

Agenda Date: 12/16/15

Agenda Item: 5B

STATE OF NEW JERSEY

Board of Public Utilities 44 South Clinton Avenue, 9th Floor Post Office Box 350 Trenton, New Jersey 08625-0350

www.nj.gov/bpu/

		WATER
IN THE MATTER OF THE NEW FOUNDATIONAL FILING FOR UNITED WATER TOMS RIVER, INC.'S DISTRIBUTION SYSTEM IMPROVEMENT CHARGE)	ORDER
PURSUANT TO <u>N.J.A.C.</u> 14:9-10.4 ¹)	DOCKET NO. WR15091103

Parties of Record:

Stephen B. Genzer, Esq., Saul Ewing LLP, on behalf of United Water Toms River, Petitioner **Stefanie A. Brand, Esq., Director**, New Jersey Division of Rate Counsel

BY THE BOARD:2

On September 29, 2015, United Water Toms River, Inc. ("Company" or "Petitioner"), a public utility corporation of the State of New Jersey, filed a petition seeking approval of a Foundational Filing to implement a Distribution System Improvement Charge ("DSIC") pursuant to the Board's regulations contained in N.J.A.C. 14:9-10.1 et seq.

BACKGROUND/PROCEDURAL HISTORY

The Company's initial DSIC Foundational Filing was approved by the Board on March 19, 2014 in BPU Docket No. WR13111128. It included the Company's first DSIC recovery period (April 1, 2014 through September 30, 2014) and the second DSIC recovery period (October 1, 2014 through March 31, 2015). The Board approved the Company's base rate filing, BPU Docket No. WR15020269 on August 19, 2015 (effective August 29, 2015), which incorporated both of the Company's DSIC recovery periods and DSIC eligible projects that were placed in-service between April 1, 2015 and June 30, 2015, the end of the test year and reset the DSIC rate to zero.

The Company filed its second Foundational Filing on September 29, 2015, as a separately docketed matter from the base rate case. The Company, the Division of Rate Counsel and the

¹ Filed following <u>In the Matter of the Petition of United Water Toms River, Inc. for Approval of an Increase in Rates for Water Service and Other Tariff Changes</u>, BPU Docket No. WR15020269, OAL Docket No. PUC 03172-2015N.

² Commissioner Upendra J. Chivukula recused himself due to a potential conflict of interest and as such took no part in the discussion or deliberation of this matter. Commissioner Joseph L. Fiordaliso was not present at the December 16, 2015 agenda meeting.

Staff of the Board of Public Utilities (collectively, "the Parties") worked to issue and respond to discovery questions in a timely manner, which would permit this matter to be acted upon by the Board within the ninety (90) day period specified in N.J.A.C. 14:9-10.4(c).

After proper notice, a public hearing was held at the County of Ocean Administration Building on November 17, 2015 at 5:30 pm, located in Toms River, NJ. Two (2) members of the public appeared at the hearing. Mr. Carmen Amato (Mayor of Berkeley Township) submitted Resolution No. 2015-472-R opposing the Company's DSIC increase. Mrs. Carolyn Kirk, a Toms River resident, stated that the proposed DSIC will result in a severe financial impact for customers living on a fixed income and also asked questions regarding the Company's facility charges and definitions. The public hearing was transcribed and made a part of the record.

A teleconference was held on November 18, 2015, with representatives from all Parties in attendance. On that conference call, representatives of the Company responded to questions from Board Staff and Rate Counsel.

DISCUSSION AND FINDINGS

As a result of an analysis of the Petitioner's Foundational Filing, which included a review of the discovery that was responded to by Petitioner, a public hearing held in the service territory, and a teleconference, the Parties have come to an agreement on this matter and executed a Stipulation of Settlement ("Stipulation"). Specifically, the Stipulation states in part:

- The Parties agree that the Foundational Filing has satisfied the requirements of N.J.A.C. 14:9-10.4(b) and that in accordance with N.J.A.C. 14:9-10.4(c), the Company has recently concluded a base rate proceeding, with new rates effective August 29, 2015, which incorporated (by resetting the surcharges to zero) the previous DSIC surcharges from the previous Foundational Filing.
- 2. The Parties agree that the projects contained in Exhibit P-1 of the Foundational Filing, a list of which is attached to the Stipulation in the revised Table 1 as Exhibit A, have been reviewed.
- The Parties further agree that those listed projects that begin construction after the Board's approval of the Foundational Filing are DSIC-eligible as defined at N.J.A.C. 14:9-10.2 and are eligible for inclusion in the Company's DSIC filings pursuant to N.J.A.C. 14:9-10.5.
- 4. The Parties agree that Exhibit B attached to the Stipulation accurately reflects the corrected P-3 DSIC Assessment Schedule. Pursuant to that corrected schedule, the maximum amount (5%) of annual DSIC revenues is \$1,685,354.00.
- 5. The Parties recommend that, subject to the DSIC rules, the Board authorize the recovery of the revenue requirement, calculated in accordance with N.J.A.C. 14:9-10.8, of the actual costs associated with the projects contained in Exhibit P-1 and the Stipulation and that construction may begin after the approval of the Foundation Filing. Additionally, the Parties acknowledge that construction of some of the projects in the approved list may commence prior to the Board's approval of the Foundation Filing, however any associated construction costs incurred after the effective date of the Foundational Filing may be used to satisfy the base spending requirement but are not eligible for recovery through the DSIC charge.

- 6. The Parties agree that the Company's base spending requirement is \$925,424.00 as calculated in Exhibit P-2 of the Foundational Filing.
- 7. The Parties agree that nothing in this Foundational Filing shall be considered Confidential.

Based upon the information presented in the petition and agreed to by the Parties in the Stipulation, the Board <u>HEREBY FINDS</u> that the Company's 2015 overall revenue for DSIC purposes is \$33,707,087.00 which is the amount of approved revenues in Docket No. WR15020269. The Board <u>FURTHER FINDS</u> that the Petitioner's maximum amount of annual DSIC revenues that may be collected is \$1,685,354.00 or no more than 5% of the Company's total water revenues established in the Company's most recent base rate case. The Company will implement the DSIC surcharge if, and when, it achieves specific levels of infrastructure investment and completes and places the facilities into service as required by <u>N.J.A.C.</u> 14:9-10.1 <u>et seq.</u> As an example, an average residential customer with a 5/8 inch meter will be subjected to a maximum monthly DSIC surcharge of \$2.37. These proposed rates are estimates and may change, however, the maximum annual DSIC revenue requirement, \$33,707,087.00 cannot be exceeded.

The Board <u>HEREBY ORDERS</u> that in accordance with <u>N.J.A.C.</u> 14:9-10.5(b), Petitioner shall make DSIC filings on a semi-annual basis, commencing approximately six months after the effective date of the Foundational Filing. Petitioner must submit its semi-annual DSIC filing within fifteen (15) days of the end of the DSIC recovery period. DSIC filings shall be reviewed by Board Staff and the Division of Rate Counsel. Petitioner may recover the interim surcharge associated with the DSIC-eligible projects closed during the DSIC recovery period not objected to by Board Staff or the Division of Rate Counsel beginning 60 days after the end of the DSIC recovery period, subject to refund at the Board's discretion. It is <u>FURTHER ORDERED</u> that Petitioner must comply with the base spending requirements set forth in this Order. Failure to comply with the base spending requirements will result in a reduction and refund, where appropriate, of the DSIC surcharge. Thus, Petitioner's DSIC surcharge is interim, subject to refund, and shall not exceed the annual maximum revenue requirement of \$1,685,354.00 set forth in this Order.

The Board <u>FURTHER ORDERS</u> that in accordance with <u>N.J.A.C.</u> 14:9-10.4(e), if within three years after the effective date of this Order, Petitioner has not filed a petition in accordance with the Board's rules for the setting of its base rates, all interim charges collected under the DSIC shall be deemed an over-recovery, and shall be credited to customers in accordance with the Board's rules.

The Board <u>FURTHER ORDERS</u> that as of the August 29, 2015 rate effective date of the United Water Toms River Base Rate Order, Docket Number WR15020269, the prior foundational filing (dated March 19, 2014) was concluded and no additional DSIC filings or DSIC rates may be collected, made or implemented pursuant thereto.

Having reviewed the Foundational Filing and the Stipulation, the Board <u>FINDS</u> that the Parties have voluntarily agreed to the Stipulation, and that the Stipulation fully disposes of all issues in this proceeding and is consistent with the law. The Board <u>FINDS</u> the Foundational Filing and Stipulation to be reasonable, in the public interest, and in accordance with the law. Therefore, the Board <u>HEREBY ADOPTS</u> the Stipulation, attached hereto, including all attachments and

schedules³, as its own, incorporating by reference the terms and conditions of the Stipulation, as if they were fully set forth at length herein, subject to the requirements set forth in <u>N.J.A.C.</u> 14:9-10.1 et seq. and the conditions set forth in this Order.

Based upon the foregoing, the Board <u>HEREBY APPROVES</u> the Company's Foundational Filing and <u>ORDERS</u> that the Company may implement a Distribution System Improvement Charge, subject to this Order and Petitioner's ongoing compliance with the DSIC regulations, as well as conformity of the base spending requirements and semi-annual true-up submissions.

The effective date of this Order is December 26, 2015.

DATED: 12/16/15

BOARD OF PUBLIC UTILITIES BY:

RICHARD S MROZ

PRESIDENT

MARY-ANNA HOLDEN COMMISSIONER

DIANNÉ SOLOMON COMMISSIONER

ATTEST:

IRENE KIM ASBURY

SECRETARY

I HEREBY CERTIFY that the within document is a true copy of the original in the files of the Board of Public Utilities

³ Based on the Parties' review of the Petitioner's filing, the Company was requested to submit a revised Exhibit P-3 and a revised Table 1 of the Engineering Report.

IN THE MATTER OF THE NEW FOUNDATIONAL FILING FOR UNITED WATER TOMS RIVER, INC.'S DISTRIBUTION SYSTEM IMPROVEMENT CHARGE PURSUANT TO N.J.A.C. 14:9-10.4 DOCKET NO. WR15091103

SERVICE LIST

Stephen B. Genzer, Esq. Saul Ewing LLP One Riverfront Plaza, 15th Floor 1037 Raymond Blvd. Newark, NJ 07102 sqenzer@saul.com

Stefanie A. Brand, Esq., Director Division of Rate Counsel 140 East Front Street, 4th Floor Post Office Box 003 Trenton, NJ 08625-0003 <u>sbrand@rpa.state.nj.us</u>

STATE OF NEW JERSEY BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE NEW FOUNDATIONAL FILING FOR UNITED WATER TOMS RIVER, INC.'S DISTRIBUTION SYSTEM IMPROVEMENT CHARGE PURSUANT TO N.J.A.C. 14:9-10.4¹ BPU DOCKET NO. WR15091103

STIPULATION OF SETTLEMENT

APPEARANCES:

Stephen B. Genzer, Esq., and Colleen A. Foley, Esq., Saul Ewing LLP, on behalf of United Water Toms River, Petitioner

Christopher M. Psihoules, Deputy Attorney General and Veronica Beke, Deputy Attorney General (John J. Hoffman, Acting Attorney General of New Jersey), on behalf of the Staff of the Board of Public Utilities

Debra F. Robinson, Esq., Deputy Rate Counsel and Christine M. Juarez, Esq., Assistant Deputy Rate Counsel, on behalf of the Division of Rate Counsel (Stefanie A. Brand, Director)

TO THE HONORABLE BOARD OF PUBLIC UTILITIES:

The Parties in this proceeding are United Water Toms River, Inc. (the "Company", "UWTR" or "Petitioner"), the Division of Rate Counsel ("Rate Counsel"), and the Staff of the Board of Public Utilities ("Board Staff" or "Staff"). As a result of an analysis of Petitioner's Foundational Filing, as well as a discovery meeting, and a public hearing held in the service territory on November 17, 2015, the Company, Board Staff, and Rate Counsel (collectively, the "Parties") have come to an agreement on this matter. The Parties hereto agree and stipulate as follows:

Filed following In the Matter of the Petition of United Water Toms River, Inc. for Approval of an Increase in Rates For Water Service and Other Tariff Changes, BPU Docket No. 15020269.

- 1. Petitioner is a public utility corporation of the State of New Jersey subject to the jurisdiction of the New Jersey Board of Public Utilities. Petitioner's principal business office is located at 1451 Rt. 37, Suite 2, Toms River, NJ 08755.
- 2. Petitioner is engaged in the business of collecting, treating and distributing water for retail service to approximately 50,000 customers. The Company's customers are located in portions of Ocean County, New Jersey.
- 3. The Parties agree that the Company has satisfied the Foundational Filing requirement specified in N.J.A.C. 14:9-10.4(b). The Parties agree that as required at N.J.A.C. 14:9-10.4(c), the Company has recently concluded a base rate proceeding and implemented base rates pursuant to an Order of the Board dated August 19, 2015 in BPU Docket No. WR15020269.
- 4. The Parties agree that this Distribution System Improvement Charge ("DSIC") Foundational Filing is made pursuant to the Board's DSIC rules generally found at N.J.A.C. 14:9-10.4 et. seq., and was filed subsequent to, but in the context of, the Company's previous base rate case to establish a new, updated Foundational Filing. The Board approved new rates in the Company's prior base rate case effective August 29, 2015, which pursuant to the DSIC regulations, incorporated (by resetting the DSIC surcharges to zero) the Company's previous DSIC surcharges pursuant to the Company's previous Foundational Filing.
- 5. The Parties stipulate the projects contained in Exhibit P-1 to the Foundational Filing have been reviewed. The Parties further stipulate that the projects in Exhibit P-1 that begin construction after the Board's approval of this Foundational Filing are DSIC-eligible projects as defined at N.J.A.C. 14:9-10.2, and are eligible to be included in the Company's DSIC filings pursuant to N.J.A.C. 14:9-10.5.

- 6. Pursuant to N.J.A.C. 14:9-10.4(b)(l), the Company provided as Exhibit P-1 an engineering evaluation report which identifies the rationale for the work to be performed; demonstrates that the proposed plan is cost-effective; identifies elements of the distribution system that require investment including assets which might be susceptible to failure; and identifies efforts to extend the life of the distribution system assets. Pursuant to N.J.A.C. 14:9-10.4(b)(2), also included with Exhibit P-1 is DSIC project information which included the following elements:
 - a. a list of DSIC-eligible projects by asset class;
 - project descriptions, including the nature, location, estimated in-service dates, as well as the vintage and condition of the facilities being replaced or rehabilitated, estimated project costs, and descriptions and reasons for the projects; and
 - c. aggregate information capturing blanket-type, DSIC-eligible infrastructure projects and the estimated annual cost of such blanket-type replacement programs.
- 7. Attached as Exhibit A to this Stipulation is the revised Table 1 containing more detail concerning certain projects and the renewal method which might be used for those projects.
- 8. The Parties agree that the Attached Exhibit B to this Stipulation accurately reflects the corrected P-3 DSIC Assessment Schedule. Pursuant to that corrected schedule, the maximum amount of Annual DSIC revenues is \$1,685,354 should the Company invest the maximum pursuant to the DSIC regulations and the Parties agree that the Board should so FIND.

- 9. The Parties agree that nothing in this Foundational Filing shall be considered Confidential.
- 10. Subject to the DSIC rules, the Parties recommend that the Board authorize the recovery in the DSIC of the revenue requirement, calculated in accordance with N.J.A.C. 14:9-10.8, of the actual costs associated with the projects contained in Exhibit P-1 and this Stipulation and that construction may begin after the Board approves this Foundational Filing. The Parties acknowledge that the Company may commence construction of some of the projects listed on Exhibit P-1 prior to the Board's approval of the Foundational Filing. In that event, the Parties agree that costs incurred for construction activities performed after the effective date of the Board's approval of the Foundational Filing may be used to satisfy the Company's base spending requirement. These costs are not, however, eligible for recovery through the DSIC charge.
- 11. The Parties agree that the Company's base spending requirement is \$925,424 as calculated in Exhibit P-2 of the Foundational Filing.
- 12. The Company agrees to continue its acoustic and other survey processes on an ongoing schedule to be discussed regularly with Staff and Rate Counsel.
- 13. The Company agrees to provide an expanded discussion of its project ranking system in its next Foundational Filing. The project ranking system should also include appropriate weightings for customer service based criteria like water quality complaints and low-pressure complaints.
- 14. The Company agrees that pressure transient assessments should be incorporated in the long term management of the system. The Company's next Foundational Filing will include a discussion of pressure transient assessments and the potential impact on water main service life.

15. This Stipulation is the product of extensive negotiations by the Parties, and it is an express condition of the settlement embodied by this Stipulation that it be presented to the Board in its entirety without modification or condition. It is also the intent of the Parties to this Stipulation that this settlement, once accepted and approved by the Board, shall govern all issues specified and agreed to herein. The Parties to this Stipulation specifically agree that if adopted in its entirety by the Board, no appeal shall be taken by them from the order adopting same as to those issues upon which the Parties have stipulated herein. The Parties agree that the within Stipulation reflects mutual balancing of various issues and positions and is intended to be accepted and approved in its entirety. Each term is vital to this Stipulation as a whole, since the Parties hereto expressly and jointly state that they would not have signed this Stipulation had any terms been modified in any way. In the event any particular aspect of this Stipulation is not accepted and approved by the Board, then any Party hereto materially affected thereby shall not be bound to proceed under this Stipulation. The Parties further agree that the purpose of this Stipulation is to reach fair and reasonable rates, with any compromises being made in the spirit of reaching an agreement. None of the Parties shall be prohibited from or prejudiced in arguing a different policy or position before the Board in any other proceeding, as such agreements pertain only to this matter and to no other matter.

this Stipulation, each of which counterparts shall be an original, but all of which shall constitute one and the same instrument. UNITED WATER TOMS RIVER, INC. November 24, 2015 By: Saul Ewing LLP Date Stephen B. Genzer, Esq. Attorney for Petitioners JOHN J. HOFFMAN ACTING ATTORNEY GENERAL OF NEW JERSEY Attorney for the Staff of the Board of Public Utilities By: Christopher M. Psihoules Date Deputy Attorney General STEFANIE A. BRAND, ESQ. **DIRECTOR - RATE COUNSEL** By: Christine M. Juarez, Esq. Date Assistant Deputy Rate Counsel

This Stipulation may be executed in as many counterparts as there are Parties of

16.

16. This Stipulation may be executed in as many counterparts as there are Parties of this Stipulation, each of which counterparts shall be an original, but all of which shall constitute one and the same instrument.

UNITED WATER TOMS RIVER, INC.

November 24, 2015 Date By:

Saul Ewing LLP
Stephen B. Genzer, Esq.
Attorney for Petitioners

JOHN J. HOFFMAN
ACTING ATTORNEY GENERAL OF NEW JERSEY
Attorney for the Staff of the Board of Public Utilities

11/20/15 Date

By:

Christopher M. Psilvules Deputy Attorney reneral

STEFANIE A. BRAND, ESQ. DIRECTOR - RATE COUNSEL

Date

By:

Christine M. Juarez, Esq.

Assistant Deputy Rate Counsel

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UNITED WATER TOMS RIVER, INC.

November 24, 2015
Date

By:

Saul Ewing LLP
Stephen B. Genzer, Esq.
Attorney for Petitioners

JOHN J. HOFFMAN
ACTING ATTORNEY GENERAL OF NEW JERSEY
Attorney for the Staff of the Board of Public Utilities

11/16/15 Dave

By:

Christopher M. Psil-fules Deputy Attorney reneral

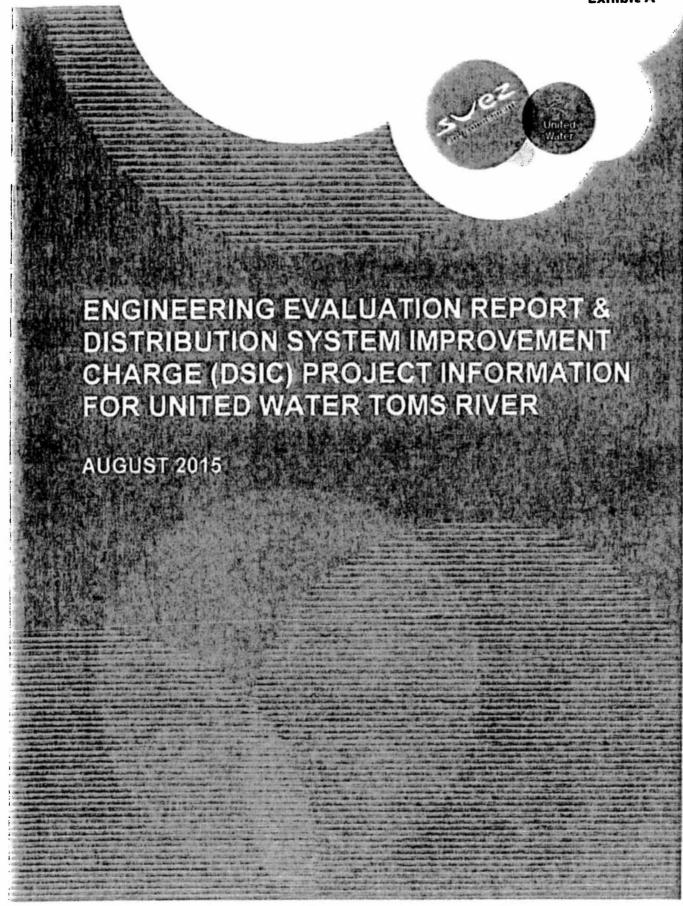
STEFANIE A. BRAND, ESQ. DIRECTOR - RATE COUNSEL

11/30/15 Date

By:

Christine M. Juarez, Esq.
Assistant Deputy Rate Counsel

EXHIBIT A



United Water Toms River - OSIG Engineering Report-



United Water Toms River (UWTR) supplies potable water for domestic use and fire protection to residents of Toms River Township, the Borough of South Toms River, a portion of Berkeley Township, and a portion of Brick Township all in Ocean County, NJ. Figure 1 shows the location of the service area in reference to Ocean County. The Company has approximately 50,000 residential, commercial and fire protection customers, which serve about 120,000 people.

The network consists of the following:

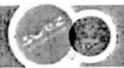
- 531 miles of pipeline;
- 54.6% made of asbestos cement (AC);
- 43.3% made of plastic (PVC);
- 2.1% made of cast or ductile iron (CI/DI);
- 3,452 hydrants;
- 8,494 valves (system and blow-off);
- 49,830 service lines;
- . One booster pump station; and
- Ten storage tanks.

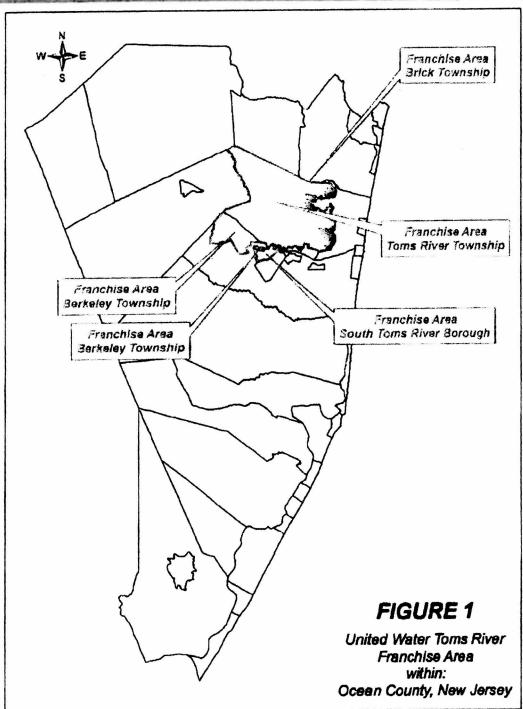
UWTR is different from other northern New Jersey systems in its size and material and how the system developed over time. The system is relatively unique in its pipeline material inventory having a large percentage of asbestos cement mains. This material was the choice for main installations in the system in the 1950's, 1960's and 1970's during a time of significant growth in the region. According to a November 2010 report entitled "AC pipe in North America: Inventory, breakage and working environments" by Y Hu, et al., asbestos cement was a common choice for potable water main construction from the 1940's to the 1970's.

Figure 2 illustrates pipe material by size showing that a majority of the 6" pipe throughout the distribution system is asbestos cement pipe with the balance being plastic. About half of the 4" pipe is asbestos cement. Also for 8" and 12" main, the distribution is about equally split between plastic and asbestos cement.

Figure 3 shows the age distribution of the overall system. This figure shows about equal growth for the first half of the 1960's, second half of the 1960's and the second half of the 1970's, with the first half of the 1970's showing a spike in growth. Also, of note is that the last half of the 1980's shows nearly double the growth of the previous decade.

Figure 4 illustrates the distribution of pipe size throughout the distribution system as a portion of the whole system with the length of each size.





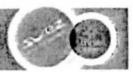


Figure 2 - Pipe Material by Size

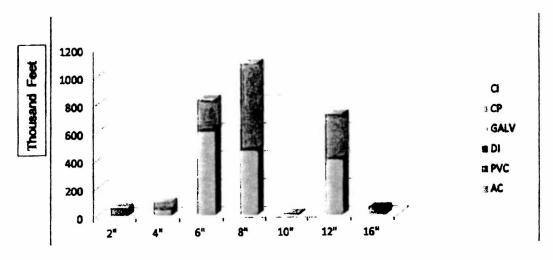
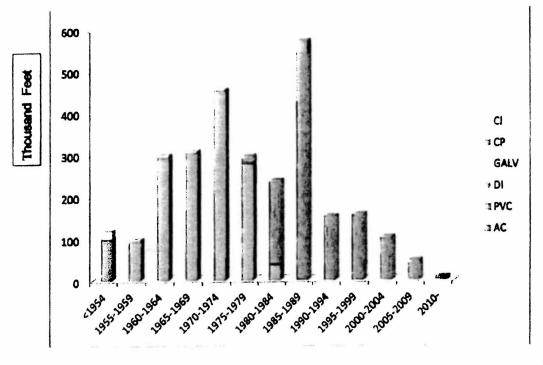
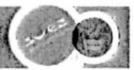
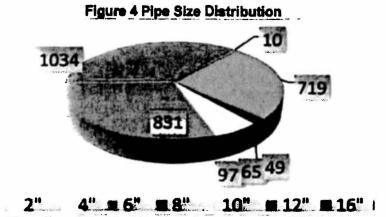


Figure 3- Pipe Age Distribution







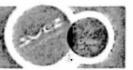
Note to Pigures 2, 3 and 4: all boxes in numbers and axis represent 1000 ft of pipe

Regarding the pipe age, it is important to note that while a small percentage, there are pipes that date back to the late nineteen and early twentieth century within the older parts of the downtown area. These mains do not present significant maintenance concern, and leaks are repaired as they are identified.

As part of UWTR's 2012-2013 Master Planning process, the Company initiated an assessment of the physical characteristics of the asbestos cement water mains within the Company's system using non-destructive acoustical analysis. This initiative is being implemented in order to contribute to the decision making protocol for pipeline replacement. Starting out with a relatively small study of nearly 28,000 feet, the non-destructive study allows pipe assessments with state of the art technology. Additionally, the initial assessment has enabled the Company to perform key main assessments used to identify the 2014 improvements while also gaining the experience necessary to prepare for the annual assessments operationally and integrate the results into a meaningful plan of action.

The initial results show the rate of degradation of asbestos cement is fairly similar throughout the distribution system, so that over the same number of years, the asbestos cement material will degrade at a somewhat similar rate. However, since the six inch pipe is starting with a thinner pipe, these sections are more likely to reach the end of the useful life sooner than an eight or twelve inch pipe. While this generality seems to be fairly effective for high level planning purposes, the difference in structural thickness could be twenty years between using the average degradation rate and the acoustical evaluation method. Thus, the acoustical methods of evaluation and remaining service life estimates will allow for proper timing of specific asbestos cement main replacements and most the most efficient use of replacement main capital dollars.

The 2015 Master Plan update (not finalized) continued the Company's assessment of water main criticality. Coupled with the information obtained from the preparation of the 2013 Master Planning Process and the completion of an asbestos cement water main break curve analysis, critical



Infrastructure has been identified for replacement. The analysis used the following Factors and Weights to determine likelihood of failure:

Likelihood of Failure

	Factor	Weight
1.	Pipe Material:	15%
2.	Year of Installation:	15%
3.	Traffic Load:	5%
4.	Peak Day Pressure:	15%
5.	Main Break Hot Spots:	35%
6.	Diameter:	15%
	Total	100%

Consequence of Failure

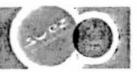
	Factor	Weight
1.	Diameter:	30%
2.	Critical Customers:	50%
3.	Repair Difficulty:	20%
	Total	100%

The weights and factors are based upon experience with main breaks for the United Water Toms River system. Multiple iterations of the analysis were completed and the weights were revised based on the break curve analysis completed previously and utilizing engineering judgment.

It should be noted that in addition to the structural thickness, soil conditions, depth of bury, and anticipated live loading are important factors impacting the remaining service life, and have been incorporated into main replacement selection. Shallow mains are most susceptible to live load pressures, and the analyses reveal that these mains are critical about ten to twenty years sooner compared to deeper bury mains.

Using the acoustical analysis completed as a guide, in 2013 - 2014, approximately 2% of the system has reached its useful life. For asbestos cement, the analyses are dependent upon the structural thickness of the pipe and the loads placed upon it. The plan is to continue to assess the condition of the asbestos cement pipe, but if the early assessments are any indication of the future life, by 2033, this number will rise to approximately 25%.

Main replacement projects are coordinated with the Townships and County so that to the greatest extent possible, we are assessing the water main condition and the timing of the Township paving and drainage projects to expend capital in the most effective manner and to reduce the impact to customers as much as feasible. Over the five year period, there may be some substitutions of main replacements when it is effective and efficient to do so in response to the Township and County paving program. The Township of Toms River has committed to performing the final pavement and has extended relief in temporary pavement conditions as well on the main replacements that are within the Township paving program. The Company will endeavor to coordinate in the same manner



with South Toms River as well. Berkeley Township mains have additional useful life. Table 1 lists all main replacements planned for the end of 2015 through 2020. Main size is another criterion used for replacement since fire protection is compromised in locations with significant amount of 4" main. The selected mains are both aged and small.

UWTR maintains a hydrant and valve testing program to identify where regular maintenance work may be required to prevent valve or hydrant failure. While, not necessary to operate all valves and hydrants annually, UWTR operates on average 3,000 system valves, and approximately 2,500 hydrants, representing over 35 percent and 72 percent respectively, annually. The Company replaces deteriorated, damaged, and un-repairable valves to improve customer service and maintain system integrity. UWTR exercises all system blow-off valves at least every year. Interconnections are tested every year including operating the valves and visually observing water flow through the system. UWTR works closely with the towns it serves to resolve any concerns that may arise during the use of its hydrants during firefighting efforts and training or during authorized hydrant usage. Additionally, United Water has a flow testing program that it conducts on an annual basis so that at least fifty hydrants are flow tested each year. These hydrants are selected based upon requests from developers and insurance Services Office, as well as those selected internally for investigation. United Water personnel conduct tests and share results with the appropriate departments.

UWTR manages "blanket projects" for hydrant, short main and valve, domestic service, and fire service replacement projects. Short main replacement projects are classified as those major main breaks requiring the replacement of existing water pipe. United Water maintains this formatting for controlling and tracking capital costs as it is not possible to pre-determine the quantity of such replacements or where these replacements will be needed. The average expenditures for these projects can be seen in Table 2.



Replace asbestos concrete mains with fifteen years or less remaining service life selected either from mains that have been condition assessed from a list of roads on the Townships road replacement and renewal program, or through an analysis of aged, asbestos cement, small diameter mains in high density zoning. For 2016 most of the roads slated for repavement have been determined by the Township Engineer's through the annual roadway assessment. For subsequent years, the main replacements have been selected based upon main size, age and housing density and analysis completed for Master Plan Amendment. On an annual basis, this list will be reassessed using various tools including the accoustical analysis, operational data, and pavement schedules due to moratoriums. This list represents the type, character and length of mains to be replaced through this program.

				0	Iriginal M ai	n		Propo	sed Main				
Project Limits	Project Number	Project No. Ext	Town	Size	Material	Year Inst.	Length	Size	Material	Install Year	Est. Cost	Performance Criteria	Renewal Method
Lockout Drive	C16D601	0.01	Toms River	8	AC	1963 thru 1967	1800	8	DI	2016	\$ 360,000	Age and Material	Lining or Replacement
Starboard Court	C16D601	0.02	Toms River	6	AC	1965	1150	6	DI	2016	\$ 230,000	Age and Material	Lining or Replacement
Compass Court	C16D601	0.03	Toms River	6	AC	1967	1150	6	DI	2016	\$ 230,000	Age and Material	Lining or Replacement
Ensign Court	C16D601	0.04	Toms River	6	AC	1970	1150	6	DI	2016	\$ 230,000	Age and Material	Lining or Replacement
Indian Head Road	C16D601	0.06	Toms River	12	AC	1966	2400	16	DI	2016	\$ 660,000	Age and Material	Replacement
Route 9 Crossing And Lining	C16D601	0.07	Toms River	12/16	AC	1966	975	16	DI	2016	\$ 285,000	Age and Material	Replacement



Replace as bestos concrete mains with fifteen years or less remaining service life selected either from mains that have been condition assessed from a list of made on the Townships road replacement and renewal program, or through an analysis of aged, as bestos cement, small diameter mains in high density zoning. For 2016 most of the roads slated for repavement have been determined by the Township Engineer's through the annual roadway assessment. For subsequent years, the main replacements have been selected based upon main size, age and housing density and analysis completed for Master Plan Amendment. On an annual basis, this list will be reassessed using various tools including the accoustical analysis, operational data, and pavement schedules due to moratoriums. This list represents the type, character and length of mains to be replaced through this program.

				0	riginal Ma	in		Propo	sed Main		0		
Project Limits	Project Number	Project No. Ext	Town	Size	Material	Year Inst.	Length	Size	Material	Instali Year	Est. Cost	Performance Criteria	Renewal Method
HOLLY ST	C16D601	0.06	Toms River	4	AC	1950	700	6	DI	2016	\$ 158,000	Age and Material	Replacement
Hallywood Avenue	C16D601	0.09	Toms River	6	AC	1954	1600	8	Di	2016	\$ 360,000	Age and Material	Replacement
Vine Avenue	C16D601	0.10	Toms River	6	AC	1958	1600	8	DI	2016	\$ 360,000	Age and Material	Replacement
Helen Street	C16D601	0.11	Toms River	6	Æ	1955	850	8	DI	2016	\$ 192,000	Age and Material	Replacement
South Shore Drive	C17D601	0.01	Toms River	6	AC	1965	2750	8	DI	2017	\$ 627,000	Age and Material	Replacement
South Shore Drive	C17D601	0.02	Toms River	6	AC	1965	2500	8	DI	2017	\$ 570,000	Age and Material	Replacement



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				O	riginal Mai	in		Propo	sed Main				
Project Limits	Project Number	Project No. Ext	Town	Size	Material	Year inst.	Length	Size	Material	install Year	Est. Cost	Performance Criteria	Renewal Method
Cranmoor	C17D601	0.03	Toms River	6/8	AC	1950	2300	8	DI	3017	\$ 525,000	Age and Material	Replacement
Holly Brook	C17D601	0.04	Toms River	6	AC	1956	500	6	DI	2017	\$ 114,000	Age and Material	Replacement
HYERS ST	C17D601	0.05	Toms River	4	AC	1950	1400	6	DI	201.7	\$ 320,000	Age and Material	Replacement
Middle Drive	C17D601	0.06	Toms River	6	AC	1965	475	6	DI	3017	\$ 109,000	Age and Material	Replacement
SEWARD AVE	C17D601	0.07	Toms River	4	AC	1950	850	6	DI	2017	\$ 194,000	Age and Material	Replacement
FRANKLIN AVE	C17D601	0.08	Toms River	8	AC	1958	1000	8	DI	2017	\$ 228,000	Age and Material	Replacemen



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				C	riginal Ma	in		Propo	sed Main				
Project Limits	Project Number	Project No. Ext	Town	Size	Material	Year Inst.	Length	Size	Material	instali Year	Est. Cost	Performance Criteria	Renewal Method
WATER ST	C17D601	0.09	Toms River	4	AC	1950	500	6	DI	2017	\$ 114,000	Age and Material	Replacement
CENTRAL AVE	C17D601	0.10	Toms River	4	AC	1950 thru 1966	450	6	DI	201.7	\$ 103,000	Age and Material	Replacement
BATCHELOR ST	C17D601	0.11	Toms River	4	AC	1950 thru 1964	400	6	DI	2017	\$ 92,000	Age and Material	Replacemen
Marian Street	C180601	0.01	Toms River	6	AC	1956 thru 1969	2300	8	DI	2018	\$ 529,000	Age and Material	Replacemen
Lafayatte Avenue	C18D601	0.02	Toms River	6	AC	1952	2050	8	DI	2018	\$ 472,000	Age and Material	Replacemen
MAIDEN LA	C18D601	0.03	Toms River	4	AC	1950	650	6	ы	2018	\$ 150,000	Age and Material	Replacemen



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				C	eM lenight	in		Propo	sed Main				
Project Limits	Project Number	Project No. Ext	Town	Size	Material	Year Inst.	Length	Size	Material	Install Year	Est. Cost	Performance Criteria	Renewal Method
BROOKS DR	C18D601	0.04	Toms River	4	AC	1950	300	6	DI	2018	\$ 69,000	Age and Material	Replacement
MESSENGER ST	C180601	0.05	Toms River	4	AC	1950	1000	6	DI	2018	\$ 230,000	Age and Material	Replacement
SNYDER ST	C18D601	0.06	Toms River	4	AC	1950	500	6	DI	2018	\$ 115,000	Age and Material	Replacement
MADISON AVE	C18D601	0.07	Toms River	4	AC	1950	1600	6	DI	2018	\$ 368,000	Age and Material	Replacement
GRAND AVE	C18D601	0.08	Toms River	4	AC	1952 thru 1954	1000	6	DI	2018	\$ 230,000	Age and Material	Replacement
HADLEY AVE	C18D601	0.09	Toms River	4	AC	1950 thru 1964	300	6	DI	2018	\$ 69,000	Age and Material	Replacement



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				0	riginal Mai	in		Рторо	sed Main				
Project Limits	Project Number	Project No. Ext	Town	Size	Material	Year Inst.	Length	Size	Material	install Year	Est. Cost	Performance Criteria	Renewal Method
HAINES COVE DR	C18D601	0.10	Toms River	4	AC	1963	300	6	DI	2018	\$ 69,000	Age and Material	Replacement
GRANT AVE	C18D601	0.11	Toms River	2/6	GAL/AC	1950 thru 1952	1700	8	DI	2018	\$ 391,000	Age and Material	Replacement
GRANT AVE	C18D601	0.12	Toms River	8	AC	1953	1400	8	DI	2018	\$ 322,000	Age and Material	Replacement
N. CENTRAL AVE	C19D601	0.01	Toms River	4/6	AC	1950 thru 1964	2200	8	DI	2049	\$ 517,000	Age and Material	Replacement
HEDGE ST	C190601	0.02	Toms River	4	AC	1950 thru 1955	450	6	Di	2019	\$ 106,000	Age and Material	Replacement
Wake Forest Drive	C19D601	0.03	Toms River	6	AC	1969 thru 1972	700	8	DI	2049	\$ 165,000	Age and Material	Replacement



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				C	riginal Ma	in		Propo	sed Main				
Project Limits	Project Number	Project No. Ext	Town	Size	Material	Year Inst.	Length	Size	Material	instail Year	Est. Cost	Performance Criteria	Renewal Method
Barnes Lane	C19D601	0.04	Toms River	6	AC	1975	800	8	DI	2019	\$ 188,000	Age and Material	Replacement
Alden Drive	C19D601	0.05	Toms River	6	AC	1966 thru 1969	1050	8	DI	2069	\$ 247,000	Age and Material	Replacement
Colfax Street	C190601	0.06	Toms River	4	AC	1950	500	6	DI	2019	\$ 118,000	Age and Material	Replacement
Dean Street	C190601	0.07	Toms River	6	AC	1953 thru 1956	700	8	DI	2029	\$ 165,000	Age and Material	Replacement
Dunham Avenue	C190601	0.08	Toms River	4	AC	1950 thru 1952	500	6	DI	2019	\$ 118,000	Age and Material	Replacement
UNION ST	C190601	0.09	Toms River	4	AC	1950	600	6	DI	2019	\$ 141,000	Age and Material	Replacement





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selected based upon main size, age and housi	main size, ag		forme bure (1	rsis com	pletted for I	Waster P.	lan Ame	ndment.	On an an	sised leur	, this list w	ng density and analysis completed for Master Plan Amendment. On an annual basis, this list will be reassessed using various tools	shoot suchev ;
Including the accoustical analysis, operational through this program.	tical analysis,		nd pavemen	t schedu	les due to	moratori	Ę. :	is list re	presents ti	ne type, c	haracter an	data, and pavement schedules due to moratoriums. This list represents the type, character and length of mains to be replaced	e replaced
				ō	Original Main	_		Propos	Proposed Main				
Project Limits	Project Number	Project No. Ext	Town	25 25	Material	Year Inst.	Length	23	Material	install	Est Cost	Est. Cost Performance Criteria	Renewal
Rabbins Parkway	C19D601	0.10	Toms	+	¥	1950	8	9	8	500	\$ 118,000	Age and Material	Replacement
TERRACE AVE	C19D601	0.11	Toms River	•	¥	1950 thru 1964	83	۰	8	8102	\$ 118,000	Age and Material	Replacement
Caral Beli Hollow	C19D601	0.12	Toms River	9	٧C	1969	82	«	ō	2015	\$ 200,000	Age and Material	Replacement
Golden Glow Circle	C19D601	0.13	Toms	9	γC	1261	1300	•	ā	800	\$ 306,000	Age and Material	Replacement
Hummingbird Lane	C19D601	0.14	Toms	9	>	1969	006	•	8	Stoc	\$ 212,000	Age and Material	Replacement
Momingside Drive	C19D601	0.15	Toms	9	¥c	1960 thru 1964	1300	60	8	SIOC	\$ 306,000	Age and Material	Replacement



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				0	riginal Ma			Propo	sed Main				
Project Limits	Project Number	Project No. Ext	Town	Size	Material	Year Inst.	Length	Size	Material	install Year	Est. Cost	Performance Criteria	Renewal Method
Ross Street	C20D601	0.01	Toms River	6	AC	1961	800	8	ы	2620	\$ 191,000	Age and Material	Replacement
Hinds Road	C200601	0.02	Toms River	6	AC	1966 thru 1972	1500	8	DI	2020	\$ 357,000	Age and Material	Replacement
Cheddar Pink	C200601	0.03	Toms River	6	AC	1969	350	8	Di	2020	\$ 84,000	Age and Material	Replacement
SPRUCE ST	C20D601	0.04	Toms River	4	AC .	1950 thru 1968	500	6	DI	2020	\$ 119,000	Age and Material	Replacement
HADLEY AVE	C20D601	0.05	Toms River	4	AC	1950 thru 1964	300	6	Di	2020	\$ 72,000	Age and Material	Replacement
FAIRWAY DR	C20D601	0.06	Torns River	4	AC	1950	1100	6	DI	2020	\$ 262,000	Age and Material	Replacement



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				О	riginal Mai	in .		Proposed Mai					
Project Limits	Project Number	Project No. Ext	Town	Size	Material	Year inst.	Length	Size	Material	install Year	Est. Cost	Performance Criteria	Renewal Method
MESSENGER ST	C200601	0.07	Toms River	4	AC ·	1950	950	6	DI	2020	\$ 227,000	Age and Material	Replacement
THOMAS ST	C20D601	0.08	Toms River	4	AC	1950	400	6	DI	2020	\$ 96,000	Age and Material	Replacement
BROAD STREET	C20D601	0.09	Toms River	4	AC	1950	1000	6	DI	2020	\$ 238,000	Age and Material	Replacement
PARK STREET	C20D601	0.10	Toms River	4	AC	1950	950	6	DI	2020	\$ 227,000	Age and Material	Replacement
DOVER STREET	C20D601	0.11	Toms River	4	AC	1950	750	6	DI	2020	\$ 179,000	Age and Material	Replacement
UNION STREET	C20D601	0.12	Toms River	4	AC	1950	600	6	DI	2020	\$ 143,000	Age and Material	Replacement
WALTON STREET	C20D601	0.13	Toms River	4	AC	1950	500	6	DI	2020	\$ 119,000	Age and Material	Replacement



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		Project No. Ext			Original Mai	in		Propo	sed Main	Install Year		Performance Criteria	Renewal Method
Project Limits	Project Number		Town	Size	Material	Year Inst.	-	Size	Material		Est. Cost		
FAIRACRES DR	C170601	0.14	Toms River	4	AC	1952 thru 1958	1300	6	Di	2020	\$ 310,000	Age and Material	Replacemen
DICKINSON AVE	C18D601	0.15	Toms River	4	AC	1950	550	6	DI	2020	\$ 131,000	Age and Material	Replacemen
Lucy Lane	C20D601	0.16	Toms River	6	AC	1960 thru 1962	400	8	ы	2020	\$ 96,000	Age and Material	Replacemen
Onyx Drive	C200601	0.17	Torns River	6	AC	1968	900	8	DI	2020	\$ 215,000	Age and Material	Replacemen





Table 2 - United Water Torns River Blanket Project Details										
DSIC Classification	2016	2017	2018	2019	2020					
Hydrant Replacement - D501	\$ 127,300	\$ 128,100	\$ 127,100	\$ 128,300	\$ 127,800					
Short Main & Valve Replacement - D502	\$ 207,700	\$ 400,300	\$ 397,100	\$ 400,800	\$ 399,400					
Domestic Services - F501	\$ 1,533,900	\$ 1,315,200	\$ 1,304,800	\$ 1,317,100	\$ 1.312,200					

Blanket projects will be undertaken throughout the three municipalities within the service area.

Table 3 is a summary of all DSIC eligible expenditures by year.

DSIC Classification	2016		2017		2018		2019		2020	
Main Replacement Projects - D600	\$	3,065,000	\$	2,996,000	\$	3,014,000	\$	3,025,000	\$	3,066,000
Bianket Structured Projects										
Hydrant Replacement - D501	\$	127,300	\$	128,100	\$	127,100	\$	128,300	\$	127,800
Short Main & Valve Replacement - D502	\$	397,700	\$	400,300	\$	397,100	\$	400,800	\$	399,400
Domestic Services - F501	\$	1,533,900	5	1,315,200	\$	1,304,800	\$	1,317,100	\$	1,312,200
TOTAL	\$	E,120,000	\$	4,829,808	3	4,043,000	8	4,871,280	\$	4,005,400

EXHIBIT B

Exhibit B Exhibit P-3 Revised 9/29/15

United Water Toms River DSIC Foundational Filing DSIC Assessment Schedule

	Total Number of Meters (3)	Meter Equivalent Ratios	Equivalent 5/8" inch Meters	Annual Maximum DSIC Amount by equivalent Meter	Maximum Monthly Charge per Meter
Metered Sales:	40.406	1.00	10.105	44 440 545	40.00
5/8"	40,106	1.00	40,106	\$1,140,615	\$2.37
3/4"	6,290	1.50	9,435	270,973	3.59
1"	1,461	2.50	3,653	103,965	5.93
1 1/2"	259	5.00	1,295	36,830	11.85
2*	259	8.00	2,072	58,928	18.96
3"	59	15.00	885	25,169	35.55
4"	40	25.00	1,000	28,440	59.25
6"	8	50.00	400	11,376	118.50
8"	4	80.00	320	9,101	189.60
10"		115.00			272.55
12"		165.00			391.05
	48,486		59,166	\$1,685,397	[1]
				\$1,685,354	
				28.48518	[2]
				2.3738	
[1] Approved reven	ues from Docket No. 5.	WR15020269		\$33,707,087	
Five percent "DSIC	Cap" per 44 NJR 172	3(a)		X 5%	
Maximum amount	of Annual DSIC Reve	nues		\$1,685,354	
[2] Amount per equ [3] Active meters p	iivalent meter (ro forma at Decembe	\$1,685,354 / er 31, 2015	59,166)	