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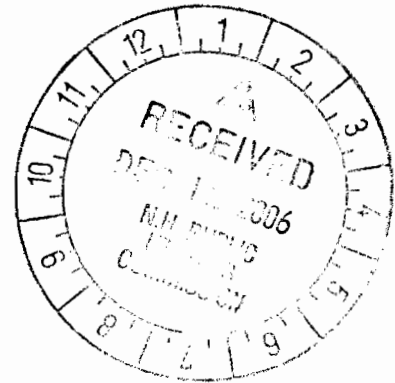
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December 12, 2006

Debra A. Howland
Executive Director and Secretary
New Hampshire Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, NH 03301



RE: DW 04-048: City of Nashua – Pennichuck Water Works, Inc.

Dear Ms. Howland:

Barbara Pressly, an intervenor in this docket, inadvertently filed the attached testimony, dated May 19, 2006, electronically with the Commission. She also sent this electronically to the service list in DW 04-048. The Commission does not presently accept electronic filings. This filing error has recently come to the Commission Staff's attention and Staff is forwarding the attached information to the Commission for formal filing, on Ms. Pressly's behalf. Staff has confirmed that her intent was to file the attached cover letter and documents entitled: Testimony on Valuation and Public Interest; Time Line Comparing Corporate Water (Nashua) & Public Water (Manchester); and An Historic Retrospective of the Business & Political Relationship Between Pennichuck Water Works Company & the City of Nashua, NH (1853-1982).

Thank you for your acceptance of this testimony.

Sincerely,

A handwritten signature in cursive script that reads "Marcia A.B. Thunberg".

Marcia A.B. Thunberg
Staff Attorney/Hearings Examiner

Enclosures

Barbara Pressly, intervener
11 Orchard Avenue
Nashua, NH 03060
(603) 880-7752
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May 19, 2006

Debra A. Howland
Executive Director and Secretary
NH Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, NH 03301-2429

RE: Docket # DW 04-048

Dear Ms. Howland,

Please accept and find enclosed for filing in the above-referenced matter testimony transmitted electronically. Copies have been sent electronically to the service list and PUC list.

Thank you.

Barbara Pressly

DW 04-048

TESTIMONY ON VALUATION AND PUBLIC INTEREST

From

Barbara Pressly, Intervener

11 Orchard Avenue

Nashua, NH 03060

May 22, 2006

The attached documents demonstrate the advantages of public (open) ownership over private (closed) ownership and why the public interest is served by Nashua owning its own water delivery system.

Attached Documents

1. Historical Retrospective
2. Time Line
3. The Manchester Web Site: Go to watershed
<http://www.manchesternh.gov/citygov/wtr/home.html>
4. The Pennichuck Web Site: http://www.pennichuck.com/about_us.htm
and <http://www.topix.net/com/pnnw>

Profit vs. Public purpose

Profit and self interest of the owners (share holders) of Pennichuck Water Works has been the purpose of the Corporation since its beginning in 1853. Making a profit does not exist in public ownership.

The decision makers of the Corporation work outside the public domain and frequently have had **conflicts of interest**. Unbeknownst to the public the leaders have historically appeared to use influence and political power to protect their assets.

The City of Nashua has repeatedly launched acquisition movements of the corporation citing **poor water quality, inadequate service and high rates**. The Corporate leaders have repeatedly resisted public ownership and have responded by belatedly addressing the water problems, by raising rates and by expanding services.

Pennichuck's disregard for public sentiment has been a source of tension with the City since 1853. The water belongs to the people and it is time that investors stop making a profit from this nature resource.

The Cities of Nashua and Manchester are the two largest cities in the State of New Hampshire. They are 17 miles apart having parallel geological and industrial histories. Nashua water system has always been privately owned and Manchester's has always been publicly owned. The contrast in water quality, protection of watershed protection land and progressive technology between the two systems is startling.

Manchester as a public entity has been a good steward of the land and thus has recharged and protected the purity of the water. Manchester's transparent decision making process and open public accountability is a strong testimonial supporting the public purpose of public ownership. The value of Manchester is the benefit it provides to the citizens and rate payers by its philosophy of caring for the land and the protection of the water supply.

The value of Pennichuck is primarily in its ability to make a profit for its shareholders. Pennichuck, as a for profit entity has destroyed our most precious resource – the land and the pure water. Their Corporate Culture appears to believe that the quality of the water is unimportant because water filtration plants can purify anything. Therefore any man produced contamination is OK. I believe that had Pennichuck been publicly owned and the profit motive had been removed, our watershed land would not have been destroyed.

The Web Sites of both Water Works show the significant differences. The Pennichuck site is small, devoted to investment information and their public relations propaganda regarding the eminent domain process. The Manchester Water Works by contrast has extensive information covering every possible topic of interest to the consumer about the water delivery service. The Manchester Watershed Site shows the magnificent devotion to water protection and public interest that public ownership can provide. The value that Manchester has provided to the community and the State of New Hampshire is irreplaceable and invaluable.

TIME LINE COMPARING
CORPORATE WATER (NASHUA)
&
PUBLIC WATER (MANCHESTER)

Updated May 19, 2006

- 1853:** Pennichuck Water Works Corporation formed
- 1871:** Manchester Water Works is formed as public entity.
- 1873:** 1st time Nashua tries an acquisition movement of Pennichuck
- 1880:** 2nd time Nashua tries an acquisition movement of Pennichuck.
- 1880:** Manchester experiences building boon around lake front property abutting the City's water supply.
- 1895:** Manchester acquires by eminent domain private property surrounding their water supply
- 1897:** 3rd time Nashua repeats the acquisition movement of Pennichuck.
- 1897:** Pennichuck drives first test wells producing pure water.
- 1900:** Pennichuck lobbies and succeeds in reducing assessed valuation from Nashua thus reducing tax burden.

- 1895 – 1920:** Period of great land acquisition in Nashua by gifts from private citizens, foreclosure and purchase. These lands provided wells producing pure water.
- 1928:** Pennichuck controlled 933.4 acres of watershed and surface water combined
- 1928 – 1933:** Nashua Mayor simultaneously serves as President of Pennichuck. .
- 1941:** World War II breaks out
- 1953:** Pennichuck land holdings totaled approximately 2,400 acres with 287 acres of water.
- 1956-1957:** Federal Interstate Highway built
- 1957:** President of Pennichuck appointed to City Planning Board
- 1958:** 4th time Nashua tries acquisition movement of Pennichuck
- 1968:** 5th time Nashua tries acquisition movement of Pennichuck
- 1974:** Manchester builds modern water filtration plant.
- 1977:** Maurice Arel elected Mayor of Nashua
- 1980:** Nashua expands outside city boundary for first time by supplying water to Anheuser Busch Brewery.
- 1980:** Pennichuck builds modern water filtration plant

- 1981:** On July 14, 1981, Resolution R-81-301:Relative To Approval Of Issuance Of \$5,000,000 In Bonds By Nashua Industrial Development Authority For Long-Term Financing Of Pennichuck Water Works Treatment Plant, was passed by the City of Nashua Board of Alderman and signed by Mayor Arel.
- 1982:** Pennichuck starts drawing water from the Merrimack River
- 1983:** Pennichuck creates an unregulated subsidiary named Southwood Development Corporation with the blessing of the PUC. 75% of formerly fenced watershed land is transferred for development. Arel reelected Mayor by landslide 80%.
- 1984:** Early in 1984 Arel sponsors legislation rezoning land critical to Pennichuck watershed development plan. October of same year Arel resigns as Mayor to become President of Pennichuck.
- 1985:** Southwood sells its first parcel of watershed land.
- 1986:** Senator John Stabile gets Exit 8 added to the State's 10 year highway plan. This exit is critical to the watershed development plan.
- 1991 – 2001:** Pennichuck revenue nearly triples from \$8.3 mil to \$22.7mil.
- 1995:** Pennichuck declares water emergency
- 1993 – 2000:** Pennichuck dividends increased 51%.
- 1998:** Pennichuck forms Pennichuck East
Pennichuck acquired Pittsfield Aqueduct Co.

1980 - 2002: Pennichuck's Southwood Division develops the former watershed land for profit to the share holders while Pennichuck Water Works uses public bond to finance the water treatment plant. During this period Pennichuck requests and is granted six rate increases from the PUC over 22 years representing 183% increase.

2001: October: Pennichuck secretly starts process of selling Company.
December: Pennichuck determines range of value of Company.

2002: Pennichuck announces its intention to sell the Corporation to Philadelphia Suburban Corp. for 106 million dollars in a stock for stock transfer. Debt is 27 million.

2003: Nashua citizens vote to pursue purchase of Pennichuck.

2004: State and Federal SEC investigations of Pennichuck are made public. Arel resigns but Board members stay on. Manchester Water Works starts upgrade of water treatment facility.

2006: Same Pennichuck Board members as cited in the SEC investigation remain in Corporate leadership roles and two are re-elected. Manchester expects to complete the upgrades to their treatment facility.

Today: Manchester owns approximately 8,000 acres of watershed protection land. Manchester does not need to take water from the Merrimack River because of its care of the watershed and water supply.

Today: Nashua owns approximately 700 acres of watershed protection land. Nashua has taken some of its water supply from the Merrimack River since 1982 suggesting poor care of its watershed land and water supply.

2009: Pennichuck will complete upgrade of treatment plant

**An Historic Retrospective of the Business & Political Relationship Between
Pennichuck Water Works Company & the City of Nashua, NH (1853-1982).**

Alan S. Manoian-AICP, New Urban Northeastern, Nashua, NH.

Sources:

Pennichuck Water Works Company 75th Commemorative Book (1928)
Pennichuck Water Works Company 100th Commemorative Book (1953)
City of Nashua Annual Reports (1870-1982)
City of Nashua Annual Directories (1870-1982)
A Testing Time, (Shepherd, 1984)
Report Upon the Property & Business of the PWW (Metcalf & Eddy, 1914)
An Evaluation of PWW Land Holdings as They Relate to Water Quality & Supply
(Sasaki, 1980)
The Nashua Telegraph (1848-1982)
The Nashua Gazette (1870-1897)
The Manchester Union Leader (1869-1897)
City of Manchester Annual Reports (1870-1914)

SUMMARY –This narrative covers the first 130 years of the Pennichuck Water Works and its often contentious relationship with the City of Nashua. Since its founding by the wealthy industrialists and bankers who controlled Nashua during its heyday as a mill city, Pennichuck has been the focus of at least five prior attempts at control by the citizens of Nashua. Complaints as to quality, cost, and adequacy of supply were the most frequent issues. The company successfully deflected the first five attempts through political maneuvers, powerful connections and attempts to expand beyond the ability of the City to acquire it. During this time the company has transitioned from a surfacewater supply to a system of wells with extensive areas of protected watershed. The story of Manchester's municipal water works is briefly covered for comparison.

♦ *PUBLIC INTEREST VS PRIVATE INTEREST*

In 1952, William F. Sullivan, having served as President of Pennichuck Water Works Co. for some 32 years, stated in the company's 100th Commemorative Book, "One hundred years ago, a sturdy group of descendants of the Pilgrim Fathers,...with true Yankee enterprise and forethought for the future banded together to form a water company...the founders and their successors through the decades have met many a grave crisis while furnishing at all times an adequate and reliable supply of running water...We begin our

second century confident that individual initiative, free from unreasonable Government regulation and undue tax burdens, will best serve the interests of the community and the company. It is our hope that the company may carry on efficiently and well for the next hundred years.”

William Sullivan was the embodiment of the complex relationship between the public interest of Nashua and private interest of Pennichuck Water Works; for he was the Mayor of Nashua from 1928-1933, NH State Senator in 1918, first president of the Nashua Chamber of Commerce, first president of the Nashua Rotary, president of the New Hampshire Improvement Co., Director of Indian Head Bank & Nashua Building & Loan Association, Trustee of the Nashua Hospital, member of the first New Hampshire Water Resources Board, president of the New England Water Works Association, and owner of his own local insurance company.

The strong individuals who built and guided Pennichuck Water Works through the decades, took great pride in building and guiding the City of Nashua; however the corporate culture of Pennichuck Water Works shaped from its earliest days in 1853 has dictated that the company would efficiently provide for the public interest, but would never effectively be controlled by that same public interest.

In both Nashua and Manchester, the three year period between 1870 and 1873 historically marks a pivotal moment or tipping point regarding the urban “water supply issue” and the public interest therein. Rampant industrialization and urbanism was the order of the day in each Merrimack Valley city. Characteristically compact, concentrated, of high-population & building density, often plagued by contagious disease, and lighted and warmed by the open flame, the late 19th century manufacturing cities of Nashua and Manchester required an ever increasing supply of reliable and safe water, and a reliable and safe water delivery system. It was increasingly agreed upon, understood, and adopted by the citizens of most cities that a large urban water system should be owned and managed by the municipality; this was seen as modern, progressive, and arguably in the public interest.

♦ *MANCHESTER’S APPROACH – PUBLIC CONTROL*

In Manchester, the “water issue” was resolved by 1871, with the creation of the municipal Manchester Water Works. The controversy raged during the previous twenty years, as three Manchester private water company attempts all failed. The success of the 1871 municipal water works was assured through the energetic leadership of a most extraordinary man, Mayor James A. Weston. James A. Weston, the first native to be Mayor of Manchester, was an accomplished civil engineer, Chief Engineer of the Concord Railroad, President of the New Hampshire Fire Insurance Co., Mayor of Manchester in 1867, 1869, 1870, and 1873, and Governor of New Hampshire in 1871 and 1874. It was written of him, “Governor Weston was a model public officer for the reason that he was capable, honest, and an unostentatious gentleman...he sprang from the

people, believed in them, worked for and sympathized with them, and they trusted, respected, and honored him.”

On August 1, 1871 the Manchester City Council adopted a resolution to build the Manchester Water Works for not more than \$600,000, with Lake Massabesic as the pure source, and to appoint the first members of the new Board of Water Commissioners. In Manchester of 1871, a group of private investors willing to attract and raise \$600,000 in capital to launch such a still risky and complex venture did not exist; therefore the municipality must provide for the public interest and deliver the water. The public had waited long enough. With the contentious and distractive arguments and battles spanning some 20 years regarding the provision of safe and abundant water for the people of Manchester, the city was prepared to move ahead and deal with other urban issues, as was the case in most New England cities of that era.

Between 1871 and 1895 a building boom emerged upon the shores of Lake Massabesic, including many retreat homes and two hotels; the potential for contamination was a real threat. It was in the interest of water quality, public health, and long-term resource protection for future generations, the City of Manchester acted once again. In 1895, the municipality took by eminent domain most of the properties surrounding Lake Massabesic forever guarding and protecting the vital watershed lands; building upon the shores of the water supply was deemed unacceptable to the public interest. For some 130 years, Manchester has consistently added to the watershed lands surrounding Massabesic today comprising an impressive resource inheritance of approximately 8,000 acres. Manchester introduced a modern water filtration plant in 1974; the plant was immediately recognized with national awards for design and technology excellence.

♦ *NASHUA'S BUSINESS OWNERS FILL THE VOID*

At Nashua in 1873, a very different dynamic and situation existed. For a private water-works system had existed there for some 20 years by 1873; a corporation owned and managed by a group of men and families best described as the founding “mercantile-industrial fathers” of the city. As was stated in the Pennichuck Water Works 75th Commemorative Book of 1928, “The Pennichuck Water Works always served the needs of Nashua completely. Early indeed did a sturdy group of men recognize that “Water, God’s best gift to man” was an essential to comfort and happiness. With foresight and courage they acted while other cities agitated. It was twenty years after Pennichuck Water Works began operations that Manchester, Lowell, Lawrence and other cities dared to risk capital in such a fluid enterprise.” Well, Manchester had dared at private venture, but failed three times; at Nashua in 1853 they succeeded the first time, and they were rightly proud and staunchly protective of the enterprise. As an old mercantile New England saying went, “They made money at the right time, in the right way”.

♦ *NASHUA'S FIRST ATTEMPT AT MUNICIPAL ACQUISITION*

In Mayor Seth Chandler's 1872 Inaugural Address he stated, "It is well known that for the last two or three years the city has been poorly supplied with water as to quantity and quality...Ignorance is bliss in regard to it." The Chief Engineer of the Fire Department, major real estate owners, leading industrialists, Ward Aldermen and members of the Common Council, all began to press the issue; the City of Nashua should control its own water supply system, as most other progressive cities are now doing; Are we in Nashua somehow different from them, is the public interest not the same? So, here was Nashua's moment in history to settle the water issue, as most other cities were doing, and a great leader, such as Manchester's Mayor Weston, was required. In 1873-74, Frank A. McKean was elected Mayor of Nashua, and this complex issue would be placed in his hands.

Frank A. McKean was a partner in McKean & Andrews Fire, Life, & Accidental Insurance Company. Though originally residing in old Ward Five, west of Main Street by the mills, by the 1870's his home was located at 60 Concord Street. His partner George Andrews was an official at the Nashua Savings Bank; the president and directors of Pennichuck Water Works, such as Dr Edward Spalding (*then president of Pennichuck*), Clark C. Boutwell, and Isaac Spalding, served as Treasurer, President, and President respectively of the Nashua Savings Bank at that time. There existed many social and business interconnections between Mayor McKean and the directors of Pennichuck; but this surely was not uncommon in the city then.

A select municipal committee was established on January 24, 1873 to survey and examine the existing state of Pennichuck property, infrastructure, and water resources. The committee returned with a positive recommendation for the city to acquire Pennichuck Water Works; their March 1873 report stated, "We know of no city or town of any considerable size where the water supply is controlled by private parties...believing the present time exceedingly favorable for getting possession of the works, we would earnestly recommend that this matter receive the early attention which its importance requires."

In May 1873, the committee reported to the full City Council, "Your committee recommends that the city purchase said water works as it can be done at the present time for \$100,000 less than the same work could be constructed at the present time...the amount required to purchase the entire works is \$175,000." The committee report was accepted by the Council and the committee discharged; no action taken.

♦ *PENNICHUCK'S ANSWER TO THE CHALLENGE*

The debate continued into the summer of 1873, as it was reported in the Nashua Telegraph in June, "There are some sound men in the city who object to the city's purchase of the water works so long as they can be satisfactorily run by private

enterprise. They maintain that a municipal corporation cannot manage any enterprise as economically as it can be managed by a private corporation.”

These “sound men” advocating private water enterprise at that time were most likely some of the following; **George Stark**, Founder & President of Pennichuck Water Works (1859-1872), Supt. of the Nashua & Lowell Railroad, & Boston & Lowell Railroad, Agent Northern Pacific Railroad, Director Nashua Fire Insurance Co.; **Dr. Edward Spalding** President Pennichuck Water Works (1872-1895), Mayor of Nashua (1864), past President of Nashua Manufacturing Co. & Jackson Manufacturing Co., President Indian Head Bank, Treasurer Nashua Savings Bank, President Peterborough Railroad, Treasurer Nashua & Lowell Railroad, Chairman Nashua Library Trustees; **Clark C. Boutwell**, Director Pennichuck Water Works (1858-1880), President Nashua Savings Bank; **Edward P. Emerson**, Founder & Treasurer of Pennichuck Water Works (1853-1865), President First National Bank, President City Savings Bank, Agent New England Mutual Life Insurance Company, Nashua Public Library Trustee, author of 1853 Nashua City Charter, Nashua’s first City Clerk (1853-1855), Nashua City Treasurer (1857, 58, 60), Judge Nashua Police Court (1863-1874); **Isaac Spalding**, Pennichuck Water Works Director (1860-1875), President Concord Railroad, President Nashua Savings Bank; and **Harrison Hobson**, Treasurer Pennichuck Water Works (1865-1880), President Nashua Gas Co., Director Nashua Savings Bank, Agent Sawyer Carriage Manufacturing Company.

In that fateful summer of 1873, the “water issue” went back and forth; it was a time for genuine leadership as demonstrated by Mayor James A. Weston of Manchester two years earlier. Unfortunately, Mayor Frank A. McKean’s response was one of passivity; he publicly stated, “Upon general principal I believe the city should control its water supply, but I am not prepared at this time to recommend any specific course of action.” And with this seemingly duplicitous declaration by the Mayor of Nashua the debate apparently came to an end, and a new contract for water was entered into with Pennichuck Water Works Company by the city. In 1874, the city cost of Pennichuck water totaled \$3,600, with the entire municipal Fire Dept. budget being but \$10,409.96.

♦ *A MAYOR REWARDED*

Mayor McKean was reelected in 1874, and in 1877 he secured the position of Cashier of the Indian Head Bank, and his brother Albert securing position of Head Teller; Dr. Edward Spalding, President of Pennichuck, Harrison Hobson, Treasurer of Pennichuck, along with many other Pennichuck owners were on the Board of Directors of Indian Head Bank, with Dr. Spalding becoming its President in 1883; they must have been impressed with Mayor McKean’s abilities.

One final note on Mayor McKean; one December morning in 1894 he disappeared from Nashua, only for the Indian Head Bank directors to find that he embezzled \$90,000 from the institution. In 1894, \$90,000 was an astronomical amount; it was said he was last seen in Buenos Aires, Argentina, never to be found.

♦ *CYCLE OF CONFLICT ESTABLISHED*

Here in 1873 the die was cast. The relationship between the municipality of Nashua and Pennichuck Water Works was set on its course or ritual of seemingly perpetual tension, confrontation, conflict, and reconciliation. It has left the community with an unsettled feeling and questioning; if it's not in the public interest now, then when? The answer tends to be "not today", but "maybe someday"; this unfulfilled public endeavor, left to future generations, has become part of Nashua's socio-political culture.

This contentious history has affected the corporate culture of the Pennichuck Water Works Company. Since 1873, if not earlier, Pennichuck Water Works, in its business relationship with the City of Nashua, has demonstrated a distinct management pattern: Expect the acquisition movement, engage the acquisition movement, withstand the acquisition movement, and expand/advance beyond the acquisition movement, prepare for the next acquisition movement. The City of Nashua and Pennichuck Water Works Company have engaged in this "ritual dance" at least six times through the years; 1873, 1880, 1897, 1958, 1968, and 2003.

Pennichuck Water Works has withstood every public acquisition movement, and in the end of each episode grown its way out of the conflict by improving service, expanding territory, introducing new technology, and adding value. Some acquisition movements were more formal than others, but this legacy of public vs. private move-countermove leaves one asking the question; will there ever be a time when Nashua's public interest absolutely demands public ownership of its water supply?

♦ *LOCAL CONTROL... OF A SORT*

The men and families that founded and managed Pennichuck Water Works were a most interconnected group of individuals; and what made Pennichuck Water Works function so well through most of its corporate history was the strikingly close physical proximity of the homes, businesses, churches, and cemeteries of the owners within their hometown. This was the socio-political control that maintained Pennichuck as a local entity. As late as 1968, the families that owned Pennichuck stock were publicly referred to as "The Holy 357"; for after some 108 years the same intimate group of Nashua-based families still substantially controlled the company; it was in many ways an inter-family and multi-generational family business.

Not only did they live in close proximity to each other, the presidents and directors of Pennichuck lived among the people, the general public. John H. Gage (*president & founder*) lived on East Olive Street (*today's Nashua Library Courtyard*), George Stark (*president & founder*) lived at his fine Italianate Villa at Concord & Manchester St., Dr. Edward Spalding (*president & director*) lived at 15 Temple Street (*today's County Registry of Deeds*), Edward P. Emerson (*treasurer*) lived at 11 Park St., Isaac Spalding (*director*) lived on Main Street (*next to Methodist Church*), Harrison Hobson & son

Harry Hobson (*treasurers*) lived at corner of Concord & Crescent St., Clark C. Boutwell (*director*) lived at 8 Abbott St., Sen. Charles C. Atherton (*first president*) Manchester St. (next to Stark), and William Beasom (*founder & director*) on Main Street (*next to Isaac Spalding*). And to complete the circle of life-business-death, after having lived their lives within a 3-5 minute walk of each other, they ultimately and eternally lay in peace closely together, literally with 20-30 feet of each other, at the Nashua Cemetery behind the Unitarian-Universalist Church. This was local control in life, business, and beyond.

♦ NASHUA'S SECOND ACQUISITION ATTEMPT

In 1880, Mayor Benjamin Fletcher, Jr., made his Inaugural Address, with Virgil Gilman (*past Mayor & clerk of Pennichuck Water Works 1854-1863*), and Dr. Edward Spalding (*then president of Pennichuck*) in attendance; he boldly stated, "No contract has yet been entered into with the Pennichuck Water Works Co. for use of water. It is the opinion of many citizens and heavy tax payers that the city should own and control the Water Works which could be done by purchase as provided by law...In my judgment the question admits of three solutions: either settle it by contract, purchase, or repeal the act authorizing the city of Nashua to construct water works". Mayor Fletcher had no fear of the powerful forces in the room that day, for he was the former Chief Engineer of the Nashua Fire Department, and the man who for years bravely fought the awesome fires of the city, and who personally witnessed and experienced the horrific threat to life and property due to failure of the water works pipe distribution system. He was a self-made man, a man who worked his whole life in the iron foundries of Nashua, and a man who could not be easily moved by power and influence. Pennichuck responded to this acquisition threat, in the proven fashion, by launching a comprehensive upgrade of the works and distribution system.

In 1881 it was reported, "Pennichuck...has commenced some improvements that will involve a cost of between \$30,000-\$40,000...the old pumps will be replaced by a Lang's patent pump...the capacity is 3,000,000 gallons in twenty four hours...the company will lay about three miles of 4 inch and 6 inch pipe in the streets...and will otherwise enlarge and improve the facilities for supplying the city...the company propose to make the water works of Nashua second to none in New England." However water quality was still greatly lacking as reported in December 1881, "...nearly every time (people) fill their tanks at the Nashua spouts they catch anywhere from two quarts to a peck of fish. Some of them are dead and some are alive and all are perch...it is not a pleasant subject to contemplate that the Pennichuck pipes are plagued with alive and decaying fish."

By 1884, tensions between Pennichuck and the City were rising. Treasurer Hobson was "authorized to pay taxes assessed against the company under protest and to employ council to find out the company's rights in the matter of taxes." Also, in that year Scarlet Fever raged through the city, and the Pennichuck water supply was identified as a possible source of the contagion. City Reports state, "the Board of Health was called to the question of the purity of Pennichuck water...the board visited various ponds owned by the water company for the purpose of learning the sanitary condition of these waters."

The company hired a Boston-based, Harvard educated chemist, Dr. Wood, to examine the water, and the analysis came back with acceptable results. In 1885, a new reservoir was built upon Winter Hill, the old one having a capacity of 600,000 gallons, and the new a capacity of 3,800,000 gallons. Supply ponds were cleaned out of vegetation and improved for public health. The company had once again weathered this period of municipal concern and investigation; as always Pennichuck grew out of the issue.

♦ *THE THIRD ACQUISITION ATTEMPT*

Pennichuck Water Works made a strong move in 1890, by securing State authorization to increase their capital stock from \$300,000 to \$800,000. 1892 brought more public complaints of water quality. The gates at Bowers Pond were shut, water was drained from the lower two ponds and “The Supt. was instructed to clear the banks of the new pond of vegetable matter...Harris Pond was partly drawn off and cleaned.” Also, in 1892, “considerable areas of land around Bowers, Harris, and Supply Ponds were bought.” More new pipe was laid, and more new pumps and engines were put into service. In 1895, a new dam was built, as reported, “Work on the new Pennichuck Dam is booming right along...the dam is at the second pond above the pumping station...and this will enlarge to four times its present capacity, giving Nashua a water supply equal to all its needs.” It went from a 25 acre pond to a 100 acre supply pond. It would appear that Pennichuck was preparing for an impending move again by the city; and it came in 1897.

Passed on March 23, 1897 titled: A Joint Resolution-Appointing a Committee to Purchase the Pennichuck Water Works. This effort was led by Mayor Jason E. Tolles, and as was reported, “The report will state that it is advisable that the city own and control the property of Pennichuck Water Works, but that under present law it cannot be done. This because of a bill which has passed the Legislature, and which, it is claimed by some members of the community, **was passed for the very purpose of stopping the city purchasing the water works**, which does not allow the city to issue bonds for over \$400,000. The Pennichuck Water Works could not be purchased for probably for considerable over twice that sum so, for the present at least, that bill cuts off Nashua endeavoring to get control of the works.” Once again Pennichuck expected an acquisition move, engaged, withstood, as was again ready to expand/advance, and prepare for the next acquisition movement. This time the company may have influenced state legislation; the Governor of New Hampshire in 1897 was George Ramsdell of Nashua, a Concord Street neighbor, past President of Nashua Savings Bank, and close associate of the Directors of Pennichuck Water Works. The 1897 municipal acquisition attempt dissolved, much like 1873 & 1880.

♦ *PENNICHUCK'S GOLDEN AGE – PURE WELLS AND PROTECTED WATERSHEDS*

In 1895, a new president of Pennichuck Water Works was named, John F. Stark, son of founder and past president George Stark. As stated in the 1928 Pennichuck 75th Commemorative Book, “Up to a few years ago Nashua was supplied with an excellent

surface water supply. The officers of the company always seeking to better the quality of the water hit upon the idea of a ground water supply. The late John F. Stark believed that such a supply could be developed." This began the Golden Age of Pennichuck watershed acquisition & protection. In 1897, the cost of Pennichuck water to the city was \$6,432.50; in 1899 \$7,384.58; and in 1902 \$7,635.00.

John F. Stark, was a young and accomplished civil engineer, groomed by his civil engineer father George Stark, founder & past president of Pennichuck Water Works. The new President Stark and the Directors fully understood that the quality of water must dramatically improve in order to curtail the seemingly ever erupting movements for municipal acquisition of the Water Works. Capital stock was raised, innovative approaches adopted, progressive technology introduced, and the system expanded

In 1897 the first test wells were driven in the meadows west of Manchester Street, and proved to yield some 1,250,000 gallons/day of the finest, purest water in New England. Several well pipes some 2 ½ inch and 6 inch were driven down in 1898, and the pure water flowed. The springs were located in the marginal land surrounding the surface ponds; therefore the priority of protecting the new water supply and the Pennichuck Water Works from future municipal acquisition movements quickly focused on protection and control of the watershed lands abutting the ponds.

It was reported in June 1898, "It is the boast of Nashua that its water for household purposes is not equaled by that of any other city in New England...Pennichuck Works are now making arrangements at a heavy expense to give to Nashua what no other city has, and that is a complete supply of the purest spring water...It is certain that providing pure spring water for domestic and all purposes will be something that will add to the general health of the people." In 1900 the population of Nashua was 23,864.

In 1900, the assessed value by the City of Nashua of the Pennichuck Water Works land and property was reduced; this caused quite a controversy in the city, but the company lobbied hard and succeeded.

The watershed lands abutting Pennichuck Brook were rapidly acquired by the company, and an extensive white pine tree forest planting program was initiated. The new white pine forest served the company interest in two ways, as was documented, "... (the) company adopted the policy of developing a growth of white pine timber upon the lands adjoining and surrounding the reservoirs, partly because such a growth is a protection to the water supply, and also because such a growth furnished the best, and in fact the only practical method, of obtaining any income from these lands which were held for the purposes of protecting the quality of the water." So, by 1912 Pennichuck Water Works erected a saw-mill at Bowers Pond, and went into the timber and lumber business to generate revenue from the newly acquired forested lands; they milled some 175,000 feet of lumber in 1912.

In a 1914 report conducted by the firm of Metcalf & Eddy for Pennichuck Water Works, the following was determined; Current population 28,000; public consumption was

2,500,000 gallons/day; quantity of well or spring water available in excess of 6,000,000/day; quality of ground water is excellent; drainage area 25.36 square miles; reservoir holdings comprise 223 acres; total land and water holdings of 885 acres; distribution reservoir capacity at Winter Hill 3,800,000 gallons; 60 miles of pipe throughout city; 3,948 services with 1,169 meters; 335 fire hydrants; and a well functioning collection of pumps and steam engines.

It is important to appreciate that the city in 1914 retained its compact, mixed-use, urban form. The total area of the City of Nashua was then, as is today, approximately 32 square miles. However, in 1914 only 10% of the total land area was utilized for residential and industrial activity; 95% of the 28,000 population lived and worked on 10% of the land! This is the reason that a system based upon the natural filtration of artesian wells or springs was feasible.

The capitalization of the company in 1914 was \$700,000; annual operating expenses, including taxes, was \$46,000; it was stated in the Metcalf & Eddy report, "The taxes (\$20,471/year) are extremely high for a property of this kind...exceeding the present time 20% of the total gross revenue..."; net revenue \$55,000/year; gross reproduction cost estimated at \$1,279,730; and finally under the heading Fairness of the Rates, "...it appears that the rates in force in Nashua are somewhat lower than those in other similarly situated cities. In view of the excellent quality of the water and the high character of the service rendered, the rates are unusually low."

In the 1928, 75th Pennichuck Commemorative Book it was stated, "We in Nashua must halt and respect the farsightedness of the boards of directors from the beginning. In the purchase of those (*watershed*) holdings the stockholders sacrificed dividends, to the end that Nashua would have today and tomorrow a protected and pure supply of water. So now the chain of ponds, the flowing wells, the forest reservation, the roadways and trails make Pennichuck properties one of the most valuable and best sources of water supply to be found anywhere." By 1928, Pennichuck controlled a watershed of 933.4 acres including surface water; 466 hydrants; 4,812 services; and 2,063 meters.

John F. Stark, passed away in March 1920, this was front page headline news in the City of Nashua, and the Nashua Telegraph editorial of March 5th expresses the degree of trust the people had for the president of Pennichuck Water Works, "(A) truly a good man has gone and in his going the sum total of the community has sustained a loss; there is a breach in the front line of this city's life."

♦ *WILLIAM SULLIVAN – NASHUA MAYOR AND PENNICHUCK PRESIDENT*

The 1920 "breach in the front line" was immediately filled by William F. Sullivan, a talented young civil engineer who John Stark had brought up from Lowell some 20 years earlier to design and implement Nashua's new driven well system, and who had served as Superintendent of Pennichuck Water Works since 1906. Sullivan was the Stark family's

“man”, and in many ways carried on the dynastic character of the Pennichuck Water Works corporate culture.

In 1928, William F. Sullivan was elected Mayor of Nashua, and continued to serve as one of the most popular mayors in Nashua’s history through 1933. He lived up to John F. Stark’s example, serving as State Senator in 1918, first President of the Chamber of Commerce & Nashua Rotary, and many other positions of prominence, power, and trust. Sullivan would serve as President of Pennichuck Water Works from 1920-1956. When he passed away in June 1958, the Nashua telegraph editorial stated, “In the over 50 years that he had resided in the Nashua, the name of William F. Sullivan had become synonymous with many of the fine things which have helped the development of his adopted city. A no time in a long and distinguished career of public service did he ever fail to lend his name and time and effort to a single project that would help the city and its citizens...In every respect he was a fine public official, devoted to the cause of good government and the welfare of the people...”. Sullivan’s model serves as a striking example of the deep and longstanding socio-political interconnection between Nashua’s municipal government and Pennichuck Water Works.

The years between 1915 and 1955 witnessed a cessation any municipal efforts to acquire Pennichuck Water Works; for the new well system provided quality water, the danger of fires had been greatly reduced, WWI 1914-18, the Great Depression 1929-1941, WWII 1941-45, and the catastrophic 1948 demise of the Nashua Manufacturing Company consumed the energy, resources, and attention of the City of Nashua. Most significantly, the population growth of Nashua had leveled and stagnated. All thoughts of municipal acquisition were off the table and completely unthinkable during these volatile years. By 1953 land holdings totaled approximately 2,400 acres, with 287 acres of water.

In 1948, the cultural and industrial cornerstone of the City of Nashua, the Nashua Manufacturing Co., ceased to exist putting 2000 people in a city of approximately 32,000 out of work permanently. This resulted in the formation of the Nashua New Hampshire Foundation, with the original Board of Trustees including Eliot Carter (*V.P. Nashua Gum & Coated Paper Co/Nashua Corp*), Hugh Gregg (*Sullivan & Gregg/Gregg & Sons Co.*), Robert Erb (*Pres. McElwain Shoe Co.*), George Thurber (*Pres. Second National Bank*), George Harris (*Pres. Nashua Trust Co.*), and many other leading local business and industrial leaders. The Foundation would prove legendary in successfully repositioning and reformulating the city’s economic and industrial profile and trajectory. Many of these men were long-time family shareholders of Pennichuck Water Works, and during the 1950’s and 60’s would serve as Directors of Pennichuck Water Works.

During the 1950’s and 60’s the City of Nashua socially, culturally, politically, and economically reinvented itself. The federal interstate highway arrived in 1956-57, cutting along a north/south orientation through the center of Nashua’s land area, away from the compact downtown and old neighborhoods, and straight across the east/west oriented Pennichuck Brook. Extensive open space lands were rezoned from residential to commercial/industrial, and the Nashua NH Foundation attracted many new electronics, manufacturing, and emerging technology corporations. The population began to spike;

1960-360 new single family homes (sfh); 1961-373(sfh); 1962-351(sfh); 1964-335(sfh); 1965-420(sfh); 1966-549(sfh); 1967-604(sfh); and 1968-527(sfh).

Pennichuck Water Works, though having introduced various new pumps and equipment during the 1930's & 40's, continued to serve the community with its driven wells and natural filtration technology and water system developed in 1897. In 1960, Nashua's population was 39,096, and it was growing fast. Pennichuck was required to "keep up", and this began to look a lot like the 1880's when Pennichuck struggled to keep ahead of the expansion. In 1961 there were 799 hydrants in the city; by 1966 there were 1,004.

Water costs to the city began to spike; 1959-\$73,909; 1960-\$77,039; 1961-\$89,526; 1962-\$118,217; 1963-\$146,936; 1964-\$153,188; 1965-\$158,790; 1966-\$172,230; and by 1980 the population of Nashua was approximately 67,817 and the cost of water \$684,682. In 1981 the cost of water to the city spiked to \$923,400!

♦ *THE FOURTH ACQUISITION ATTEMPT, AND THE SOCIALIST THREAT*

In 1957, Donald C. Calderwood, an accomplished civil engineer, who had served as Supt. of Pennichuck Water Works since 1946, was elevated to President. This promotion followed the successful Stark-Sullivan model of executive advancement within Pennichuck. Donald Calderwood was appointed to the Nashua Planning Board by Mayor Mario Vagge about this time.

In April of 1958, that which had not been attempted since 1897 once again reared its head, a municipal movement to acquire Pennichuck Water Works. The Nashua Telegraph ran the story with the headline, "Water Works Purchase is Up Once More". It stated, "Alderman James R. Griffin said he will introduce a resolution at the April 20th aldermanic meeting calling for a referendum on a question of purchasing the Pennichuck Water Works." If the resolution was approved the vote would come before the public on the November ballot. This municipal movement was a direct result of the seemingly ever increasing annual costs of water charged to the city. It was not necessarily a water quality issue, yet, but a financial or money issue; for it was reported on April 15, 1958, "The City Opposes Effective Date of Water Rate Hike".

At the aldermanic meeting of April 20th the resolution was presented, "That the qualified voters adopt or reject at the next general municipal election this resolution authorizing the City of Nashua to purchase Pennichuck Water Works." The action by Alderman Griffin proved to be a most controversial one and for Griffin a frightening experience, considering that it was the height of the Cold War and the hunt for Socialist sympathizers was at its height in America. It was reported on May 28, 1958 in a Nashua Telegraph article titled, "PWW Purchase Plan To Committee After Wrangle"; "If socialism is giving people here lower priced water, I'm for it, said Alderman James R. Griffin...A name-calling hassle broke out immediately after Board President Wilfred Pelletier, by prerogative referred the proposal to the City Planning Board...Griffin's statement came after Alderman Albert L. Lavoie charged the former with leaning toward

Socialism...Griffin asked the Board to reconsider his action and refer the measure to an Aldermanic committee...It's not right when the President and general Manager of Pennichuck (*Donald C. Calderwood*) is a member of the Planning Board...Griffin then charged Lavoie with not looking toward the interest of Nashua residents. This was denied stoutly by Lavoie who then charged Griffin with Socialistic leanings."

Donald C. Calderwood, President of Pennichuck Water Works, would go on to become Vice-Chairman and then Chairman of the Nashua Planning Board in 1963, member of the Nashua Regional Planning Commission, and Chairman of the Nashua NH Foundation in 1972, succeeding Eliot Carter who by 1972 was 85 years of age.

♦ *THE FIFTH ACQUISITION ATTEMPT*

Dramatic population increases, rapid residential home development, suburban sprawl, strained city budgets, and the spiraling escalation of municipal water costs during the 1960's, forced the Pennichuck Water Works issue by 1968. This was the era of the legendary populist and contentious Mayor J. Dennis Sullivan. In that year Pennichuck Water Works requested a 19% rate increase; this pushed city officials "over the edge" and ignited the long smoldering embers between the City and Pennichuck once again.

On October 8, 1968 a Resolution Relative to the Feasibility of Acquiring Pennichuck Water Works was passed by the Board of Alderman; President of the Board of Alderman at that time was Maurice L. Arel. The Nashua Telegraph reported on October 9th, "Under suspension of the rules the aldermen named a three-man committee last night to study the feasibility of acquiring Pennichuck Water Works. (*Alderman Richard P. Joyce*) maintains that if the city owned the water works it could be operated at lower rates than proposed by PWW officials.

A dramatic New Hampshire PUC Hearing took place in Nashua on October 1st. Representing Pennichuck was Donald Calderwood President and Richard Pike Treasurer. Also, Joseph F. Brennan of Associated Utility Services of Philadelphia testified on behalf of Pennichuck stating, "Water utility investors are entitled to an opportunity to earn a proper level of earnings...(*To ignore this*) may result in a capital-starved company whose service ultimately becomes sub-standard to the detriment of customers and the economic well being of the area served and more frequent and costly rate cases whose cost is ultimately borne by the customers."

Pennichuck Treasurer, Richard Pike testified, "...the rate of return since 1962 has been lower than the calculated rate...the continued erosion in the rate of return is attributed to expansion costs, increases in federal income tax and local property tax, higher wage and inflation...if the increases are granted the best yield would be 7.214 percent with the cost of money being at 7.703 percent." Pike also added, "...holders of Pennichuck stock left their stocks in the bank and passed them on to the next generation, he said stocks were not traded daily on the market and were not easy to get, adding, however, he would not

classify them as being closely held.” The PUC Chairman at that time was Francis J. Riordan.

Also testifying was Attorney Jerome Silverstein, Nashua resident and activist stating, “per share earnings of Pennichuck stock had increased in recent years rather than decreased. And he maintained that in the present case the water users were being required to pay higher prices to protect the investment of a small select group of stockholders whom he referred to as the (Holy 357).”

Mayor Sullivan then testified stating, “a heavy color problem in the water entering at his home had caused him to filter it. He said in several occasions the water appeared almost tobacco leaf laden and that Mrs. Sullivan had been forced to do her washing over again to combat the effects of the water.” Mayor Sullivan was a master at generating public emotion and populist reaction.

In February 1969, the Nashua Telegraph reported, “The New Hampshire Public Utilities Commission has authorized Pennichuck Water Works of Nashua to increase its rates by 17.7% above the rates in effect since July 1, 1968. The company in its petition...sought a 19.2% boost...The commission (PUC) said its decision last Wednesday that the increase it approved would be sufficient to permit the firm to absorb increased costs of doing business while allowing it a just and reasonable return on its investment...The city fought the rate increase on the grounds it would cause an estimated \$38,000 rise in its annual fire protection charges.”

And with this the 1968 municipal acquisition movement like others before seems to have dissolved, a new contract was executed and future generations were left again to deal with Nashua’s legendary “water issue”.