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STATE OF NEW HAMPSHIRE



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October 25, 2018

Debra A. Howland
Executive Director
New Hampshire Public Utilities Commission
21 S. Fruit St., Suite 10
Concord, NH 03301

NHPUC 25OCT18PM3:18

Re: DW 18-099, Town of Derry
Staff Recommendation for Approval of Petition for Franchise Expansion in the Town of Londonderry and Approval of MSDC Rates for the Franchise Expansion

Dear Ms. Howland:

On June 22, 2018, the Town of Derry (Town or Derry) filed a petition (Petition) pursuant to RSA 374:22, to expand the provision of water service into a limited area in the Town of Londonderry, known as Lorden Commons. Derry also requested, pursuant to RSA 362:4 III-a(b), to charge those customers the prevailing rates for the Merrimack Source Development Charge (MSDC) which are different from the MSDC rates Derry residents pay per a 2013 agreement with Manchester Water Works (MWW). Staff reviewed Derry's filing and believes the Town possesses the requisite technical, managerial, and financial skills necessary to provide water service in the proposed franchise area and that it would be consistent with the public good to approve Derry's proposed franchise expansion. Staff further believes it is consistent with the public good to allow Derry to charge the prevailing MSDC rates to the new Londonderry customers. As a result of allowing Derry to charge out of town customers rates that are greater than 15% than those charged to in-town customers, Staff believes Derry should continue to be exempt from Commission regulation, apart from the Commission authorization for franchise expansion required pursuant to RSAs 374:22 and 374:26. Therefore, Staff recommends Commission approval of Derry's Petition.

Background

Derry asserted in its Petition it is a municipal corporation, duly established and existing under RSA 31, and operates a water department and waterworks that provides potable water service to 15,000 residents, institutions, and businesses in Derry and a limited area of Londonderry. The area known as Lorden Commons in Londonderry is located within close proximity to the Derry town line. The owner of the land, Lorden Commons, LLC (Lorden), has completed Phase 1 of 4 of the residential homes planned for the property, as authorized by the Town of Londonderry Planning

Board.¹ This first Phase consists of 50 residential homes served by private wells. Due to local growth ordinances, the construction of 83 more homes has been split into three additional Phases over four years.²

After researching several options for obtaining water for the additional homes, Lorden requested, and Derry agreed, to provide public water from Derry's nearby main. Derry is seeking to extend its franchise and provide water service in and around the area known as Lorden Commons.³ With respect to the water main, the Petition references an agreement between Lorden and Derry. Per this agreement, Lorden will construct and extend Derry's 12 inch main on Old Manchester Road into Londonderry to Lorden Commons, and will construct the waterworks for the homes in Lorden Commons (Phases 2, 3 & 4) in accordance with Derry's Official Water Main Specifications.⁴ Once the main extension and subdivision work is complete and inspected by Derry, the Town will accept and assume full ownership of the water system with the exception of the individual service lines connecting the curb stop to the customer's meter.⁵ Phase 1 homes within Lorden Commons and along the path of the main as it travels to Lorden Commons would then be eligible to be served by Derry,⁶ to which it expressed it is amenable.

The Petition also states that although Derry has the support of the Town of Londonderry and MWW, Derry acknowledges it must still obtain final approvals from the Town of Londonderry and the New Hampshire Department of Environmental Services (DES).

Derry explains that adding customers to its water system will increase revenues and allow it to spread utility expenses among more customers which will have a dampening effect on future rate increases. Derry's Petition stated they expect all new customers to be assessed the same rates, charges and fees applied to its residents, with the exception of the MSDC rates. Derry petitions to charge these new customers the MSDC rates included in MWW's tariff on file with the Commission. The MSDC appears in various wholesale water agreements involving water supply from MWW. Derry has such an agreement with MWW which involves the purchase of MSDC Maximum (Max) and Average Daily Flow (ADF) capacity credits.⁷

The Petition explains that according to the 2013 wholesale water agreement between Derry and MWW, Derry may not distribute current water purchases, or MSDC capacity, to customers outside of its municipal boundaries.⁸ MWW, however, agreed to provide Derry additional water capacity specifically for the proposed franchise area in Londonderry as long as those new customers were charged the same, prevailing MSDC rates as other new MWW customers.⁹ At the time of filing the Petition, the current MSDC rate as found on the Commission website was \$3.57 per gallon. Derry's Petition lists the current Derry MSDC rates and the prevailing MWW MSDC rates and notes

¹ See Attachment to Staff 1-1.

² See Pre-Filed Testimony of Thomas Carrier, Page 7, Line 11.

³ See Pre-Filed Testimony of Thomas Carrier, Attachment A Exhibit A, Tax Map 16.

⁴ See Pre-Filed Testimony of Thomas Carrier, Attachment A, Pages 3 – 4.

⁵ See Pre-Filed Testimony of Thomas Carrier, Attachment A, Page 3, Item 13.

⁶ See Pre-Filed Testimony of Thomas Carrier, Attachment A, Page 3, Item 17.

⁷ See Pre-Filed Testimony of Thomas Carrier, Attachment G.

⁸ See Pre-Filed Testimony of Thomas Carrier, Attachment G, Section 201.4.

⁹ See Pre-Filed Testimony of Thomas Carrier, Attachment F.

the difference is greater than 15% invoking RSA 362:4 and the possibility of Commission regulation of Derry's municipal water system.

Analysis

In prior franchise expansions, the Commission ruled that Derry possesses the requisite managerial, technical, and financial capabilities to provide water service.¹⁰ In addition, the Town has provided a current list of the certifications of the five full time employees and one part time employee that comprise the Town's water department.¹¹ The Town also provided verification from DES¹² which satisfies the requirements of RSA 374:22, III, regarding the suitability and availability of water to serve the proposed franchise expansion. Lastly, Staff reviewed the other water source options as explained in Data Request 1-1 and 1-1 Supplemental, and determined that extending the water main from the Derry town line is the most economical choice, and therefore advantageous to the end user, as seen below:¹³

Extend MWW main down from Auburn Road:	\$1,120,540
<u>Extend Derry main up from Old Manchester Road:</u>	<u>\$ 320,066</u>
Difference passed onto customers:	\$ 800,474

Based on these facts, Staff believes it would be consistent with the public good to approve the proposed franchise expansion.

The MSDC charged by MWW was first approved by this Commission in 1987 in Docket No. DR 86-80. The MSDC was a one-time charge assessed to new customers in new franchise areas outside Manchester acquired as of May 1, 1987. Order No. 18,628, 72 NH PUC 138 (1987). The funds provided by the MSDC for the cost of constructing facilities necessary to develop the Merrimack River as a supplemental source of water supply. In 1991, the Commission approved expanding the MSDC to all new customers regardless of location (see *MWW*, Docket No. DR 91-113, Order No. 20,332, 76 NH PUC 778 1991). In Docket No. DW 02-161, the Commission conditionally exempted MWW from rate regulation (see Order No. 24,138, March 14, 2003).

In its investigation, Staff found the current MSDC rates Derry charges its residents was first included as part of a wholesale water agreement with MWW in 1998. In this agreement, the entirety of the increased portion of Derry's requested water capacity was subject to MWW's MSDC. Derry, however, was able to pre-buy this increase in capacity at the 1998 prevailing MSDC rates; and in lieu of a single payment, the cost of that pre-buy capacity was paid over 15 years. Derry further explained their water rates did not increase as a result of this, but rather payments were met by a reduction in capital expenses and extra revenues from increased water usage.¹⁴ As a result, it was 13 years before the Town increased their regular water service rates.

¹⁰ See Docket DE 95-359, Order No. 22,173 (May 29, 1996).

¹¹ See Data Request Response 1-13.

¹² See Pre-Filed Testimony of Thomas Carrier, Page 7, Line 17.

¹³ See Data Request Response 1-1 including 1-1 Supplemental.

¹⁴ See Data Request Response Tech 1 and Attachment to Tech 1.

In 2012, Derry made the last payment on the 1998 agreement. It is Staff's understanding that Derry is not obligated to purchase further MSDC capacity credits from MWW until its usage is greater than the contractual 2.9 MGD Daily Average / 4.0 MGD Maximum Daily Flow cap it has with MWW.¹⁵ Therefore, Derry will continue to charge the older 1998 MSDC rates to its residents as new capacity is requested by them. The fact Derry did not increase regular water service rates for 13 years and has finished making payments on the pre-buy ensures customers in the proposed franchise area are not paying for MSDC capacity twice, once in their regular service rates and as a onetime charge.

Staff views the MSDC charged by Derry as a "pass-through" from MWW and not one directly resulting from Derry's water operations. With regard to the 15% differential, Staff believes it would be inequitable to compare the 1998 MSDC rates which Derry adeptly procured in advance for its in-town residents with today's prevailing MSDC rates MWW charges to all its new customers. Staff and the Petitioner recognize this difference is over 15%. Staff, however, highlights that Derry is merely proposing to pass-through the prevailing MSDC rate which has a \$0 and 0% difference from current MWW MSDC rates as seen below:¹⁶

	Derry's Current (1998) MSDC Rates	MWW Current Rates*	Difference Compared to 1998 Rates	MWW Charge to to Lorden Commons	Difference Compared to Current Rates
5/8"	N/A	\$1,030	N/A	\$1,030	0%
3/4"	\$721	\$1,030**	+43%	\$1,030	0%
1"	\$2,069	\$2,951	+43%	\$2,951	0%
1 1/2"	\$5,429	\$7,743	+43%	\$7,743	0%
2"	\$9,589	\$13,674	+43%	\$13,674	0%
>2"	\$2.36 per Gal.	\$3.47 per Gal.	+47%	\$3.47 per Gal.	0%

*MWW website did not list the 2018 MSDC rates at filing this recommendation. Therefore, the most recent (2017) MSDC rates from their website are listed.

**Derry will charge MWW's 5/8-inch rate for the 3/4-inch customers because Derry does not allow 5/8-inch services and the meter capacity is 5/8 inch.

Staff notes that had the developer chosen the other option to tie into the Manchester Water system, the new customers of Lorden Commons would be paying the exact same MSDC rate that are proposed through the Derry's water system.

With respect to the collection of these charges from the Lorden Commons subdivision, Derry expects to receive four payments over four years from the developer, covering the MSDC for the new homes¹⁷ as they are constructed and the increased capacity is requested and charged by MWW. Each of these payments is expected to cover 25 homes, up to the 83 planned. Staff understands that any other property in the proposed franchise, whether along the water main pathway or in the Lorden Commons subdivision, whether existing or not, would be charged the prevailing MWW MSDC rates

¹⁵ See Pre-Filed Testimony of Thomas Carrier, Attachment G, Page 3 and DR Response Tech 1, Page 2.

¹⁶ See Data Request Response to 1-7 Supplemental.

¹⁷ See Pre-Filed Testimony of Thomas Carrier, Attachment A, Exhibit A, Page 4, Item 28.

that are attributed to any of the approximately 160,000+¹⁸ MWW customers who request a new water service from MWW.

The Commission has previously found the MSDC rate to be just and reasonable as applied to all new customers of MWW¹⁹ and the Commission maintains continued jurisdiction over the rates. The State of New Hampshire encourages MWW to be a regional supplier as evidenced by the availability of potential SRF and DWGTF loans and in official reports²⁰ that explain regionalization of water utilities are a key way to meet growing demands. The MSDC is the method which MWW has chosen to finance a portion of that demand and regionalization. Derry merely proposes to pass-through the exact same MSDC charged to other MWW customers with no additional administrative charge. As such, despite a resultant MSDC rate is greater than 15% difference, Staff believes that Derry's exemption from Commission regulation is consistent with the public good, pursuant to RSA 362:4,III-a(b).

Summary

Based upon the above, Staff believes Derry possesses the requisite expertise to competently operate and maintain the proposed Lorden Commons franchise expansion; that it is consistent with the public good to allow the Town of Derry to charge prevailing MSDC rates to the franchise customers, which are greater than 15% currently charged to Derry residents; and that it is consistent with the public good for Derry to remain exempt from further regulation by the Commission. Thus, Staff recommends the Commission approve Derry's Petition.

If you have any further questions regarding this matter, please do not hesitate to contact me.

Sincerely,



Anthony J. Leone
Utility Analyst, Gas & Water Division

Cc: service list

¹⁸ See Attached MWW 2017 Water Quality Report Page 5.

¹⁹ See Manchester Water Works, Docket No. DR 91-113, Order No. 20,332.

²⁰ See Attached pages from the NH Dept. of Environmental Services and NH Public Utilities Commission report to the legislature entitled Regulatory Barriers to Water Supply Regional Cooperation and Conservation in New Hampshire, dated August 14, 2001.

August 30, 2018

RE: Waterline extension
Lorden Commons Phases 2, 3 & 4
Londonderry Tax Map 16, Lot 38
17 Old Derry Road
Londonderry, NH

To Whom it May Concern,

The following outline is a general overview of the timeline and process navigated to serve the proposed 83 lot residential subdivision with drinking water.

Timeline

Lorden Commons Phase 1 was designed by Jones and Beech and approved by the Londonderry Planning Board on January 28, 2013. Phase 1 was designed and built with one private well per lot.

In October of 2015 Keach-Nordstrom Associates, Inc. (KNA) was contracted to design and permit Lorden Commons Phases 2, 3, & 4. We continued with the expectation that the proposed phases would be developed with private wells.

In May of 2016 KNA met with Manchester Water Works (MWW) to explore the idea of four potential locations to connect to the MWW distribution system. During that meeting it was explained that the subject property was not in the MWW franchise area and a franchise expansion would need to be sought. Also, during that meeting the three potential cross-country connection locations were dispelled as not permitted by MWW or the State. MWW stated the only option for connection would be from the Auburn Road main. That would require an extension along the Old Derry Road right-of-way to the easterly most point of the frontage. The option of connection was presented to Londonderry Department of Public Works (LDPW). Due to the presence of ledge in the area, and the need for blasting to construct the extension, LDPW was going to require full box reconstruction of the road. That option was determined to be cost prohibitive.

Following the meeting with MWW the project continued working with a Hydrogeologist, the Town of Londonderry Planning Department, and the Town's Review Consultant exploring the use of wells for the three proposed phases. There was growing concern presented at the public hearings from abutters, residents in Phase 1 and the Town's Review Consultant.

The Applicant began to explore the option for municipal water connection once again.

In January of 2017 KNA discussed the franchise expansion option with staff at the Public Utilities Commission. We were encouraged to speak to MWW and Pennichuck Water to gain more information and knowledge of the specific area and franchise options. As further information was gathered questions arose about potential ownership of the franchise area. KNA received mixed information with no clear documentation stating ownership.

In February of 2017 an on-site meeting with the Applicant, Town of Derry Department of Public Works (DDPW), LDPW, Contractor and KNA conducted a site walk to investigate the potential to extend the Town of Derry's water system to serve the project. It was determined that it may be possible if all proper approvals were obtained.

In March of 2017 the Town of Derry Town Council vote to permit the DDPW and the Town Manager to begin the due diligence process to connect the project.

In April of 2017 the Town of Derry decided not to pursue the connection due to questions over the ownership of the franchise area.

In May of 2017 the Applicant contracted with Attorney Patricia Panciocco to conduct research to determine if the property was part of an existing franchise area. It was determined the property is not part of an existing franchise for a water utility.

In October of 2017 Attorney Panciocco began communications with MWW

In November of 2017 the Town of Derry decided to move forward with the connection request.

In January of 2018 Derry, MWW and Lorden Commons reached an agreement for the connection to the Derry system and the associated rates and fees.

Between December 2017 and April 2018 KNA designed a detailed water main extension plan reviewed by both DDPW and LDPW.

On June 21, 2018 the Town of Derry submitted the application the PUC.

On August 8, 2018 the Town of Londonderry Planning Board conditionally approval Lorden Commons Phases 2, 3 & 4. One on the conditions is the connection of the water to the Town of Derry system.

The previous outline highlights the three-year process it has taken to place the application before the Public Utilities Commission. On behalf of my Client I would like to request an expedited process since all parties agree with the proposal. The success of the project is driven by the health of the economy and housing market, both are strong at this time. Further delay has the potential of impacting the project.

In the event you should have specific thoughts or questions regarding this outline, I am available to discuss or respond to the same.

Regards,



Jason Lopez
Project Manager
Keach-Nordstrom Associates, Inc.
jlopez@keachnordstrom.com

10 Commerce Park North, Suite 3
Bedford, NH 03110
603-627-2881

**Town of Derry
DW 18-099**

Petition for Approval of Franchise Expansion in Londonderry and
Approval of MSDC Rates for Lorden Commons

Responses to Staff Data Requests – Set 1

Date Request Received: 9/12/18
Request No. Staff 1-13

Date of Response: 9/24/2018
Witness: Thomas Carrier

REQUEST: Re: Carrier Testimony, Page 8 of 9, Lines 1-3:

Please describe the present certifications and licenses possessed by the Town of Derry Water Department's 5 full-time and 1 part-time employees.

RESPONSE:

- Employee #1, Primary Water System Operator: Certified Backflow Inspector; Water Distribution Grade III; Water Treatment Grade II; Commercial Driver's License B w/ tanker endorsement
- Employee #2, Utilities Crew Chief: Certified Backflow Inspector; Water Distribution Grade II; Water Treatment Grade I; Commercial Driver's License B w/ tanker endorsement
- Employee #3, Utility Worker: Certified Backflow Inspector; Water Distribution Grade II; Water Treatment Grade I; Commercial Driver's License B w/ tanker endorsement; MA Hoisting License; Public Weigh Masters License
- Employee #4, Utility Worker: Certified Backflow Inspector; Water Distribution Grade I; Water Treatment Grade I; Commercial Driver's License A w/ tanker endorsement
- Employee #5, Utility Worker: Certified Backflow Inspector; Water Distribution Grade II; Water Treatment Grade I; Commercial Driver's License A w/ tanker endorsement; Solid Waste License 4
- Employee #6, Part-Time, Laborer

(Water and Wastewater Divisions combine resources as needed) The following persons/people are available to assist in Water Division Operations.

- Employee #7, Utility Assets Coordinator; Water Distribution Grade III, Water Treatment Grade II
- Employee #8, Mechanical Electrical Technician II: Master Electrician, CDL -B w/ tanker Endorsement
- Employee #9, Mechanical Electrical Technician I: Master Electrician
- Employee #10, Chief Wastewater Treatment Plant Operator & Lab Director: Certified Drinking Water Lab for Microbiology; WW Treatment Operator II, CDL B w/ tanker endorsement

**Town of Derry
DW 18-099**

Petition for Approval of Franchise Expansion in Londonderry and
Approval of MSDC Rates for Lorden Commons

Responses to Staff Data Requests – Set 1

Date Request Received: 9/12/18

Date of Supplemental Request: 10/11/18

Request No. Staff 1-1

Date of Response: 9/24/18

Date of Supplemental Response: 10/18/18

Witness: Jason Lopez

Keach-Nordstrom Assoc., Inc. on behalf of
Lorden Commons, LLC and

Paul Kerrigan, Lorden Commons, LLC

REQUEST: Please briefly explain the different options for supplying water to Phases 2-4 of the Lorden Commons development in Londonderry and why the installation of new water mains was chosen rather than another supply option.

SUPPLEMENTAL REQUEST: Please provide a comparison of the costs Lorden Commons, LLC would have to pay if it connected to Manchester Water Works for water supply and as compared to the costs to connect to the Town of Derry.

RESPONSE:

There were four options of water supply explored to serve Phases 2, 3 and 4 of Lorden Commons.

- Option 1 was to serve each of the 83 proposed single-family homes with a private well. This option drew opposition from a few residents in Phase 1, and abutters to the project, during the public hearing process. Two Consultant Review Engineers working on behalf of the Town of Londonderry questioned whether the aquifer would have enough water to supply 83 new homes, in addition to the 50 home previously approved in Phase 1. There was also concern about the proximity of the development to a "Superfund Site" to the north. The Applicant was encouraged to investigate other options.
- Option 2 was to serve the proposed homes with an on-site community water system supplied by deep bedrock wells. This option presented the same concerns about the quantity of water available in the aquifer as was raised in Option 1, and for that reason was put aside.
- Option 3 explored connecting to one of four potential connection point along the Manchester Water Works (MWW) system. In a meeting with MWW three of the connection point were dismissed, because MWW stated "cross country connections" would not meet their requirements nor those of the State. The one available option remaining to connect to a MWW line would have required Lorden to extend the main from Auburn Road 3,800 feet along Old Derry Road. This option would serve 83 homes in Lorden Commons and a maximum of 20 homes along Old Derry Road. It was confirmed that this option would involve ledge removal and disruption to the existing roadway base, therefore the Town of

Londonderry advised they would require Lorden to fully reconstruct the road. Collectively, these requirements made it cost prohibitive.

- Option 4 explored the ability to extend the Town of Derry watermain 1,400 feet along Old Derry Road to serve the project. This option would serve 83 homes in Lorden Commons and the ability for the future connection of 10 homes along Old Derry Road and 59 homes in two adjacent existing developments. After much research and planning it was determined to be a viable option. This option was presented to the appropriate Departments and Boards at the Town of Derry and Londonderry who both support this line extension.

Further detail and the timeline about this process is explained in the August 30, 2108 outline by KNA. (Attachment Staff 1-1 KNA Timeline).

SUPPLEMENTAL RESPONSE:

Lordens decision to pursue Option 4 over Option 3 was based solely on a construction cost comparison. Lorden received construction estimates for both Options 3 and 4 as outlined in the Response above. The construction cost for Option 3 to extend the MWW water main from Auburn Road to the southerly most property corner on Old Derry Road, as required by MWW, totaled \$1,120,540.00. The construction cost for Option 4 to extend the Derry water main from the town line to the proposed road, Clover Lane, totaled \$320,066.00. The additional construction costs of \$800,474.00 to connect to the 83 homes to MWW (from the Auburn Road intersection) would result in an additional expense of \$9,644 added to each home. The \$800,474.00 difference represents the delta between the two suppliers.

**Town of Derry
DW 18-099**

Petition for Approval of Franchise Expansion in Londonderry and
Approval of MSDC Rates for Lorden Commons

Responses to Staff Data Requests – Tech 1

Date Request Received: 10/11/18
Request No. Staff Tech 1

Date of Response: 10/18/18
Witness: Thomas Carrier

REQUEST: Please explain whether, and if applicable, how, current Derry customer rates include repayment of any pre-paid MSDC.

RESPONSE:

The Merrimack River Source Development Charge (MSDC) was incorporated into the Derry & Manchester Water Works Wholesale Water Agreement when the contract was renewed in 1998. Derry's original 1983 contract with MWW provided Derry with 2.1 MGD of capacity. The 1998 Agreement increased that capacity to 3.2 MGD. The MSDC applied only to the difference between the 2.1 and 3.2, or 1.2 MGD. In lieu of a lump sum payment for this added capacity, Derry and MWW agreed to a annual payment plan. A copy of the plan at the original \$1.14/GPD rate is attached. Derry adopted its own MSDC charge for its new customers and used the same rates as MWW. Although the Derry Water Enterprise Fund budget included revenue from the newly adopted MSDC charge, a significant portion of the annual MSDC payment was subsidized by the Derry rate payers. The water rates were not increased to offset this new expense but rather the added expense was absorbed into the budget through a reduction in capital expenses and extra revenues from increased water usage. The Derry Water Rates in 1998 were: Base Charge of \$12.76 plus \$1.73 per 100 cft.

After 13 years without a water rate increase, and following the loss of 2 of Derry's largest water users, and increases in MWW's wholesale water usage rate, Derry, in 2003, increased its retail rates to: base Charge \$19.65 and \$1.83 per 100 cft. The Derry water user rates continued to subsidize the MSDC payments.

In 2005, MWW increased the MSDC from \$1.14 to \$2.43/GPD with annual increases of 3% each January. Rather than increase the Derry MSDC rate, Derry revised its Wholesale Agreement with MWW and to allow payment of the higher rates by reducing the total purchased capacity from 3.2 to 2.9 MGD. A copy of that payment plan is attached. Rates were not increased as a result of MWW's rate increase.

Concurrently, however, MWW was increasing Derry's wholesale water usage rate by 35% over 3 years, necessitating another increase in 2005 to Derry's retail water rates from \$1.94 to \$2.04 per 100 cft.

Derry's last MSDC payment to MWW was in 2012. Derry will collect the MSDC charge from new and expanding users until it reaches the purchased capacity and those revenues will continue to be recognized as general water fund revenues.

BOARD OF WATER COMMISSIONERS

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President

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Ex Officio
HON. RAYMOND J. WIECZOREK
Mayor

THOMAS M. BOWEN, P.E.
Director and Chief Engineer

ROBERT BEAURIVAGE, P.E.
Asst. Director



MANCHESTER WATER WORKS

281 LINCOLN ST., MANCHESTER, NEW HAMPSHIRE 03103-5093 Tel. (603) 624-6494

July 16, 1999

Derry Water Works
Dept. of Public Works
c/o Accounts Payable
40 Fordway
Derry, NH 03038

Re: Merrimack Source Development Charge (MSDC)

Dear Sir/Madam:

Enclosed please find a copy of the yearly schedule of the MSDC Payment Schedule for minimum annual payments for the years 1998 through 2012 for the Merrimack Source Development Charge per the Derry Wholesale Water Agreement dated May 27, 1998 (see Sec. 303 MSDC, pgs. 11 and 12 of the Agreement).

As indicated, the Town of Derry is responsible for a minimum payment obligation for 1999 in the sum of \$68,400.

Thank you for your consideration to the above.

Yours truly,

Philip W. Croasdale
Financial Division Manager

Enclosures

PWC:amp

MSDP_Derry

If Derry's average daily flow exceeds its "desired capacity" as specified below in any particular year, Derry shall be entitled to such capacity up to its maximum 3.3 MGD provided Derry pays to MWW, within 60 days, applicable MSDC payments for the capacity used."

MSDC PAYMENT SCHEDULE

Year	Capacity Desired MGD at 3% Growth Rate	Incremental Capacity Subject to MSDC Gals	Annual MSDC Due
1 - 1998	2.18	80,000	\$ 91,200
2 - 1999	2.24	60,000	68,400
3 - 2000	2.31	70,000	79,800
4 - 2001	2.38	70,000	79,800
5 - 2002	2.46	80,000	91,200
6 - 2003	2.53	70,000	79,800
7 - 2004	2.61	80,000	91,200
8 - 2005	2.68	70,000	79,800
9 - 2006	2.76	80,000	91,200
10 - 2007	2.85	90,000	102,600
11 - 2008	2.93	80,000	91,200
12 - 2009	3.02	90,000	102,600
13 - 2010	3.11	90,000	102,600
14 - 2011	3.20	90,000	102,600
15 - 2012	3.30	<u>100,000</u>	<u>114,000</u>
		1,200,000	\$1,368,000

Section 304. Emergency Use. Should Derry require water from MWW in excess of the limits specified in Section 201.3, and MWW in its absolute discretion agrees to supply such water to Derry, Derry shall pay two (2) times the rate specified in Section 302.1 for each gallon



MANCHESTER WATER WORKS

281 LINCOLN ST., MANCHESTER, NEW HAMPSHIRE 03103-5093 Tel. (603) 624-6494

C. ARTHUR SOUCY
President

DONALD P. COUTURIER
Clerk

JAMES W. CRAIG
PATRICIA H. CORNELL
RICHARD M. BUNKER
LOUIS C. D'ALLESANDRO

Ex Officio
HON. ROBERT A. BAINES
Mayor

THOMAS M. BOWEN, P.E.
Director and Chief Engineer

ROBERT BEAURIVAGE, P.E.
Asst. Director

July 13, 2005

Mr. Thomas A. Carrier, W/WW Superintendent
Town of Derry
Dept. of Public Works
14 Manning Street
Derry, NH 03038

Re: Merrimack Source Development Charge (MSDC)

Dear Mr. Carrier:

Enclosed please find a copy of the amended MSDC Payment Schedule for minimum annual payments for the years 1998 through 2012 for the Merrimack Source Development Charge per the Derry Wholesale Water Agreement (Agreement) dated May 27, 1998 (see Sec. 303 MSDC, pgs. 11 and 12 of the Agreement).

Based on the amended schedule, The Town of Derry is responsible for a minimum payment obligation for 2005 in the sum of \$77,760. This and future MSDC payments will now be due annually on July 30th of each year.

7/13/05
C. F. 106

Thank you for your consideration to the above.

Yours truly,

Philip W. Croasdale
Water Financial Administrator

Enclosure

MSDC PAYMENT SCHEDULE

rev 7/12/05

	YEAR	CAPACITY (mgd) (rounded)	ADDITIONAL MSDC CAP.	MSDC RATE / GAL	MSDC PAYMENT DUE
1	1998	2.18	80,000	\$ 1.14	\$ 91,200
2	1999	2.24	60,000	\$ 1.14	\$ 68,400
3	2000	2.31	70,000	\$ 1.14	\$ 79,800
4	2001	2.38	70,000	\$ 1.14	\$ 79,800
5	2002	2.46	80,000	\$ 1.14	\$ 91,200
6	2003	2.53	70,000	\$ 1.14	\$ 79,800
7	2004	2.61	80,000	\$ 1.14	\$ 91,200
8	2005	2.64	32,000	\$ 2.43	\$ 77,760 FY06
9	2006	2.68	37,000	\$ 2.50	\$ 92,500 FY07
10	2007	2.72	40,000	\$ 2.58	\$ 103,200
11	2008	2.75	34,000	\$ 2.66	\$ 90,440
12	2009	2.79	37,000	\$ 2.73	\$ 101,010
13	2010	2.83	37,000	\$ 2.82	\$ 104,340
14	2011	2.86	35,000	\$ 2.90	\$ 101,500
15	2012	2.90	38,000	\$ 2.99	\$ 113,620
			800,000		\$ 1,365,770

Town of Derry
DW 18-099

Petition for Approval of Franchise Expansion in Londonderry and
Approval of MSDC Rates for Lorden Commons

Responses to Staff Data Requests – Set 1

Date Request Received: 9/12/18
Date of Supplemental Request: 10/11/18
Request No. Staff 1-7

Date of Response: 9/24/2018
Date of Supplemental Response: 10/18/18
Witness: Thomas Carrier

REQUEST: Please detail the difference, as a percentage, in the MSDC that the Town of Derry proposes to charge customers in the requested franchise compared to the MSDC charged to residents within the Town of Derry's municipal borders.

SUPPLEMENTAL REQUEST: Please detail the difference, as a percentage, in the MSDC that Lorden Commons, LLC would pay if it connected directly to Manchester Water Works instead of to the Town of Derry.

RESPONSE:

Derry's Current MSDC Rates		MWW Current MSDC Rates	Diff	MWW Charge to Lorden Commons	Diff.
5/8 inch	N/A	\$1,030	N/A	\$1,030	0%
3/4 inch	\$721	\$1,030*	+43%	\$1,030	0%
1 inch	\$2,069	\$2,951	+43%	\$2,951	0%
1 1/2 inch	\$5,429	\$7,743	+43%	\$7,743	0%
2 inch	\$9,589	\$13,674	+43%	\$13,674	0%
>2 inch	\$2.36 per gallon	\$3.47 per gallon	+47%	\$3.47 per gallon	0%

* Derry will charge MWW's 5/8-inch rate for the 3/4-inch customers because Derry does not allow 5/8-inch services and the meter capacity is 5/8 inch.

SUPPLEMENTAL RESPONSE:
See above.

Excellence in Water Treatment

Manchester Water Works (MWW) was established in 1871 and now serves a population of about 160,000 in the Greater Manchester area. The 50 million gallons/day (MGD) conventional treatment facility was first commissioned in 1974 and significantly upgraded in 2006. MWW employs 11 full-time operators to run a highly complex, state-of-the-art treatment facility 24/7/365 on three daily 8-hour shifts.

Well before the 2006 facility upgrade, MWW became a charter member of the Partnership for Safe Water. "The Partnership is an unprecedented alliance of six prestigious drinking water organizations. The Partnership's mission is to improve the quality of water delivered to customers by optimizing water system operations. The Partnership offers self-assessment and optimization programs so that operators, managers and administrators have the tools to improve performance above and beyond even proposed regulatory levels."*

In early 2012, MWW was recognized as only the 11th utility in the nation to achieve the challenging Partnership for Safe Water award for "Excellence in Water Treatment". In 2017, MWW was further recognized at the American Water Works Association Annual Conference and Exhibition in Philadelphia, PA, for maintaining optimized performance for five consecutive years and is among a very small group of optimized water treatment facilities nationwide.

These significant accomplishments would not be possible without the tireless dedication of MWW operators and other department employees who demonstrate and maintain a quality-first culture on a daily basis. The bottom line: MWW provides sustained, optimized treatment along with one of the lowest customer water rates in the region.

We are working hard to keep our aging infrastructure viable and up to date. This work includes annual pipeline replacement and/or rehabilitation; improvements to our Cohas Avenue Pump Station that lifts water from the Low Service System into the Londonderry System (completion in early 2019), design and construction of a new three-million-gallon water storage tank in Londonderry (completion in late 2018), and design and construction of a new Merrimack River Water Treatment Facility (completion in 2022).

*<https://www.awwa.org/resources-tools/water-and-wastewater-utility-management/partnership-for-safe-water.aspx>

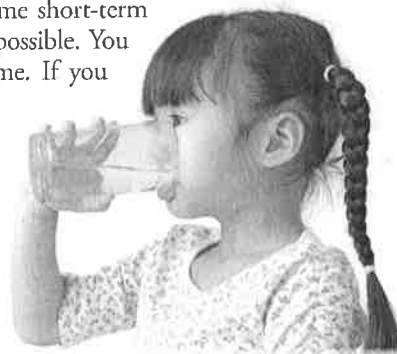
Water Main Flushing

Distribution mains (pipes) convey water to homes, businesses, and hydrants in your neighborhood. The water entering distribution mains is of very high quality; however, water quality can deteriorate in areas of the distribution mains over time. Water main flushing is the process of cleaning the interior of water distribution mains by sending a rapid flow of water through the mains.

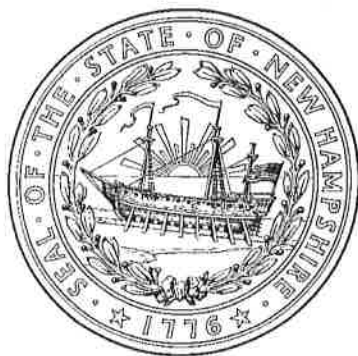
Flushing maintains water quality in several ways. For example, flushing removes sediments such as iron and manganese. Although iron and manganese do not pose health concerns, they can affect the taste, clarity, and color of the water. Additionally, sediments can shield microorganisms from the disinfecting power of chlorine, contributing to the growth of microorganisms within distribution mains. Flushing helps remove stale water and ensures the presence of fresh water with sufficient dissolved oxygen, disinfectant levels, and an acceptable taste and smell.

During flushing operations in your neighborhood, some short-term deterioration of water quality, though uncommon, is possible. You should avoid tap water for household uses at that time. If you do use the tap, allow your cold water to run for a few minutes at full velocity before use, and avoid using hot water to prevent sediment accumulation in your hot water tank.

Please contact us if you have any questions or if you would like more information on our water main flushing schedule.



***Regulatory Barriers to Water Supply Regional
Cooperation and Conservation in New Hampshire***



***A Report to the New Hampshire Legislature
As Required by Chapter 64,
Laws of 2000***

Prepared By:

**New Hampshire Department of Environmental Services
&
New Hampshire Public Utilities Commission**

August 14, 2001

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1.0 INTRODUCTION

This report fulfills the requirements of Chapter 64, Laws of 2000 for the New Hampshire Department of Environmental Services (DES) and the New Hampshire Public Utilities Commission (PUC) to conduct a study of regulatory structures which encourage or discourage regional cooperation in drinking water resources management and water conservation, and report back to the Legislature with recommendations by June 29, 2001.

There is increasing concern about periodic drinking water shortages in New Hampshire, especially in public water systems serving the southern tier and the seacoast regions of the state. The term “shortage” implies that the problem is entirely one of impairment of source yield, but supply-side management is only part of the problem. As demonstrated repeatedly during low rainfall periods over past decades, water demand peaks dramatically during dry spells, especially as a result of landscape irrigation, pointing to the need for more effective demand-side management.

The most recent drought during the summer of 1999 demonstrated that limited tools are available to water suppliers to curb customer demand, enforce conservation or to rapidly obtain backup or emergency supplies from contiguous water supplies on a short-term basis. The drought also provided increasing evidence of the need to develop more effective long-range water supply planning in areas where regional cooperation and conservation might jointly play a significant role in resolving water supply deficits. Furthermore, even when water systems have a surplus of water available, water conservation practices can provide meaningful environmental and economic benefits. Increased water use efficiency is also directly linked to improved energy conservation and pollution prevention. Also, as the number of users of New Hampshire’s water resources for diverse purposes expands with time, the potential increases for conflicts between users for drinking water, industrial, commercial and agricultural applications, and environmental resource protection. For example, recent proposals for large groundwater withdrawals for new golf courses and a commercial bottling facility and public comments on the instream flow rules recently proposed by DES have demonstrated the need to continue to clarify the balance between the riparian rights of property owners for new withdrawals with the rights of other existing and potential future water users and the public trust.

In this context, DES and PUC have assessed what improvements to state policies can be made to further promote consideration of regional approaches and water conservation by New Hampshire’s water suppliers.

2.0 STUDY APPROACH

A survey that covered both regional and water conservation issues was developed and distributed to water suppliers and planning organizations. The survey was designed to understand their viewpoints and to identify potential study issues. The survey was mailed to municipal and PUC-regulated water suppliers (150 surveys with 66 returns) and regional

planning entities (50 surveys with 30 returns), including Regional Planning Commissions, Economic Development Agencies, and Regional Development Corporations. Compiled responses to the survey served as the basis for producing issue papers to focus subsequent discussions on identified barriers to regional cooperation and conservation.

A working committee of stakeholders, labeled the Conservation and Regionalization Work Group (CONREG), was formed concurrently with the survey to provide additional focus on the issues defined. This committee was comprised of water suppliers (municipal and privately-owned), regional planners, representatives from the State's Office of the Consumer Advocate, and agency staff. CONREG met on three occasions to discuss issues on state policy, regulation and statute and to assist DES and PUC with the development of the conclusions and recommendations put forth in this report.

This report serves as a summary of this effort. Detailed supporting information is contained in two companion documents that are available upon request: (1) A working document entitled *Detailed Discussion and Analysis of Regional Water Supply Cooperation and Water Conservation Issues, May 3, 2001*; and (2) *Compilation of Survey Questionnaires on Regional Cooperation and Water Conservation, February 20, 2001*.

3.0 UNIVERSE OF REGULATED PUBLIC WATER SUPPLIES

Of New Hampshire's total population of about 1,236,000 people, approximately 62 percent (764,000 people) are provided water from community (residential customer base) public water systems while 38 percent (472,000 people) are served by private, residential wells (Figure 1).

There are 684 community water systems that range in customer base from 15 service connections (small housing developments) to 24,100 service connections (Manchester Water Works). These systems are regulated by DES under both federal and state Safe Drinking Water Acts for water quality, infrastructure integrity, and operator certification. One hundred nine of these community systems, serving approximately 16 percent (200,000 people) of the population, are also regulated for water rates and adequacy of service by the PUC because of their monopoly status (Figure 2).

Of the 684 community public water systems, 134 are owned and operated by municipal entities, including cities, towns and village districts. Municipal systems are not regulated by the PUC unless they provide retail water sales outside their municipal boundaries at a rate that is higher than the rate applied inside of their municipal boundaries.

Thirteen large water utilities provide water service outside their boundaries or core service areas on a wholesale basis (Figure 3). For example, Manchester Water Works provides water through wholesale agreements to eleven external services areas, including the Town of Derry and a portion of Hooksett (Figure 4). Twenty New Hampshire utilities serve significant numbers (greater than 10) of retail customers outside their boundaries (Figure 5).

residential water users may opt to construct private wells in lieu of practicing conservation, possibly resulting in lower quality water supplies for these households.

- During drought periods when local water use restriction moratoriums are in effect, chronic violators of moratoriums are a persistent concern in many communities. Some customers make the economic decision to pay fines and continue high water usage, for example, by lawn watering. Potential solutions may include:
 - Substantially escalating fines and penalties imposed by regulated utilities for chronic violators during periods of critical water shortages.
 - The state establishing a process that a water utility can utilize to seek formal support by DES or PUC for implementing water use restrictions when potential water supply shortages are predicted.
 - The state developing and promoting a model ordinance or bylaw with language on municipal water use restrictions.
- Due to federal requirements, loans from the Drinking Water and Clean Water State Revolving Loan Funds cannot be used for many potential water conservation projects such as improvements that are owned and operated by private individuals and companies. There is a potential opportunity to provide financial incentives for water conservation and efficiency projects that cannot occur under current federal requirements.

6.0 RECOMMENDATIONS

Regional Water Supply Cooperation

Recommendation 1: By December 31, 2001, DES and PUC should reconvene the Southern New Hampshire Water Supply Task Force to discuss the recommendations contained in this report and the *1990 Water Supply Study for Southern New Hampshire*. Voluntary participation in regional water supply planning by water suppliers and regional planners is critical to the long-term management of New Hampshire's water resources. This group is a good vehicle to further this process.

Recommendation 2: The Legislature has authorized a Seacoast Water District, subject to the provisions of RSA 53-A, to enable voluntary participation by communities in southeastern New Hampshire to address drinking water issues (Chapter 42, Laws of 1995). **DES and PUC should convene possible District members to discuss ways they could to work in conjunction with the Southern New Hampshire Water Supply Task Force on issues raised in this report.**

Recommendation 3: By December 31, 2001, PUC should recommend legislation to enable PUC to authorize rate premiums for intermunicipal retail water service to

provide additional incentive for municipalities to serve retail customers outside of local boundaries. The willingness of municipalities to serve in this manner is important to relieve water quality or quantity problems at individual residential or small public water supplies. The rate premium charged to external retail customers could be capped at a percentage over that charged to internal customers. Issues requiring consideration also include prospective application of rates, grandfathering of current external customers, addressing free riders, and standards for measuring public good.

Recommendation 4: State grant and loan programs should be enhanced to further encourage regional approaches by the following actions:

- By December 31, 2001, DES should propose legislation to expand the eligibility for state-aid water supply grants to include projects with significant benefit to regional water supply needs, including system emergency interconnections. (These grants are now only available for surface water treatment rule compliance projects.)
- By December 31, 2001, DES should propose legislation to ensure that regional water supply needs are considered by making it a condition of receiving grant and loan funds for municipal water supply infrastructure projects.
- By December 31, 2001, DES should propose changes to state-aid grant and loan program administrative rules to provide higher priority for projects that address regional water supply needs.
- By December 31, 2001, DES should develop cost estimates of the fiscal impacts of the proposed changes on state and federal funding sources.

Recommendation 5: By December 31, 2001, DES and PUC should propose legislation to establish a statutory process to provide for mandatory intermunicipal extensions or connections under certain critical or emergency conditions, such as when severe water supply quantity or quality problems exist. This could include a petition process to DES and/or PUC such as the procedure that currently exists under RSA 482:79 for lake level determinations at dam-controlled impoundments, under which DES must conduct an investigation, make a decision, and issue an order.

Recommendation 6: By December 31, 2001, DES should propose legislation to develop a process for the Legislature to assess further the potential conflict over competing water uses. The Public Water Rights Study Committee established by the Legislature under Chapter 148, Laws of 1990 stated that “there is a need for a direct and comprehensive statutory statement of policy asserting the reach of the state’s public trust interests and establishing clear directives for regulating withdrawals from public waters.” A legislative study committee should be established to (1) clarify the hierarchy of water uses which would enable determination of the “most beneficial use” for a given available water source, including consideration of environmental concerns, such as in-stream flow protection, and (2) define a process by which new water users would be required to develop the “least impacting

alternative”, to require water users to collaborate on regional water management issues. Collaboration with area Regional Planning Commissions may also facilitate regional water strategies.

Recommendation 7: DES and PUC should develop a procedure by which a PUC regulated utility may propose and obtain pre-approval from both the PUC and DES to participate in advanced regional technical planning, including new source development. The goal of the pre-approval would be to obtain agreement on the scope of the project to be undertaken and the portion of the project which would be rate recoverable. To allow rate recovery before improvements are used and useful, legislative changes to RSA 378:30-a, popularly known as the anti-CWIP statute, would be required.

Water Conservation

Recommendation 8: Establish a formal state policy on water conservation for all state operations and programs that affect the planning, use and management of the state’s water resources by the following actions:

- By December 31, 2001, DES should recommend to the Governor an executive order to establish this policy.
- By December 31, 2001, DES should recommend legislation that integrates water conservation requirements into all applicable state statutes.

Recommendation 9: By December 31, 2001, PUC should propose legislation that amends RSA 378, Rates and Charges, to allow the PUC to provide more incentives for PUC-regulated utilities to promote water conservation practices.

Recommendation 10: By December 31, 2001, PUC and DES will establish a mechanism to support water-use restrictions during times of drought and create a model ordinance for municipal water use restrictions. Such a mechanism may include increased fines or the ability to terminate water service of offenders.

Recommendation 11: By September 30, 2001, DES and PUC Commissioners should express to the Congressional delegation and EPA the need for the State Revolving Loan Fund eligibility requirements to be expanded to enable funding of end user water conservation projects.

Recommendation 12: DES and PUC should jointly develop a public outreach initiative for water conservation that may include advertisements that can be aired on television and radio, and placed in print media for implementation in the summer of 2002. DES and PUC should also investigate funding mechanisms for this initiative.

Recommendation 13: By December 31, 2001, PUC should convene a proceeding open to all water utilities and other interested persons, to consider innovative water utility