result of such factors as:

- the overall size, stability and financial condition of such company;
- the organization, including technical and managerial expertise and efficiency of the company; and
- the physical condition and capacity of the company's plant.

DPUC may order the company to reduce its costs or revoke its franchise if the company is unable to do so.

At first glance, the notion of DPUC finding rates it had previously approved under a standard of "adequate service at reasonable rates" to be "excessive" seems contradictory. However, this excessiveness provision adds comparability and impact elements that do not exist in the concept of reasonableness in C.G.S. Sec. 16-19e. Although comparability can come into play when determining rates of return, for example, unique geographic, water source, or other similar characteristics, coupled with a certain sized customer base, create noncomparable situations in terms of standard ratemaking concerns.

The consumer counsel at the time testified that while there were provisions dealing with inadequate service, there are no provisions for excessive rates. He maintained that a company could be providing very good service, but at too high a price, due perhaps to a small customer

base. In terms of small water companies, this provision would work in tandem with the economic viability assessment recommended above.

As noted above, the five-year lookback period will have passed in October 1994, so that the provision will be available for water companies. However, to date, DPUC has not promulgated regulations for the statute; the current statutory wording suggests DPUC may have discretion about drafting these guidelines.

Finally, the current limit to companies serving under 5000 customers includes all but eight of the current regulated water companies within the reach of the excessive rate statute. Given that some of the highest rates are charged by some of the largest companies, those water customers should have the same opportunity for an excessive rate review as others.

The program review committee recommends that C.G.S. Sec. 16-10a(b) be amended to include all water companies regulated by DPUC and that DPUC be required to promulgate regulations to implement the provisions of the excessive rate statute.

Involuntary acquisition process. The state's involuntary acquisition statute is another tool developed during the 1980s to provide for continued service to customers for failing water companies. The statute represents one of the few areas where both municipal and private water companies fall under DPUC jurisdiction.

The majority of companies deemed most suitable for acquiring troubled companies have been private, although some municipalities have acquired entities under the acquisition statute. The emphasis on geographic proximity as a factor for DPUC to consider coupled with historical development patterns of the private companies tend to put them most often in close proximity to failing systems.

The problem is that the ratepayers of these private companies pay, along with the acquired company customers, for the costs of saving the failing system. A recent case, mentioned earlier, provides some insight into how the acquisition statute is applied. The Ellsworth Estates Water Company served about 82 homes in East Windsor, with the oldest part of its system built in 1915. In mid-1991, the company notified the DPUC of its intent to cease service because of the owner's inability to continue to run the company. The rates for the Ellsworth company customers were \$31.07 per quarter, based on an average usage of 18,000 gals.

As part of the acquisition process, DPUC determined a certain level of capital improvements. DPUC noted that if the capital improvements they required were paid for by Ellsworth customers, the rates would be \$248.34 per quarter for each of the 82 customers.

The statutory selection criteria for DPUC to pick a company to takeover a failing company is:

- the geographical proximity of the plant of the acquiring entity to the water company;
- whether the acquiring entity has the financial managerial and technical resources to operate the water company in a reliable and efficient manner and to provide continuous and adequate service to the persons served by the company and
- any other factors the department deems relevant.

In this case, MDC and the Connecticut Water Company (CWC) were brought in as potential acquiring parties. The Office of Consumer Counsel argued that MDC should be the acquiring entity, based in part on the fact that MDC had the lowest rates of the two: \$32 compared to \$113. DPUC responded that:

[DPUC] has consistently determined that the impact on the customers of the acquired water company is a single factor in determining the most suitable entity. However, that impact is measured by comparing the resulting rates if the necessary capital improvements were recovered from only the customers of the acquired entity, to the resulting rates if the costs are spread over all the customers of the acquiring company and not by comparing the current rates among the candidates for the most suitable entity. (underlining added)

Both MDC and CWC had parts of their systems nearby Ellsworth, but CWC had closer sources of supply, which was compelling to DPUC. DPUC also determined, however, that for the present, it would be most cost-effective for CWC to operate the Ellsworth Estate system as a satellite (ie. not connected).

The program review committee acknowledges that many considerations need to go into the decision about suitable takeover companies. The committee believes that the ratepayer perspective should be clearly taken into consideration.

The program review committee recommends that C.G.S. Sec. 16-262o be amended to require DPUC to consider the current rates among the candidates for the most suitable entity.

Municipal and Regional Water Entity Participation. The reason so many small water companies exist today is because past state and local policies allowed the growth. Currently, the burden of handling the small company problem falls primarily on private company ratepayers, either as acquiring or acquired customers.

Private water companies pay for DPUC operations, including acquisition activities, through annual assessments. The small water company economic viability screening process recommended earlier will require additional work for DPUC.

In addition to DPUC assessments, private water suppliers are subject to state and local taxes their municipal counterparts are not. Thus state tax policy adds costs to ratepayers of private companies that municipal ratepayers do not bear. For example, although the gross earnings tax for utilities applies to both municipal and private providers of electric and gas, it only applies to private providers of water.

Assuring the provision of adequate water is a matter of public interest. As a matter of equity, the costs should be spread out as widely as possible. Municipal and private water customers make up the Connecticut public water system community. Costs for ensuring the continued adequacy of this system should be more broadly shared beyond certain ratepayer groups who find themselves in the proverbial "wrong place at the wrong time".

The program review committee recommends that an annual fee shall be paid by municipal and regional water suppliers to assist with the costs attendant to the acquisition process for water companies under C.G.S. Sec. 16-262o, including rehabilitation costs, and the economic viability assessment recommended earlier. The fee shall be equivalent to the utility gross earnings tax paid by private water suppliers.

This fund would be used for both DPUC activities and to reduce acquisition costs for the affected ratepayers.

Agency Coordination

As discussed earlier, different state agencies are charged with exercising regulatory authority over water suppliers. The legislature recognized the need to minimize duplicative efforts in the specific areas of water conservation and emergency contingency planning when it established the memorandum of understanding (MOU) process involving OPM in 1989. The legislature expanded the scope of the memorandum of understanding in 1991 to deal with issues of regulatory overlap with respect to water regulation.

Under that provision, OPM was to develop another MOU for areas of regulatory overlap by April 1992. This has not occurred yet, and according to OPM staff, it is not clear that there are any further areas that need coordination.

In the course of this study, the program review committee has identified some areas of potential conflict. For example, in several interviews, staff was told there are coordination issues related to the DEP diversion permit process and other water regulatory agencies. In addition, program review staff is aware that DPHAS, in an update memo about the Connecticut

Plan, noted that certain aspects of the water supply planning process could benefit from formal coordination efforts.

It would be useful for OPM to at least review the overlapping areas along with staff from the other relevant agencies, and make a written report on its findings. Therefore, the program review committee recommends that **OPM develop a matrix of overlapping regulatory authority in the chapters indicated in C.G.S. Sec. 4-67e, and assess whether a MOU in any of those areas is needed. OPM should report its findings from that review to the legislative committees of cognizance by January 1, 1995.**

APPENDIX



STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC UTILITY CONTROL

REGINALD J. SMITH
COMMISSIONER

May 12, 1994

Co-Chairpersons of the Legislative Program
Review and Investigations Committee
The Honorable Judith G. Freedman
State Senator
The Honorable Wade A. Hyslop Jr.
State Representative
State Capitol
Room 506
Hartford, CT 06106-1591

Dear Senator Freedman and Representative Hyslop:

The Department of Public Utility Control (Department) received a draft of the Legislative Program Review and Investigations Committee's report, Department of Public Utility Control: Regulation of Water Companies, on May 1, 1994. We have reviewed the draft and have some brief remarks on the recommendations, taking into account recent legislative action. Before doing so, I would like to commend Carrie Vibert, Chief Attorney, for her fine work in preparing this comprehensive report.

Regarding the recommendations that involve this Department:

- a) Without a statutory change, we can not act on recommendations Nos. 2 and 6.
- b) The Department is disappointed that recommendation 3 did not pass; however, we have the authority to evaluate the economic viability of any utility under C.G.S. 16-11. When the Department establishes performance measures, it will begin the process of evaluating the existing Class C companies, as resources permit.
- c) The Department will begin drafting the regulations regarding the provisions of the excessive rate statute mentioned in recommendation 4 and will publish notice in the Connecticut Law Journal of its intent to adopt regulations within five months after the effective date of the public act.
- d) Consistent with recommendation 5, it is the Department's practice to consider current rates as one of the criteria for candidates for the most suitable entity under C.G.S. Sec. 16-262o. We will continue to do so.
- e) The Department believes that recommendation 7 that OPM develop a Memorandum Of Understanding (MOU) will aid the water industry as the

regulatory agencies assess overlaps and determine means of unifying regulation.

Again, the Department appreciates the effort that went into producing the report and we look forward to implementing the recommendations discussed above.

Sincerely,

A handwritten signature in cursive script, appearing to read "Reg Smith".

Reginald J. Smith
Chairperson

RJS/ajg

cc: Michael L. Nauer
Carrie E. Vibert