



**TESTIMONY AND DATA
IN SUPPORT OF THE
KENT COUNTY WATER AUTHORITY'S**

VOLUME I

**RATE FILING
APRIL 8, 2016**

**1072 MAIN STREET
P.O. BOX 192
WEST WARWICK, RHODE ISLAND 02893-0192**

RATE FILING

**Testimony & Data in Support of the
KENT COUNTY WATER AUTHORITY**

RATE FILING

April 8, 2016

*1072 Main Street
P.O. Box 192
West Warwick, RI 02893-0192*

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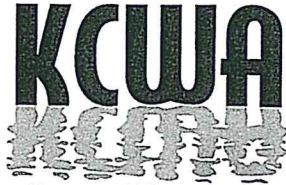
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Kent County Water Authority

April 8, 2016

The Honorable Margaret Curran
Chairwoman Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

Re: Kent County Water Authority Tariff Filing

Dear Chairwoman Curran:

On behalf of the Kent County Water Authority, we herewith file a revised tariff to be effective May 9, 2016. These tariffs represent a general increase in our rate revenues in the amount of \$3,296,334.

We have included in our tariff filing pre-filed testimony from four witnesses to be presented by the Kent County Water Authority including all supporting documents as required by the rules of practice and procedure. We have complied with all requirements including Rhode Island General Laws 39-3-12.1 by filing that information as exhibits attached to our filing.

We are filing along with these, copies to all affected parties within our system those being the following communities and organizations:

- Attorney General's Office
- Town Clerk of the Town of East Greenwich
- City Clerk of the City of Warwick
- Town Clerk of the Town of West Greenwich
- Town Clerk of the Town of Coventry
- Town Clerk of the Town of West Warwick
- City Clerk of the City of Cranston
- Town Clerk of the Town of Scituate
- Town Clerk of the Town of North Kingstown

Also, in accordance with RIGL 39-3-11C all fire districts will be notified via certified mail of notice of this rate increase.

We have included a copy of our proposed notice to be published in the Providence Journal. Once approved, we will forward copies via mail to our customers.

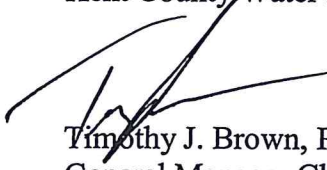
The following individuals should receive all correspondence for any additional information requested by the Public Utilities Commission; 1.) General Manager of the Kent County Water

PO Box 192
West Warwick, RI 02893-0192
401-821-9300
www.kentcountywater.org

Authority, Timothy J. Brown, P.E., General Manager/Chief Engineer, P.O. Box 192, West Warwick, Rhode Island 02893; tbrown@kentcountywater.org; 2.) Mary B. Shekarchi, Attorney, 33 College Hill Road, Suite #15E, Warwick, RI 02886: marybali@aol.com, as our legal counsel who will represent us in all rate filing matters concerning this document.

We look forward to presenting our case to the Commission for the continued benefit of our customers.

Very truly yours,
Kent County Water Authority



Timothy J. Brown, P.E.
General Manager Chief Engineer

TB/ym

**NOTICE OF PROPOSED CHANGES
AND
RATE TARIFFS**

State of Rhode Island and Providence Plantations
PUBLIC UTILITIES COMMISSION

RE: KENT COUNTY WATER AUTHORITY
Docket No. _____

NOTICE OF CHANGE IN RATE

Pursuant to Rhode Island General Laws (R.I.G.L.), Sections 39-3-11, and in accordance with Section 2.4 of the Rules of Practice and Procedure of the Rhode Island Public Utilities Commission, the Kent County Water Authority ("KCWA") hereby gives notice of a proposed change in rates filed and published in compliance with R.I.G.L. 39-3-10.

The proposed changes are contained in accompanying exhibits. The new rates, as proposed, are to become effective May 9, 2016. The new rates are designed to collect additional revenues in a twelve (12) month period equal to \$3,296,334.

The average residential customer will see a yearly billing of \$519.80 under the proposed rates, a \$58.44 increase over the current rates for the same amount of water consumed.

The proposed rate structure will not change the current three (3) block uniform rate structures based on meter size that is contained in our current rates.

A copy of this filing is on file at our office at 1072 Main Street or on our website www.kentcountywater.org and at the Public Utilities Commission, 89 Jefferson Boulevard, Warwick, Rhode Island 02889 and may be examined by the public during business hours. Also, copies are available at the public libraries and the cities and towns we service. The commission will publish a notice of the hearing dates when they are scheduled.

Robert B. Boyer
Chairman
Kent County Water Authority

CURRENT TARIFF SCHEDULES

**KENT COUNTY WATER AUTHORITY
RATE SCHEDULE**

Page 1
KCWA PUC DOCKET# 4417
WITH PWSB PASS THROUGH 4406
EFFECTIVE: 12-7-2013

METER SALES VOLUME:

Applicable to all metered water in the Kent County system for residential, commercial and industrial consumption.

<u>Rates:</u>	<u>Rate Per</u> <u>100 cu. ft.</u>
Small (5/8" to 2" meters)	\$5.254
Medium (3" to 4" meters)	\$4.476
Large (6" meters and up)	\$3.816

Terms of payment:

All metered sales bills are rendered quarterly or monthly and are due and payable in full when rendered.

METERED SALES SERVICE CHARGE:

Applicable to all metered sales of customers of Kent County Water Authority exclusive of fire service connections.

<u>Rates:</u>	<u>Meter Size (in)</u>	<u>Quarterly Accounts</u>	<u>Monthly Accounts</u>
	5/8 & 3/4	\$ 10.26	\$ 7.51
	1	\$ 13.57	\$ 8.61
	1 ½	\$ 19.78	\$10.67
	2	\$ 25.17	\$12.47
	3	\$ 32.20	\$14.82
	4	\$ 45.86	\$19.37
	6	\$ 76.08	\$29.44
	8	\$ 128.66	\$46.97

Terms of Payment:

All customer service charges are billed quarterly or monthly in advance, and are due and payable in full when rendered.

PUBLIC FIRE SERVICE:

Applicable for service to public fire hydrants in the Kent County service area.

<u>Rates:</u>	<u>Quarterly</u>
Hydrant	\$139.33 hydrant
Plus	\$ 6.12/billing

Terms of Payment:

All bills for public fire service are rendered quarterly in advance and are due payable in full when rendered.

PRIVATE FIRE SERVICE:

Applicable for service to private fire protection systems and private hydrants in the Kent County service area.

<u>Rates:</u>	<u>Service Size (in.)</u>	<u>Quarterly Accounts</u>
	4	\$ 55.69
	6	\$150.09
	8	\$312.94
	10	\$557.88
	12	\$897.35
	hydrant	\$150.09

Terms of Payment:

All bills for private fire services are rendered quarterly in advance and are due and payable in full when rendered.

WHOLESALE RATE WARWICK WATER DEPARTMENT: Same rate as charged by Providence Water Supply Board. Rate will change upon changes to Providence Water Supply Board wholesale rate charge.

INTEREST ON DELINQUENT ACCOUNTS: Applicable to all water account balances over 30 days from billing date. Interest charges are payable as incurred.

CHARGE: 1.5% per month on unpaid balances.

TURN OFF CHARGE: Applicable to all services turned off due to a specific violation which resulted in the requirement to terminate service and requests prior to 8:00 a.m. and after 3:00 p.m., Monday thru Friday and all day Saturday, Sunday, and any Holiday. Charges payable in full prior to subsequent turn-on.

CHARGE: \$55.00 per occurrence

TURN ON CHARGE: Applicable to all services turned on after the interruption of a service due to a specific violation which resulted in the service shut off and requests prior to 8:00 a.m. and after 3:00 p.m., Monday thru Friday and all day Saturday, Sunday, and any Holiday. Charges payable in full prior to turn-on.

CHARGE: \$45.00 per occurrence

INSTALLATION AND REPAIR WORK: Applicable to all installation and repair work.

CHARGE: Cost of all material, labor and equipment plus applicable overhead, as determined by the Kent County Water Authority on a yearly basis, usually on July 1.

CHLORINATION CHARGE: Applicable to all main extensions to existing systems.

CHARGE: Cost of laboratory and labor to collect, transport to lab, flush and test sample, as determined by the Kent County Water Authority on a yearly basis, usually on July 1.

MATERIAL PURCHASE: Applicable to all material sales.

CHARGE: Cost of material plus handling and applicable overhead, as determined by the Kent County Water Authority on a yearly basis, usually on July 1.

INSUFFICIENT FUND RETURNED CHECKS: Applicable to all payment checks returned to Kent County Water Authority by our bank due to insufficient funds available or account problems will bear a charge for our handling and bank charges.

CHARGE: \$20.00 Per occurrence.

METER TESTING: Applicable to all meter testing services.

CHARGE: \$50.00 Per occurrence.

INSPECTION FEE'S: Applicable to all developer installation work, public or private, in regards to all main or service extensions.

CHARGE: \$5.00/ft of installed main or for service pipe from main to curb stop.

LEGAL FEE'S: Applicable to all services requiring legal assistance by the Kent County Water Authority's legal counsel including but not limited to easement description preparation or review, deed restriction preparation or review, involvement with actions necessary for review or approvals of any water service request to the Authority.

CHARGE: Cost as billed to Kent County Water Authority by legal counsel on a monthly basis.

Terms Of Payment For All Other Charges: All bills rendered quarterly or monthly are due and payable in full when rendered.

PROPOSED TARIFF SCHEDULES

**KENT COUNTY WATER AUTHORITY
RATE SCHEDULE**

WITH PUBLIC HYDRANT RATES
Page 1
KCWA PUC DOCKET#
EFFECTIVE:

METER SALES VOLUME:

Applicable to all metered water in the Kent County system for residential, commercial and industrial consumption.

<u>Rates:</u>	<u>Rate Per</u> <u>100 cu. ft.</u>
Small (5/8" to 2" meters)	\$5.580
Medium (3" to 4" meters)	\$4.418
Large (6" meters and up)	\$4.018

Terms of payment:

All metered sales bills are rendered quarterly or monthly and are due and payable in full when rendered.

METERED SALES SERVICE CHARGE:

Applicable to all metered sales of customers of Kent County Water Authority exclusive of fire service connections.

<u>Rates:</u>	<u>Meter Size (in)</u>	<u>Quarterly Accounts</u>	<u>Monthly Accounts</u>
	5/8 & 3/4	\$ 15.29	\$11.15
	1	\$ 20.25	\$12.80
	1 ½	\$ 29.56	\$15.91
	2	\$ 37.63	\$18.60
	3	\$ 48.18	\$22.11
	4	\$ 68.66	\$28.94
	6	\$ 113.97	\$44.04
	8 & up	\$ 192.80	\$70.32

Terms of Payment:

All customer service charges are billed quarterly or monthly in advance, and are due and payable in full when rendered.

DEMAND SURCHARGE:

<u>Rates:</u>	<u>Meter Size (in)</u>	<u>Quarterly Accounts</u>	<u>Monthly Accounts</u>
	5/8 & 3/4	\$ 3.06	\$ 1.02
	1	\$ 5.13	\$ 1.71
	1 ½	\$ 10.23	\$ 3.41
	2	\$ 16.38	\$ 5.46
	3	\$ 32.76	\$10.92
	4	\$ 51.18	\$17.06
	6	\$ 102.36	\$34.12
	8 & up	\$ 163.80	\$54.60

Terms of Payment:

All demand surcharges are billed quarterly or monthly in advance, and are due and payable in full when rendered.

PUBLIC FIRE SERVICE:

Applicable for service to public fire hydrants in the Kent County service area.

<u>Rates:</u>	<u>Quarterly</u>
Hydrant	\$251.22 hydrant
Plus	\$ 9.08/billing

Terms of Payment:

All bills for public fire service are rendered quarterly in advance and are due payable in full when rendered.

PRIVATE FIRE SERVICE:

Applicable for service to private fire protection systems and private hydrants in the Kent County service area.

<u>Rates:</u>	<u>Service Size (in.)</u>	<u>Quarterly Accounts</u>
	4	\$ 95.89
	6	\$261.25
	8	\$546.47
	10	\$975.49
	12	\$1,570.10
	hydrant	\$261.25

Terms of Payment:

All bills for private fire services are rendered quarterly in advance and are due and payable in full when rendered.

OTHER CHARGES

WHOLESALE RATE WARWICK WATER DEPARTMENT: Same rate as charged by Providence Water Supply Board. Rate will change upon changes to Providence Water Supply Board wholesale rate charge.

INTEREST ON DELINQUENT ACCOUNTS: Applicable to all water account balances over 30 days from billing date. Interest charges are payable as incurred.

CHARGE: 1.5% per month on unpaid balances.

TURN OFF CHARGE: Applicable to all services turned off due to a specific violation which resulted in the requirement to terminate service and requests prior to 8:00 a.m. and after 3:00 p.m., Monday thru Friday and all day Saturday, Sunday, and any Holiday. Charges payable in full prior to subsequent turn-on.

CHARGE: \$55.00 per occurrence

TURN ON CHARGE: Applicable to all services turned on after the interruption of a service due to a specific violation which resulted in the service shut off and requests prior to 8:00 a.m. and after 3:00 p.m., Monday thru Friday and all day Saturday, Sunday, and any Holiday. Charges payable in full prior to turn-on.

CHARGE: \$45.00 per occurrence

INSTALLATION AND REPAIR WORK: Applicable to all installation and repair work.

CHARGE: Cost of all material, labor and equipment plus applicable overhead, as determined by the Kent County Water Authority on a yearly basis, usually on July 1.

CHLORINATION CHARGE: Applicable to all main extensions to existing systems.

CHARGE: Cost of laboratory and labor to collect, transport to lab, flush and test sample, as determined by the Kent County Water Authority on a yearly basis, usually on July 1.

MATERIAL PURCHASE: Applicable to all material sales.

CHARGE: Cost of material plus handling and applicable overhead, as determined by the Kent County Water Authority on a yearly basis, usually on July 1.

INSUFFICIENT FUND RETURNED CHECKS: Applicable to all payment checks returned to Kent County Water Authority by our bank due to insufficient funds available or account problems will bear a charge for our handling and bank charges.

CHARGE: \$20.00 Per occurrence.

METER TESTING: Applicable to all meter testing services.

CHARGE: \$100.00 Per occurrence.

INSPECTION FEE'S: Applicable to all developer installation work, public or private, in regards to all main or service extensions.

CHARGE: \$5.00/ft of installed main or for service pipe from main to curb stop.

LEGAL FEE's: Applicable to all services requiring legal assistance by the Kent County Water Authority's legal counsel including but not limited to easement description preparation or review, deed restriction preparation or review, involvement with actions necessary for review or approvals of any water service request to the Authority.

CHARGE: Cost as billed to Kent County Water Authority by legal counsel on a monthly basis.

BILLABLE LOST WATER: Applicable to all lost water caused by ruptured mains, service pipes or any and all ancillary appurtenances of the system by actions of others. Volume metered or estimated by the Authority due to non-metered lost water.

CHARGE: Billed at the rate established for the 5/8" to 2" metered volume rate per 100 cubic feet, metered or estimated.

Terms Of Payment For All Other Charges: All bills rendered quarterly or monthly are due and payable in full when rendered.

**KENT COUNTY WATER AUTHORITY
RATE SCHEDULE**

STEP INCREASE FY2018
WITH PUBLIC HYDRANT RATES
Page 1
KCWA PUC DOCKET#
EFFECTIVE:

METER SALES VOLUME:

Applicable to all metered water in the Kent County system for residential, commercial and industrial consumption.

Rates:

	<u>Rate Per</u> <u>100 cu. ft.</u>
Small (5/8" to 2" meters)	\$5.795
Medium (3" to 4" meters)	\$4.588
Large (6" meters and up)	\$4.173

Terms of payment:

All metered sales bills are rendered quarterly or monthly and are due and payable in full when rendered.

METERED SALES SERVICE CHARGE:

Applicable to all metered sales of customers of Kent County Water Authority exclusive of fire service connections.

<u>Rates:</u>	<u>Meter Size (in)</u>	<u>Quarterly Accounts</u>	<u>Monthly Accounts</u>
	5/8 & 3/4	\$ 15.88	\$11.58
	1	\$ 21.03	\$13.29
	1 ½	\$ 30.07	\$16.52
	2	\$ 39.08	\$19.32
	3	\$ 50.04	\$22.96
	4	\$ 71.30	\$30.05
	6	\$ 118.36	\$45.74
	8 & up	\$ 200.22	\$73.03

Terms of Payment:

All customer service charges are billed quarterly or monthly in advance, and are due and payable in full when rendered.

DEMAND SURCHARGE:

<u>Rates:</u>	<u>Meter Size (in)</u>	<u>Quarterly Accounts</u>	<u>Monthly Accounts</u>
	5/8 & 3/4	\$ 3.18	\$ 1.06
	1	\$ 5.33	\$ 1.78
	1 ½	\$ 10.62	\$ 3.54
	2	\$ 17.01	\$ 5.76
	3	\$ 34.02	\$11.34
	4	\$ 53.15	\$17.72
	6	\$ 106.30	\$35.43
	8 & up	\$ 170.11	\$56.70

Terms of Payment:

All demand surcharges are billed quarterly or monthly in advance, and are due and payable in full when rendered.

PUBLIC FIRE SERVICE:

Applicable for service to public fire hydrants in the Kent County service area.

Rates:

	<u>Quarterly</u>
Hydrant	\$260.89 hydrant
Plus	\$ 9.43/billing

Terms of Payment:

All bills for public fire service are rendered quarterly in advance and are due payable in full when rendered.

PRIVATE FIRE SERVICE:

Applicable for service to private fire protection systems and private hydrants in the Kent County service area.

<u>Rates:</u>	<u>Service Size (in.)</u>	<u>Quarterly Accounts</u>
	4	\$ 99.58
	6	\$271.31
	8	\$567.51
	10	\$1,013.06
	12	\$1,630.56
	hydrant	\$271.31

Terms of Payment:

All bills for private fire services are rendered quarterly in advance and are due and payable in full when rendered.

OTHER CHARGES

WHOLESALE RATE WARWICK WATER DEPARTMENT: Same rate as charged by Providence Water Supply Board. Rate will change upon changes to Providence Water Supply Board wholesale rate charge.

INTEREST ON DELINQUENT ACCOUNTS: Applicable to all water account balances over 30 days from billing date. Interest charges are payable as incurred.

CHARGE: 1.5% per month on unpaid balances.

TURN OFF CHARGE: Applicable to all services turned off due to a specific violation which resulted in the requirement to terminate service and requests prior to 8:00 a.m. and after 3:00 p.m., Monday thru Friday and all day Saturday, Sunday, and any Holiday. Charges payable in full prior to subsequent turn-on.

CHARGE: \$55.00 per occurrence

TURN ON CHARGE: Applicable to all services turned on after the interruption of a service due to a specific violation which resulted in the service shut off and requests prior to 8:00 a.m. and after 3:00 p.m., Monday thru Friday and all day Saturday, Sunday, and any Holiday. Charges payable in full prior to turn-on.

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INSTALLATION AND REPAIR WORK: Applicable to all installation and repair work.

CHARGE: Cost of all material, labor and equipment plus applicable overhead, as determined by the Kent County Water Authority on a yearly basis, usually on July 1.

CHLORINATION CHARGE: Applicable to all main extensions to existing systems.

CHARGE: Cost of laboratory and labor to collect, transport to lab, flush and test sample, as determined by the Kent County Water Authority on a yearly basis, usually on July 1.

MATERIAL PURCHASE: Applicable to all material sales.

CHARGE: Cost of material plus handling and applicable overhead, as determined by the Kent County Water Authority on a yearly basis, usually on July 1.

INSUFFICIENT FUND RETURNED CHECKS: Applicable to all payment checks returned to Kent County Water Authority by our bank due to insufficient funds available or account problems will bear a charge for our handling and bank charges.

CHARGE: \$20.00 Per occurrence.

METER TESTING: Applicable to all meter testing services.

CHARGE: \$100.00 Per occurrence.

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CHARGE: \$5.00/ft of installed main or for service pipe from main to curb stop.

LEGAL FEE's: Applicable to all services requiring legal assistance by the Kent County Water Authority's legal counsel including but not limited to easement description preparation or review, deed restriction preparation or review, involvement with actions necessary for review or approvals of any water service request to the Authority.

CHARGE: Cost as billed to Kent County Water Authority by legal counsel on a monthly basis.

BILLABLE LOST WATER: Applicable to all lost water caused by ruptured mains, service pipes or any and all ancillary appurtenances of the system by actions of others. Volume metered or estimated by the Authority due to non-metered lost water.

CHARGE: Billed at the rate established for the 5/8" to 2" metered volume rate per 100 cubic feet, metered or estimated.

Terms Of Payment For All Other Charges: All bills rendered quarterly or monthly are due and payable in full when rendered.

**KENT COUNTY WATER AUTHORITY
RATE SCHEDULE**

STEP INCREASE FY2019
WITH PUBLIC HYDRANT RATES
Page 1
KCWA PUC DOCKET#
EFFECTIVE:

METER SALES VOLUME:

Applicable to all metered water in the Kent County system for residential, commercial and industrial consumption.

Rates:

	<u>Rate Per 100 cu. ft.</u>
Small (5/8" to 2" meters)	\$6.159
Medium (3" to 4" meters)	\$4.876
Large (6" meters and up)	\$4.435

Terms of payment:

All metered sales bills are rendered quarterly or monthly and are due and payable in full when rendered.

METERED SALES SERVICE CHARGE:

Applicable to all metered sales of customers of Kent County Water Authority exclusive of fire service connections.

<u>Rates:</u>	<u>Meter Size (in)</u>	<u>Quarterly Accounts</u>	<u>Monthly Accounts</u>
	5/8 & 3/4	\$ 16.88	\$12.31
	1	\$ 22.35	\$14.13
	1 ½	\$ 32.63	\$17.56
	2	\$ 41.53	\$20.53
	3	\$ 53.18	\$24.40
	4	\$ 75.78	\$31.94
	6	\$ 125.79	\$48.61
	8 & up	\$ 212.80	\$77.61

Terms of Payment:

All customer service charges are billed quarterly or monthly in advance, and are due and payable in full when rendered.

DEMAND SURCHARGE:

<u>Rates:</u>	<u>Meter Size (in)</u>	<u>Quarterly Accounts</u>	<u>Monthly Accounts</u>
	5/8 & 3/4	\$ 3.38	\$ 1.13
	1	\$ 5.66	\$ 1.89
	1 ½	\$ 11.29	\$ 3.76
	2	\$ 18.08	\$ 6.03
	3	\$ 36.16	\$12.05
	4	\$ 56.49	\$18.83
	6	\$ 112.98	\$37.66
	8 & up	\$ 180.79	\$60.26

Terms of Payment:

All demand surcharges are billed quarterly or monthly in advance, and are due and payable in full when rendered.

PUBLIC FIRE SERVICE:

Applicable for service to public fire hydrants in the Kent County service area.

Rates:

	<u>Quarterly</u>
Hydrant	\$277.28 hydrant
Plus	\$ 10.02/billing

Terms of Payment:

All bills for public fire service are rendered quarterly in advance and are due payable in full when rendered.

PRIVATE FIRE SERVICE:

Applicable for service to private fire protection systems and private hydrants in the Kent County service area.

<u>Rates:</u>	<u>Service Size (in.)</u>	<u>Quarterly Accounts</u>
	4	\$105.84
	6	\$288.35
	8	\$603.15
	10	\$1,076.67
	12	\$1,732.95
	hydrant	\$288.35

Terms of Payment:

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CHARGE: Cost as billed to Kent County Water Authority by legal counsel on a monthly basis.

BILLABLE LOST WATER: Applicable to all lost water caused by ruptured mains, service pipes or any and all ancillary appurtenances of the system by actions of others. Volume metered or estimated by the Authority due to non-metered lost water.

CHARGE: Billed at the rate established for the 5/8" to 2" metered volume rate per 100 cubic feet, metered or estimated.

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**KENT COUNTY WATER AUTHORITY
RATE SCHEDULE**

WITHOUT PUBLIC HYDRANT RATES
Page 1
KCWA PUC DOCKET#
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Medium (3" to 4" meters)	\$4.418
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Applicable to all metered sales of customers of Kent County Water Authority exclusive of fire service connections.

<u>Rates:</u>	<u>Meter Size (in)</u>	<u>Quarterly Accounts</u>	<u>Monthly Accounts</u>
	5/8 & 3/4	\$ 29.79	\$15.99
	1	\$ 44.42	\$20.86
	1 ½	\$ 77.89	\$32.02
	2	\$ 114.96	\$44.38
	3	\$ 202.84	\$73.67
	4	\$ 310.31	\$109.49
	6	\$ 597.26	\$205.14
	8 & up	\$ 966.06	\$328.08

Terms of Payment:

All customer service charges are billed quarterly or monthly in advance, and are due and payable in full when rendered.

DEMAND SURCHARGE:

<u>Rates:</u>	<u>Meter Size (in)</u>	<u>Quarterly Accounts</u>	<u>Monthly Accounts</u>
	5/8 & 3/4	\$ 3.06	\$ 1.02
	1	\$ 5.13	\$ 1.71
	1 ½	\$ 10.23	\$ 3.41
	2	\$ 16.38	\$ 5.46
	3	\$ 32.76	\$10.92
	4	\$ 51.18	\$17.06
	6	\$ 102.36	\$34.12
	8 & up	\$ 163.80	\$54.60

Terms of Payment:

All demand surcharges are billed quarterly or monthly in advance, and are due and payable in full when rendered.

PRIVATE FIRE SERVICE:

Applicable for service to private fire protection systems and private hydrants in the Kent County service area.

<u>Rates:</u>	<u>Service Size (in.)</u>	<u>Quarterly Accounts</u>
	4	\$ 95.89
	6	\$261.25
	8	\$546.47
	10	\$975.49
	12	\$1,570.10
	hydrant	\$261.25

Terms of Payment:

All bills for private fire services are rendered quarterly in advance and are due and payable in full when rendered.

OTHER CHARGES

WHOLESALE RATE WARWICK WATER DEPARTMENT: Same rate as charged by Providence Water Supply Board. Rate will change upon changes to Providence Water Supply Board wholesale rate charge.

INTEREST ON DELINQUENT ACCOUNTS: Applicable to all water account balances over 30 days from billing date. Interest charges are payable as incurred.

CHARGE: 1.5% per month on unpaid balances.

TURN OFF CHARGE: Applicable to all services turned off due to a specific violation which resulted in the requirement to terminate service and requests prior to 8:00 a.m. and after 3:00 p.m., Monday thru Friday and all day Saturday, Sunday, and any Holiday. Charges payable in full prior to subsequent turn-on.

CHARGE: \$55.00 per occurrence

TURN ON CHARGE: Applicable to all services turned on after the interruption of a service due to a specific violation which resulted in the service shut off and requests prior to 8:00 a.m. and after 3:00 p.m., Monday thru Friday and all day Saturday, Sunday, and any Holiday. Charges payable in full prior to turn-on.

CHARGE: \$45.00 per occurrence

INSTALLATION AND REPAIR WORK: Applicable to all installation and repair work.

CHARGE: Cost of all material, labor and equipment plus applicable overhead, as determined by the Kent County Water Authority on a yearly basis, usually on July 1.

CHLORINATION CHARGE: Applicable to all main extensions to existing systems.

CHARGE: Cost of laboratory and labor to collect, transport to lab, flush and test sample, as determined by the Kent County Water Authority on a yearly basis, usually on July 1.

MATERIAL PURCHASE: Applicable to all material sales.

CHARGE: Cost of material plus handling and applicable overhead, as determined by the Kent County Water Authority on a yearly basis, usually on July 1.

INSUFFICIENT FUND RETURNED CHECKS: Applicable to all payment checks returned to Kent County Water Authority by our bank due to insufficient funds available or account problems will bear a charge for our handling and bank charges.

CHARGE: \$20.00 Per occurrence.

METER TESTING: Applicable to all meter testing services.

CHARGE: \$100.00 Per occurrence.

INSPECTION FEE'S: Applicable to all developer installation work, public or private, in regards to all main or service extensions.

CHARGE: \$5.00/ft of installed main or for service pipe from main to curb stop.

LEGAL FEE'S: Applicable to all services requiring legal assistance by the Kent County Water Authority's legal counsel including but not limited to easement description preparation or review, deed restriction preparation or review, involvement with actions necessary for review or approvals of any water service request to the Authority.

CHARGE: Cost as billed to Kent County Water Authority by legal counsel on a monthly basis.

BILLABLE LOST WATER: Applicable to all lost water caused by ruptured mains, service pipes or any and all ancillary appurtenances of the system by actions of others. Volume metered or estimated by the Authority due to non-metered lost water.

CHARGE: Billed at the rate established for the 5/8" to 2" metered volume rate per 100 cubic feet, metered or estimated.

HYDRANT: Installation applicable to any request by any fire department, district or governing body for installation of a fire hydrant for public firefighting purposes only. Location is to be determined and connected to the water infrastructure of KCWA, where adequate pressure and volume exists, as determined by KCWA for firefighting purpose requested.

CHARGE: Billed at cost for all construction, installation, materials engineering and remediation services required either by outside construction contractors or KCWA staff services. Construction services to be approved by KCWA in advance if performed by a contractor engaged by the fire department, district or governing body.

Terms Of Payment For All Other Charges: All bills rendered quarterly or monthly are due and payable in full when rendered.

**KENT COUNTY WATER AUTHORITY
RATE SCHEDULE**

STEP INCREASE FY2018
WITHOUT PUBLIC HYDRANT RATES
Page 1
KCWA PUC DOCKET#
EFFECTIVE:

METER SALES VOLUME:

Applicable to all metered water in the Kent County system for residential, commercial and industrial consumption.

Rates:

	<u>Rate Per</u> <u>100 cu. ft.</u>
Small (5/8" to 2" meters)	\$5.79
Medium (3" to 4" meters)	\$4.59
Large (6" meters and up)	\$4.17

Terms of payment:

All metered sales bills are rendered quarterly or monthly and are due and payable in full when rendered.

METERED SALES SERVICE CHARGE:

Applicable to all metered sales of customers of Kent County Water Authority exclusive of fire service connections.

<u>Rates:</u>	<u>Meter Size (in)</u>	<u>Quarterly Accounts</u>	<u>Monthly Accounts</u>
	5/8 & 3/4	\$ 30.94	\$16.61
	1	\$ 46.13	\$21.66
	1 ½	\$ 80.89	\$33.25
	2	\$ 119.39	\$46.09
	3	\$ 210.65	\$76.51
	4	\$ 322.26	\$113.71
	6	\$ 620.26	\$213.04
	8 & up	\$ 1,003.26	\$340.71

Terms of Payment:

All customer service charges are billed quarterly or monthly in advance, and are due and payable in full when rendered.

DEMAND SURCHARGE:

<u>Rates:</u>	<u>Meter Size (in)</u>	<u>Quarterly Accounts</u>	<u>Monthly Accounts</u>
	5/8 & 3/4	\$ 3.18	\$ 1.06
	1	\$ 5.33	\$ 1.78
	1 ½	\$ 10.62	\$ 3.54
	2	\$ 17.01	\$ 5.67
	3	\$ 34.02	\$11.34
	4	\$ 53.15	\$17.72
	6	\$ 106.30	\$35.43
	8 & up	\$ 170.11	\$56.70

Terms of Payment:

All demand surcharges are billed quarterly or monthly in advance, and are due and payable in full when rendered.

PRIVATE FIRE SERVICE:

Applicable for service to private fire protection systems and private hydrants in the Kent County service area.

<u>Rates:</u>	<u>Service Size (in.)</u>	<u>Quarterly Accounts</u>
	4	\$ 95.89
	6	\$261.25
	8	\$546.47
	10	\$975.49
	12	\$1,570.10
	hydrant	\$261.25

Terms of Payment:

All bills for private fire services are rendered quarterly in advance and are due and payable in full when rendered.

OTHER CHARGES

WHOLESALE RATE WARWICK WATER DEPARTMENT: Same rate as charged by Providence Water Supply Board. Rate will change upon changes to Providence Water Supply Board wholesale rate charge.

INTEREST ON DELINQUENT ACCOUNTS: Applicable to all water account balances over 30 days from billing date. Interest charges are payable as incurred.

CHARGE: 1.5% per month on unpaid balances.

TURN OFF CHARGE: Applicable to all services turned off due to a specific violation which resulted in the requirement to terminate service and requests prior to 8:00 a.m. and after 3:00 p.m., Monday thru Friday and all day Saturday, Sunday, and any Holiday. Charges payable in full prior to subsequent turn-on.

CHARGE: \$55.00 per occurrence

TURN ON CHARGE: Applicable to all services turned on after the interruption of a service due to a specific violation which resulted in the service shut off and requests prior to 8:00 a.m. and after 3:00 p.m., Monday thru Friday and all day Saturday, Sunday, and any Holiday. Charges payable in full prior to turn-on.

CHARGE: \$45.00 per occurrence

INSTALLATION AND REPAIR WORK: Applicable to all installation and repair work.

CHARGE: Cost of all material, labor and equipment plus applicable overhead, as determined by the Kent County Water Authority on a yearly basis, usually on July 1.

CHLORINATION CHARGE: Applicable to all main extensions to existing systems.

CHARGE: Cost of laboratory and labor to collect, transport to lab, flush and test sample, as determined by the Kent County Water Authority on a yearly basis, usually on July 1.

MATERIAL PURCHASE: Applicable to all material sales.

CHARGE: Cost of material plus handling and applicable overhead, as determined by the Kent County Water Authority on a yearly basis, usually on July 1.

INSUFFICIENT FUND RETURNED CHECKS: Applicable to all payment checks returned to Kent County Water Authority by our bank due to insufficient funds available or account problems will bear a charge for our handling and bank charges.

CHARGE: \$20.00 Per occurrence.

METER TESTING: Applicable to all meter testing services.

CHARGE: \$100.00 Per occurrence.

INSPECTION FEE'S: Applicable to all developer installation work, public or private, in regards to all main or service extensions.

CHARGE: \$5.00/ft of installed main or for service pipe from main to curb stop.

LEGAL FEE's: Applicable to all services requiring legal assistance by the Kent County Water Authority's legal counsel including but not limited to easement description preparation or review, deed restriction preparation or review, involvement with actions necessary for review or approvals of any water service request to the Authority.

CHARGE: Cost as billed to Kent County Water Authority by legal counsel on a monthly basis.

BILLABLE LOST WATER: Applicable to all lost water caused by ruptured mains, service pipes or any and all ancillary appurtenances of the system by actions of others. Volume metered or estimated by the Authority due to non-metered lost water.

CHARGE: Billed at the rate established for the 5/8" to 2" metered volume rate per 100 cubic feet, metered or estimated.

HYDRANT: Installation applicable to any request by any fire department, district or governing body for installation of a fire hydrant for public firefighting purposes only. Location is to be determined and connected to the water infrastructure of KCWA, where adequate pressure and volume exists, as determined by KCWA for firefighting purpose requested.

CHARGE: Billed at cost for all construction, installation, materials engineering and remediation services required either by outside construction contractors or KCWA staff services. Construction services to be approved by KCWA in advance if performed by a contractor engaged by the fire department, district or governing body.

Terms Of Payment For All Other Charges: All bills rendered quarterly or monthly are due and payable in full when rendered.

**KENT COUNTY WATER AUTHORITY
RATE SCHEDULE**

STEP INCREASE FY2019
WITHOUT PUBLIC HYDRANT RATES
Page 1
KCWA PUC DOCKET#
EFFECTIVE:

METER SALES VOLUME:

Applicable to all metered water in the Kent County system for residential, commercial and industrial consumption.

Rates:

	<u>Rate Per</u> <u>100 cu. ft.</u>
Small (5/8" to 2" meters)	\$6.16
Medium (3" to 4" meters)	\$4.88
Large (6" meters and up)	\$4.43

Terms of payment:

All metered sales bills are rendered quarterly or monthly and are due and payable in full when rendered.

METERED SALES SERVICE CHARGE:

Applicable to all metered sales of customers of Kent County Water Authority exclusive of fire service connections.

<u>Rates:</u>	<u>Meter Size (in)</u>	<u>Quarterly Accounts</u>	<u>Monthly Accounts</u>
	5/8 & 3/4	\$ 32.88	\$17.65
	1	\$ 49.03	\$23.02
	1 ½	\$ 85.97	\$35.34
	2	\$ 126.88	\$48.98
	3	\$ 223.88	\$81.31
	4	\$ 342.50	\$120.85
	6	\$ 659.21	\$226.42
	8 & up	\$ 1,066.26	\$362.11

Terms of Payment:

All customer service charges are billed quarterly or monthly in advance, and are due and payable in full when rendered.

DEMAND SURCHARGE:

<u>Rates:</u>	<u>Meter Size (in)</u>	<u>Quarterly Accounts</u>	<u>Monthly Accounts</u>
	5/8 & 3/4	\$ 3.38	\$ 1.13
	1	\$ 5.66	\$ 1.89
	1 ½	\$ 11.29	\$ 3.76
	2	\$ 18.08	\$ 6.03
	3	\$ 36.16	\$12.05
	4	\$ 56.49	\$18.83
	6	\$ 112.98	\$37.66
	8 & up	\$ 180.79	\$60.26

Terms of Payment:

All demand surcharges are billed quarterly or monthly in advance, and are due and payable in full when rendered.

PRIVATE FIRE SERVICE:

Applicable for service to private fire protection systems and private hydrants in the Kent County service area.

<u>Rates:</u>	<u>Service Size (in.)</u>	<u>Quarterly Accounts</u>
	4	\$ 95.89
	6	\$261.25
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	10	\$975.49
	12	\$1,570.10
	hydrant	\$261.25

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HYDRANT: Installation applicable to any request by any fire department, district or governing body for installation of a fire hydrant for public firefighting purposes only. Location is to be determined and connected to the water infrastructure of KCWA, where adequate pressure and volume exists, as determined by KCWA for firefighting purpose requested.

CHARGE: Billed at cost for all construction, installation, materials engineering and remediation services required either by outside construction contractors or KCWA staff services. Construction services to be approved by KCWA in advance if performed by a contractor engaged by the fire department, district or governing body.

Terms Of Payment For All Other Charges: All bills rendered quarterly or monthly are due and payable in full when rendered.

**ATTESTATION
UNDER RULE
1.20(e)(2) and 2.7**


In Reference:

Kent County Water Authority
Tariff Filing of April 8, 2016

State of Rhode Island
Public Utilities Commission
Docket

Attestation Under Rule 1.20 (e) (2) and 2.7
of the Rules of Practice and Procedures
of the Public Utilities Commission

I, Jo-Ann Gershkoff, Director of Administration and Finance of the Kent County Water Authority, in conformance with Rule 1.20 (e) (2) and 2.7 of the Rules and Practice and Procedure of the Public Utilities Commission, hereby attest that the facts contained in the documents and testimony prepared by me are true and correct to the best of my knowledge, information, and belief.


Jo-Ann Gershkoff
Director of Administration and Finance

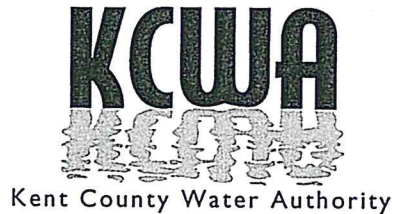
STATE OF RHODE ISLAND
KENT COUNTY

Subscribed and sworn to me this 6 of April, 2016.


Notary Public



**LETTERS OF NOTICE
TO
MUNICIPALITIES, AGENCIES
AND
FIRE DISTRICTS**



April 8, 2016

Attorney General Peter F. Kilmartin
Attorney General's Office
150 South Main Street
Providence, Rhode Island 02903

Re: Kent County Water Authority
Application for increase in tariffs with the Public Utilities Commission

Dear Mr. Kilmartin:

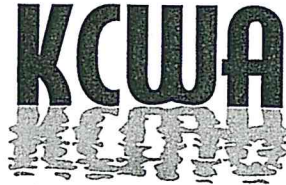
Pursuant to Section 39-3-11 of the General Laws of the State of Rhode Island, Kent County Water Authority has filed the enclosed document with the Rhode Island Public Utilities Commission in support of an increase in its rates. Copies of these documents have been filed with each governing body of our services communities. Pursuant to RIGL 39-3-11C a notice of our increase in rates will be provided to the fire districts within our service area. Certainly, if you have any questions or concerns on this filing, you may contact myself or our attorney Robert A. Watson, to review any of these items.

Very truly yours,
Kent County Water Authority

A handwritten signature in black ink, appearing to be "TJ Brown", is written over the typed name of Timothy J. Brown.

Timothy J. Brown, P.E.
General Manager Chief Engineer

Enclosure



Kent County Water Authority

April 8, 2016

Ms. Cheryl George
Town Clerk
Coventry Town Hall
1670 Flat River Road
Coventry, RI 02816


Re: Kent County Water Authority
Application for increase in tariffs with the Public Utilities Commission

Dear Ms. George:

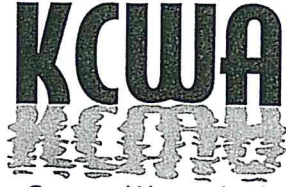
Pursuant to Section 39-3-11 of the General Laws of the State of Rhode Island, Kent County Water Authority has filed the enclosed document with the Rhode Island Public Utilities Commission in support of an increase in its rates. Copies of these documents are to be filed with the governing council of your community. Please notify them of this filing and that you are in possession of the complete document. You may also wish to leave it out for public display.

Thank you for your assistance.

Very truly yours,
Kent County Water Authority


Timothy J. Brown, P.E.
General Manager Chief Engineer

Enclosure



Kent County Water Authority

April 8, 2016

Maria Wall, City Clerk
869 Park Avenue
Cranston, Rhode Island 02910

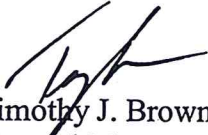
Re: Kent County Water Authority
Application for increase in tariffs with the Public Utilities Commission

Dear Ms. Wall:

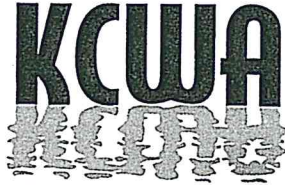
Pursuant to Section 39-3-11 of the General Laws of the State of Rhode Island, Kent County Water Authority has filed the enclosed document with the Rhode Island Public Utilities Commission in support of an increase in its rates. Copies of these documents are to be filed with the governing council of your community. Please notify them of this filing and that you are in possession of the complete document. You may also wish to leave it out for public display.

Thank you for your assistance.

Very truly yours,
Kent County Water Authority


Timothy J. Brown, P.E.
General Manager Chief Engineer

Enclosure



Kent County Water Authority

April 8, 2016

Leigh A. Botello, Town Clerk
Town of East Greenwich
P.O. Box 111
East Greenwich, Rhode Island 02818

Re: Kent County Water Authority
Application for increase in tariffs with the Public Utilities Commission

Dear Ms. Botello:

Pursuant to Section 39-3-11 of the General Laws of the State of Rhode Island, Kent County Water Authority has filed the enclosed document with the Rhode Island Public Utilities Commission in support of an increase in its rates. Copies of these documents are to be filed with the governing council of your community. Please notify them of this filing and that you are in possession of the complete document. You may also wish to leave it out for public display.

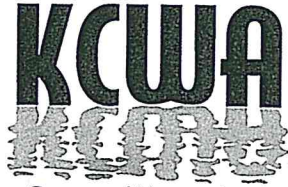
Thank you for your assistance.

Very truly yours,
Kent County Water Authority



Timothy J. Brown, P.E.
General Manager Chief Engineer

Enclosure



Kent County Water Authority

April 8, 2016

Jeannette Alyward, Town Clerk
Town of North Kingstown
80 Boston Neck Road
North Kingstown, Rhode Island 02852

Re: Kent County Water Authority
Application for increase in tariffs with the Public Utilities Commission

Dear Ms. Alyward:

Pursuant to Section 39-3-11 of the General Laws of the State of Rhode Island, Kent County Water Authority has filed the enclosed document with the Rhode Island Public Utilities Commission in support of an increase in its rates. Copies of these documents are to be filed with the governing council of your community. Please notify them of this filing and that you are in possession of the complete document. You may also wish to leave it out for public display.

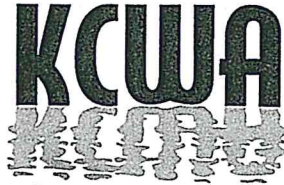
Thank you for your assistance.

Very truly yours,
Kent County Water Authority

A handwritten signature in black ink, appearing to read "T. Brown", is written over the typed name of Timothy J. Brown.

Timothy J. Brown, P.E.
General Manager Chief Engineer

Enclosure



Kent County Water Authority

April 8, 2016

Kathleen Curran, Town Clerk
Town of Scituate
195 Danielson Pike
P.O. Box 328
North Scituate, Rhode Island 02857

Re: Kent County Water Authority
Application for increase in tariffs with the Public Utilities Commission

Dear Ms. Curran:

Pursuant to Section 39-3-11 of the General Laws of the State of Rhode Island, Kent County Water Authority has filed the enclosed document with the Rhode Island Public Utilities Commission in support of an increase in its rates. Copies of these documents are to be filed with the governing council of your community. Please notify them of this filing and that you are in possession of the complete document. You may also wish to leave it out for public display.

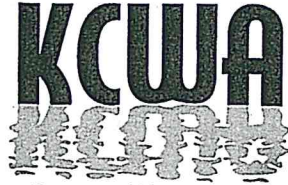
Thank you for your assistance.

Very truly yours,
Kent County Water Authority

A handwritten signature in black ink, appearing to read "Timothy J. Brown".

Timothy J. Brown, P.E.
General Manager Chief Engineer

Enclosure



Kent County Water Authority

April 8, 2016

Judy Wild, City Clerk
City of Warwick
3275 Post Road
Warwick, Rhode Island 02886

Re: Kent County Water Authority
Application for increase in tariffs with the Public Utilities Commission

Dear Ms. Wild:

Pursuant to Section 39-3-11 of the General Laws of the State of Rhode Island, Kent County Water Authority has filed the enclosed document with the Rhode Island Public Utilities Commission in support of an increase in its rates. Copies of these documents are to be filed with the governing council of your community. Please notify them of this filing and that you are in possession of the complete document. You may also wish to leave it out for public display.

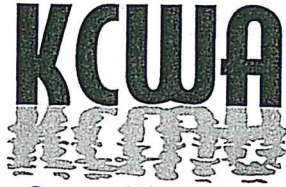
Thank you for your assistance.

Very truly yours,
Kent County Water Authority

A handwritten signature in black ink, appearing to read "T. Brown", is written over the typed name of Timothy J. Brown.

Timothy J. Brown, P.E.
General Manager Chief Engineer

Enclosure



Kent County Water Authority

April 8, 2016

Erin F. Liese, CMC, City Clerk
Town of West Greenwich
280 Victory Highway
West Greenwich, Rhode Island 02817

Re: Kent County Water Authority
Application for increase in tariffs with the Public Utilities Commission

Dear Ms. Liese:

Pursuant to Section 39-3-11 of the General Laws of the State of Rhode Island, Kent County Water Authority has filed the enclosed document with the Rhode Island Public Utilities Commission in support of an increase in its rates. Copies of these documents are to be filed with the governing council of your community. Please notify them of this filing and that you are in possession of the complete document. You may also wish to leave it out for public display.

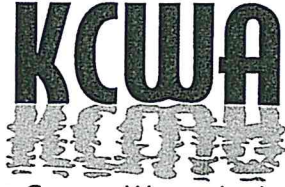
Thank you for your assistance.

Very truly yours,
Kent County Water Authority

A handwritten signature in black ink, appearing to read "Timothy J. Brown".

Timothy J. Brown, P.E.
General Manager Chief Engineer

Enclosure



Kent County Water Authority

April 8, 2016

Marianne Kelly, CMC, Town Clerk
West Warwick Town Hall
1170 Main Street
West Warwick, Rhode Island 02893

Re: Kent County Water Authority
Application for increase in tariffs with the Public Utilities Commission

Dear Ms. Kelly:

Pursuant to Section 39-3-11 of the General Laws of the State of Rhode Island, Kent County Water Authority has filed the enclosed document with the Rhode Island Public Utilities Commission in support of an increase in its rates. Copies of these documents are to be filed with the governing council of your community. Please notify them of this filing and that you are in possession of the complete document. You may also wish to leave it out for public display.

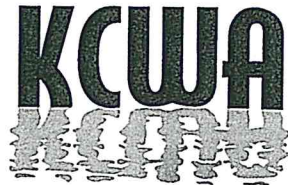
Thank you for your assistance.

Very truly yours,
Kent County Water Authority

A handwritten signature in black ink, appearing to read "Timothy J. Brown", is written over the typed name.

Timothy J. Brown, P.E.
General Manager Chief Engineer

Enclosure



Kent County Water Authority

April 8, 2016

Central Coventry Fire District
Ms. Gayle Corrigan, District Manager
240 Arnold Road
Coventry, RI 02816

Re: Kent County Water Authority Rate Filing

Dear Ms. Corrigan:

Pursuant to RIGL 39-3-11C Kent County Water Authority must provide, by certified mail, a notice of our increase in rates to you. Attached herewith find the original notice as filed to the Public Utilities Commissions of our proposed rate increase as filed on April 8, 2016 with the Public Utilities Commission. A complete copy of this filing has been provided to each city and town for review. You may review that copy or visit our website www.kentcountywater.org. We are also providing copies to the libraries within your area, the Coventry Public Library, West Warwick Public Library, East Greenwich Public Library, Warwick Public Library, and the West Greenwich Public Library, and may obtain a copy to review as well.

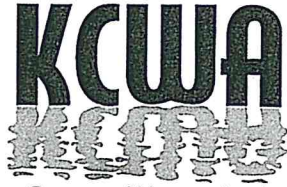
Certainly, if you have any questions or concerns on this filing, you may contact myself or our attorney, Mary B. Shekarchi, to review any of these items. Also, the hearing process will be fully noticed in accordance with state law by the Public Utilities Commission.

Very truly yours,
KENT COUNTY WATER AUTHORITY

A handwritten signature in black ink, appearing to read "T. Brown", is written over the printed name of Timothy J. Brown.

Timothy J. Brown, P.E.
General Manager/Chief Engineer

CERTIFIED



Kent County Water Authority

April 8, 2016

Hope-Jackson Fire Department
Chief John Robinson
117 Main Street
Hope, RI 02831


Re: Kent County Water Authority Rate Filing

Dear Chief Robinson:

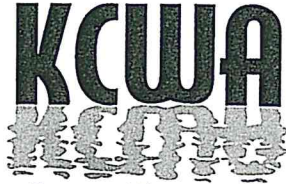
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Very truly yours,
KENT COUNTY WATER AUTHORITY


Timothy J. Brown, P.E.
General Manager/Chief Engineer

CERTIFIED



Kent County Water Authority

April 8, 2016

Hopkins Hill Fire District
Chief Frank M. Brown
1 Bestwick Trail
Coventry, RI 02816


Re: Kent County Water Authority Rate Filing

Dear Chief Brown:

Pursuant to RIGL 39-3-11C Kent County Water Authority must provide, by certified mail, a notice of our increase in rates to you. Attached herewith find the original notice as filed to the Public Utilities Commissions of our proposed rate increase as filed on April 8, 2016 with the Public Utilities Commission. A complete copy of this filing has been provided to each city and town for review. You may review that copy or visit our website www.kentcountywater.org. We are also providing copies to the libraries within your area, the Coventry Public Library, West Warwick Public Library, East Greenwich Public Library, Warwick Public Library, and the West Greenwich Public Library, and may obtain a copy to review as well.

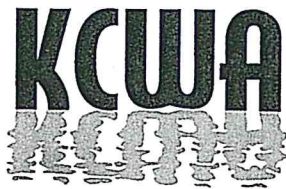
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Very truly yours,
KENT COUNTY WATER AUTHORITY



Timothy J. Brown, P.E.
General Manager/Chief Engineer

CERTIFIED



Kent County Water Authority

April 8, 2016

Lake Mishnock Fire Department
Chief Bud Tyler
166 Mishnock Road
West Greenwich, RI 02817

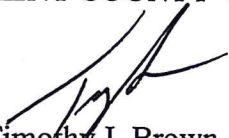
Re: Kent County Water Authority Rate Filing

Dear Chief Tyler:

Pursuant to RIGL 39-3-11C Kent County Water Authority must provide, by certified mail, a notice of our increase in rates to you. Attached herewith find the original notice as filed to the Public Utilities Commissions of our proposed rate increase as filed on April 8, 2016 with the Public Utilities Commission. A complete copy of this filing has been provided to each city and town for review. You may review that copy or visit our website www.kentcountywater.org. We are also providing copies to the libraries within your area, the Coventry Public Library, West Warwick Public Library, East Greenwich Public Library, Warwick Public Library, and the West Greenwich Public Library, and may obtain a copy to review as well.

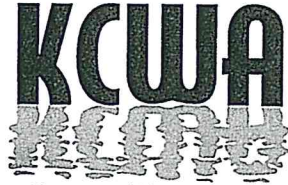
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Very truly yours,
KENT COUNTY WATER AUTHORITY



Timothy J. Brown, P.E.
General Manager/Chief Engineer

CERTIFIED



Kent County Water Authority

April 8, 2016

West Greenwich Fire Department #1
Chief Brian Hoxsie
830 Nooseneck Hill Road
West Greenwich, RI 02817


Re: Kent County Water Authority Rate Filing

Dear Chief Hoxsie:

Pursuant to RIGL 39-3-11C Kent County Water Authority must provide, by certified mail, a notice of our increase in rates to you. Attached herewith find the original notice as filed to the Public Utilities Commissions of our proposed rate increase as filed on April 8, 2016 with the Public Utilities Commission. A complete copy of this filing has been provided to each city and town for review. You may review that copy or visit our website www.kentcountywater.org. We are also providing copies to the libraries within your area, the Coventry Public Library, West Warwick Public Library, East Greenwich Public Library, Warwick Public Library, and the West Greenwich Public Library, and may obtain a copy to review as well.

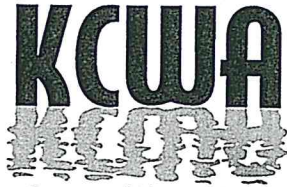
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Very truly yours,
KENT COUNTY WATER AUTHORITY



Timothy J. Brown, P.E.
General Manager/Chief Engineer

CERTIFIED



Kent County Water Authority

April 8, 2016

Coventry Fire District
Chief Robert Warren
571 Washington Street
Coventry, RI 02816


Re: Kent County Water Authority Rate Filing

Dear Chief Warren:

Pursuant to RIGL 39-3-11C Kent County Water Authority must provide, by certified mail, a notice of our increase in rates to you. Attached herewith find the original notice as filed to the Public Utilities Commissions of our proposed rate increase as filed on April 8, 2016 with the Public Utilities Commission. A complete copy of this filing has been provided to each city and town for review. You may review that copy or visit our website www.kentcountywater.org. We are also providing copies to the libraries within your area, the Coventry Public Library, West Warwick Public Library, East Greenwich Public Library, Warwick Public Library, and the West Greenwich Public Library, and may obtain a copy to review as well.

Certainly, if you have any questions or concerns on this filing, you may contact myself or our attorney, Mary B. Shekarchi, to review any of these items. Also, the hearing process will be fully noticed in accordance with state law by the Public Utilities Commission.

Very truly yours,
KENT COUNTY WATER AUTHORITY



Timothy J. Brown, P.E.
General Manager/Chief Engineer

CERTIFIED

PO Box 192
West Warwick, RI 02893-0192
401-821-9300
www.kentcountywater.org

TESTIMONY

**PRE-FILED TESTIMONY
OF
TIMOTHY J. BROWN, P.E.**

1 PRE-FILED TESTIMONY

2 TIMOTHY J. BROWN, PE

3
4 **Q. Please state your name and business address.**

5 A. My name is Timothy J. Brown, P.E. My current business address is 1072 Main Street,
6 West Warwick, Rhode Island 02893.

7
8 **Q. By whom are you employed and in what capacity?**

9 A. I am the General Manager/Chief Engineer of the Kent County Water Authority.

10
11 **Q. Please describe your qualifications and experience.**

12 A. I'm a Registered Professional Engineer in the State of Rhode Island and two other New
13 England States. I have been certified by the R. I. Department of Health as a Class 4
14 Drinking Water Distribution Operator and a Class 3 Water Treatment Operator and am the
15 licensed operator of KCWA. I have been a Civil and Sanitary Engineer for 40 years. My
16 career has encompassed professional engineering services in various New England States
17 including the State of Rhode Island and overseas in North Africa in both sanitary waste
18 water and water engineering project facilities. I have a Bachelor of Science Degree from
19 the University of Rhode Island.

20
21 **Q. Have you previously testified before State Regulatory Commissions concerning the
22 operations matters of Kent County Water Authority?**

23 A. Yes - Dockets #1952, #2034, and #2098, #2440, #2555, #2860, #3311, #3660, #3942 and
24 #4142 along with various Division Dockets.

25
26 **Q. What is your role in these proceedings?**

27 A. As General Manager/Chief Engineer of the Kent County Water Authority, I am responsible
28 for the Authority operations including plant, transmission, distribution, pumping facilities,
29 storage facilities within the Kent County Water Authority, and the licensed Distribution
30 and Treatment operator of the Authority.

1 **Q. What are the total water sales for the Kent County Water Authority during each of**
2 **the last five fiscal years (excluding Warwick)?**

3 A. Last five fiscal year water sales in cubic feet are as follows:

- 4
- 5 FY 11 – 342.6 million cubic feet
- 6 FY 12 – 332.0 million cubic feet
- 7 FY 13 – 328.6 million cubic feet
- 8 FY 14 – 317.3 million cubic feet
- 9 FY 15 – 322.8 million cubic feet

10

11 **Q. Doesn't this show a clear downward trend in sales?**

12 A. It does when you look over a longer period of time. The long term trending is essential to
13 determining an established downward trend and estimating future demand. We do believe
14 our sales are stabilizing to our new “normal” operating range.

15

16 **Q. What is your understanding of this trend?**

17 A. It is somewhat unknown but I believe it relates to our demand management methods, loss
18 of large customers, wetter than normal years, generally less water use by our customers to
19 control cost, low flow plumbing devices and the continued stagnated economy in Rhode
20 Island. Wetter than normal years should be further explained as the timing of rainfall
21 during the summer outdoor demand, negating the need for watering the landscape.

22

23 **Q. What is the fiscal year of the Kent County Water Authority?**

24 A. July 1 to June 30.

25

26 **Q. What is the rate year of the Kent County Water Authority in this docket?**

27 A. Fiscal year 2017 (July 1, 2016 – June 30, 2017).

28

29

30

1 **Q. What is the test year for this docket?**

2 A. Fiscal year ended June 30, 2015.

3

4 **Q. What is the average number of customers for the Kent County Water Authority?**

5 A. The number of retail billable customers based on our records is 26,626 (adjusted for
6 compound meters) as of June 30, 2015.

7

8 **Q. Please explain the request in front of this Commission.**

9 A. The request encompasses a number of modifications, changes and two optional rate
10 proposed adjustments along with approvals of programming.

11 a) Known and measurable changes are requested.

12 b) Increase in personnel by three. Two for replacement transferred personnel to
13 treatment plant operations. One new additional for maintenance duties.

14 c) Infrastructure replacement program – remains at the previously approved
15 \$5,400,000 and not the plan approved \$7,000,000.

16 d) Approval of new capital improvement program along with cash capital funding.

17 e) Establishment of OPEB (other post employee benefits) trust fund account with
18 funding.

19 f) New replacement meter program 2” and less in size to comply with Division “20
20 year testing” and replace obsolete reading system.

21 g) Optional public hydrant rate charge elimination with customer assessment – if
22 accepted, revised tariff for hydrant installation.

23 h) Optional seasonal rate charge.

24 i) Demand surcharge rate proposal to balance fixed expenses with a fixed charge.

25 j) Salary increase proposed.

26 k) Tariff addition for lost water charge for brakes or ruptures of mains and services.

27 l) Tariff addition for hydrant installation at cost only if public hydrant charge is
28 eliminated.

29 m) Tariff revision meter testing charge increase to \$100 per occurrence.

30 n) Cash capital to remain as previously approved, \$100,000.

1 o) Operating revenue allowance to remain at previously approved 3% with 1½%
2 restricted and 1½% to unrestricted.
3

4 **Q. Please describe the Kent County Water Authority's system?**

5 A. Please see the attached system description in volume 2. It provides an in-depth review of
6 our system and its complexity. Kent County Water Authority system is not stagnant and
7 continually is changing. The description is based on the moment in time that it was
8 prepared.
9

10 **Q. Mr. Brown, are you proposing any tariff changes?**

11 A. Yes, besides rate changes an additional miscellaneous charge for lost water caused by
12 actions of others is being proposed.
13

14 **Q. Please review what is being proposed?**

15 A. Billable Lost Water: applicable to all lost water cause by ruptured mains, service pipes or
16 any and all ancillary appurtenances of the system by actions of others. Volume metered or
17 estimated by the Authority due to non-metered lost water.

18 Charge: Billed at the rate established for the 5/8" to 2" metered volume rate per 100 cubic
19 feet, metered or estimated.
20

21 **Q. What is the reason for this proposal?**

22 A. Strictly for clarity. A tariff description will codify the charge.
23

24 **Q. Mr. Brown, are you proposing any other tariff changes besides the one just
25 mentioned?**

26 A. Yes.
27

28 **Q. Please review what is being proposed.**

29 A. The KCWA is proposing two options for public fire hydrant billing. The first as it has
30 always been of course with new charges added due to this docket. A second, where the

1 public fire hydrant billing (cost) would be assigned to the customer service charge and the
2 separate public hydrant billing eliminated. If the Commission approves the alternate
3 proposed cost of service eliminating the separate public hydrant billing charges, we would
4 need to add a cost of hydrant installation charge tariff, as follows:

5 Hydrant: Installation applicable to any request by any fire department, district or
6 governing body for installation of a fire hydrant for public firefighting purposes
7 only. Location is to be determined and connected to the water infrastructure of
8 KCWA, where adequate pressure and volume exists, as determined by KCWA for
9 the firefighting purpose requested.

10 Charges: Billed at cost for all construction, installation, materials, engineering and
11 remediation services required either by outside construction contractors or KCWA
12 staff services. Construction services to be approved by KCWA in advance if
13 performed by a contractor engaged by the fire department, district or governing
14 body.

15
16 **Q. Why is the KCWA proposing the option to eliminate the public hydrant charge?**

17 **A.** State law currently allows this option, if a municipality owned system passes an ordinance
18 to eliminate the charge within its own borders. It does not affect KCWA but does possibly
19 open the door for that to occur with revised legislation. The second reason is quite clear, as
20 we have had difficulty in collecting from two fire districts in our system. Even though
21 judgements have been ordered in our favor the cost and time needed is unnecessary. Fire
22 protection is to the benefit of all customers of KCWA whether we charge the cost of
23 service or the taxing districts or municipalities collect. It is felt that the simple approach is
24 more cost effective to collect directly vs. waiting for indirect collection.

25
26 **Q. Is the KCWA recommending one of the options?**

27 **A.** Yes, the direct collection from the customer charge vs. separate public hydrant charge is
28 recommended.

- 1 **Q. Mr. Brown, are there any other tariff changes being proposed at this time?**
- 2 A. Yes.
- 3
- 4 **Q. What change in a tariff are you proposing?**
- 5 A. Based on the cost of meter testing we are recommending it be increased from \$50.00 per
- 6 test to \$100.00 per test.
- 7
- 8 **Q. How did you calculate that needed increase?**
- 9 A. The time it takes to remove the meter, transport to our facilities, test the meter and reinstall
- 10 the meter. We estimate it will take an average of an hour to remove the meter and transport
- 11 to our facilities, one hour for testing and half hour to reinstall the meter. Using the average
- 12 salary rate plus benefits of \$35/hr and truck expenses of \$15 for both trips, costs \$102.50
- 13 for the service. We rounded it to \$100.00 per test.
- 14
- 15 **Q. Mr. Brown, are there other tariff changes being proposed at this time?**
- 16 A. No.
- 17
- 18 **Q. Are you including a revised Capital Improvement Program in this filing?**
- 19 A. Yes.
- 20
- 21 **Q. What does this program entail?**
- 22 A. It is comprehensive in nature and spans a 5 year period. Due to its complexity we will offer
- 23 a witness from C&E Engineering to testify on its makeup, cost and development. The
- 24 revised plan can be found in Volume II.
- 25
- 26 **Q. What is the desired outcome of the Authority by the Commission?**
- 27 A. Approval of the program by the Commission so the remaining existing bond funds can be
- 28 utilized and provide an additional funding stream on a going forward basis. Mr.
- 29 Woodcocks Testimony will review that in detail.
- 30
- 31

- 1 **Q. Will the program be completed in 5 years as proposed?**
- 2 A. No. the funding stream proposed will require additional years to complete all proposed
- 3 improvements.
- 4
- 5 **Q. Approximately how long will it take to complete?**
- 6 A. At a minimum 10 years. Even though it is slower than proposed I believe that an approach
- 7 to balance reduced funding proposed, reduced system demands and IFR Program
- 8 Improvements may put us in a position to reevaluate Capital needs prior to the full
- 9 implementation as stated above. I recommend this approach as it will protect the interests
- 10 of all parties that benefit from the system improvements.
- 11
- 12 **Q. Of the programs proposed, what are the initial programs Authority will consider if**
- 13 **funding is made available?**
- 14 A. Projects #1-4 as outlined and described in the program and the feasibility study for project
- 15 #5.
- 16
- 17 **Q. Have you received funding for any of these from the Commission?**
- 18 A. Yes, we currently have approximately \$1,000,000 left in the bond fund for project 1 with
- 19 the balance provided by the Commissions release of restricted funds for capital use.
- 20 Project 2 will also utilize the funds recently provided by the Commission in the release of
- 21 the restricted funds. The remaining funds will be collected if approved by the docket.
- 22
- 23 **Q. So, full funding is necessary by the docket to complete the projects just referred to?**
- 24 A. Yes
- 25
- 26 **Q. Project CIP #5 has been proposed before and was withdrawn, please explain.**
- 27 A. Yes, in a previous Capital Improvement Program it was a project that Kent County Water
- 28 Authority sought funding for in a rate filing. In settlement discussions on the rate filing it
- 29 was dropped from consideration no implementation and funding occurred.
- 30
- 31

1 **Q. Why is it now included in this filing?**

2 A. We have reached our limits at our existing facility. We believe that improvement in
3 facilities will enhance our operation and provide for a major technological updating of all
4 of our operations. Security, customer services, inventory, storage areas, employee work
5 areas, equipment storage and parking are all needed. At a minimum we would look for
6 future growth, efficiency in all areas, ease of maintenance and central location within our
7 district will be stressed. Central location will allow for emergency servicing and transport
8 at the shortest time frame. A segmented build out approach would be looked at to facilitate
9 expansion in the future stressing necessary function first. It is deplorable not having ease of
10 access for the customers that is safe and with sufficient parking arrangements. We
11 encourage contact with our customers both via visits to our facilities and also via
12 communication by telephone and internet. That has been inadequate at our current
13 facilities, dangerous and must be improved.

14

15 **Q. Are you proposing any IFR funding request?**

16 A. Yes, the request is the same as our previous filing that included a revised IFR Program with
17 the restricted amount of \$5.4 million.

18

19 **Q. Are you current with the restricted IFR funding previously approved by the
20 Commission?**

21 A. Yes.

22

23 **Q. Why haven't you requested the full \$7,000,000 per year of program needs?**

24 A. Previously we had, but the Commission did not agree with our proposal. At this time the
25 needs of a meter program and its effect on the rate outweighs the added need in the IFR
26 program. Therefore, we have not requested the additional funding.

27

28 **Q. Please describe your current IFR Program.**

29 A. The program as approved contains a review and inclusion of all KCWA owned
30 infrastructure. Each year we review the needs of our infrastructure to determine, based on
31 multiple factors, age, condition, number of ruptures, size, public safety and water quality

1 conditions, to prepare a program for design and construction. There is no shortage to what
2 can and should be replaced. The program as approved by the Department of Health is
3 attached in Volume II.
4

5 **Q. How do you develop a program for replacement?**

6 **A.** As stated above we look at all infrastructure and evaluate the troubled, undersized, poor
7 gradients and aged infrastructure to include in a design for construction replacement.
8 We have been targeting areas of more than normal ruptures of mains, public safety
9 concerns and older undersized mains for programming. We also like to group an area to
10 keep the construction localized as it enhances cost effectiveness and completes areas at one
11 time. Another aspect is to design multiple year programs at one time taking advantage of
12 design volume at a better design fee. There certainly is no mystery to this but we have seen
13 major improvements to our programing effort and will continue this pattern.
14

15 **Q. The program as envisioned by the approved plan, when will it be completed?**

16 **A.** The plan in accordance with state law has no end and will “roll” back on itself as that
17 infrastructure ages. As such the funding we have requested and been granted previously
18 will continue indefinitely.
19

20 **Q. What are you requesting of the Commission?**

21 **A.** Acceptance of our infrastructure program and consideration of the continued funding of the
22 program at the requested docket amount.
23

24 **Q. In the past the Commission has been concerned with not expanding the funding
25 completely before requesting additional funds, is this the case?**

26 **A.** No and it isn't. The nature of a restricted account with monthly deposits and construction
27 that lags due to winter shutdown and final paving, sometimes a construction season apart,
28 does appear to exhibit that. But we always want the cost of construction in the restricted
29 account prior to signing or at least a major portion of the amount. In the past where we
30 have not had sufficient funds for the IFR Restricted it was shorted until a rate filing to
31 explain and resolve. We continually review committed funds versus contract amounts to

1 plan the IFR programs yearly. This assures as that a balance between expenditures and
2 allocated construction funds can be met.

3
4 **Q. Please provide an accounting of the program currently under construction or in the**
5 **bidding phase for the IFR Program?**

6 **A.** See Volume II for that break down Please note it is as of the date of preparation.
7

8 **Q. Are you proposing a system wide meter replacement program?**

9 **A.** Yes we are.
10

11 **Q. Why now are you proposing the replacement program?**

12 **A.** Based on the last change out program and the Division Rules section V, D, 1 we are at a
13 point of replacement or testing. Testing is out of the question based on the time needed per
14 meter and the sheer volume of meters that need to be tested. When completed we will still
15 have 20 year old meters with obsolete reading technology. Our current estimate is two and
16 one half hours of labor to remove a meter, install a spacer, bring the meter to the shop for
17 testing and return to reinstall the meter. The ARB 5 technology meters proposed for
18 replacement are hard wired versus the current radio read technology. The current ARB 5
19 reading devices are no longer manufactured and are non-supported in maintenance
20 including the reading devices.
21

22 **Q. Is it your contention that a replacement meter is more cost effective and sound**
23 **practice for KCWA to pursue?**

24 **A.** Yes, we would meet the regulations by implementing a replacement program and upgrade
25 to current reading technology as well as billing software. The new technology also provides
26 benefits of data logging memory and efficient back flow and leak detection features. We
27 also must deal with obsolescence of our current ready equipment and future support for
28 technology and servicing.
29
30
31

1 **Q. Who owns the meter?**

2 A. The property owner. They purchase them and are installed by KCWA. If the meter is
3 damaged because of the homeowners neglect, the owner must pay for a replacement.

4

5 **Q. How do you propose to fund this program?**

6 A. A charge in rates to the metered customers that would have their meters (2" or less)
7 replaced. Large meters that would not be changed out by KCWA would not be assessed the
8 charge.

9

10 **Q. Please explain, how you would implement this?**

11 A. The additional charge would be collected in a restricted account solely for the meter change
12 out program and be implemented over a three year period. Once the program is completed
13 a rate case or petition filing to adjust the rate would be filed. Any excess funds not needed
14 for the program would be considered as an adjustment in rates along with the cessation of
15 collection. The replacement cost estimate is \$300/per meter, that includes purchase and
16 installation. The purchase and installation cost will be a public solicitation. The actual
17 program needs will be known after selection and the duration of the collections established.
18 Reports to the Commission will be prepared and forwarded establishing the actual
19 collections needed in advance and when the rate would be adjusted downward after
20 completion.

21

22 **Q. If the property owner owns the meter how will they take possession of the new meter?**

23 A. As before in a previous rate filing and approved replacement program, we would have the
24 property owner confirm the final reading of the old meter with the installation of the new
25 meter by signature, transfer the old meter to us and provide them the new meter in
26 exchange. It worked very well the last change out program.

27

28 **Q. What happens to the old meters?**

29 A. The meters will be disassembled and the material sorted for scrap. The scrap revenue will
30 be returned to the meter account to offset the replacement program cost.

31

1 **Q. Are you proposing personnel changes in this rate filing?**

2 A. Yes.

3

4 **Q. Please describe what changes are being proposed?**

5 A. We are proposing to replace the two employees that were transferred to the Treatment Plant
6 as operators. These were positions that needed to be filled but were not allocated in our last
7 rate filing. We are proposing an additional employee for system maintenance duties to
8 assist our current mechanic.

9

10 **Q. You are requesting a total of three new positions?**

11 A. Yes.

12

13 **Q. Please detail the needs in each of the proposed positions you have described?**

14 A. The replacement for the operators transferred to the treatment facility are necessary to fill
15 the two vacant positions in the field crew. The field crew is responsible for operation and
16 maintenance of the distribution system. As such the replacement positions are necessary to
17 carry out the duties assigned to the previous two employees prior to their transfer.

18

19 A new maintenance position with mechanical skills is needed due to our expanded
20 mechanical and maintenance duties. At present we have one trained employee fulltime
21 performing all duties routine and emergency for our entire system. Additional help is
22 needed for daily maintenance and redundancy.

23

24 We are not asking additional staff at this time for a 2nd shift at the treatment facilities but
25 will in the future as the plant will be ramped up to a twenty-four hour production in the
26 demand season.

27

28 **Q. Are you requesting a multiple year rate increase in this filing?**

29 A. Yes and Mr. Woodcocks' testimony will elaborate on several step increases.

30

31

- 1 **Q. Why at this time are you requesting the multiple step increases?**
- 2 **A.** We believe it will balance the revenue required with the program needs. It will be
3 beneficial to the customers and reduce cost of needed rate requests.
4
- 5 **Q. Are you proposing seasonal rates in this filing?**
- 6 **A.** Yes and we have previously done so in our last rate filing.
7
- 8 **Q. Why are you proposing seasonal rate now when your demand for water sales has been**
9 **decreasing?**
- 10 **A.** Good demand management requires it and the Water Efficiency Act proposes it. It is
11 however the determination of the Commission, a regulator, if it is part of the rate order in
12 this case in particular when sales have dropped and remain so.
13
- 14 **Q. What do you mean by that and how does it affect KCWA?**
- 15 **A.** Reducing demand seasonally is beneficial to supply management but will by definition
16 reduce revenue and therefore increase the rate to augment the lost revenue by reduced
17 sales. It has always been considered that this will reduce needed expansion improvements
18 and the associated cost. Based on our current demands I do not believe it will have any
19 effect on our need for expansion. As such KCWA does not favor a seasonal rate be
20 implemented, but if the Commission does then we would recommend option "A".
21
- 22 **Q. Are you proposing a new demand surcharge fixed rate in this docket?**
- 23 **A.** Yes.
24
- 25 **Q. Why are you proposing a demand surcharge?**
- 26 **A.** To provide more revenue (fixed) to match the fixed expenses that we have.
27
- 28 **Q. How will this be implemented?**
- 29 **A.** Very similar to the customer service charge in that it will be based on meter size and be a
30 fixed rate per meter size.
31

- 1 **Q. What do you seek to generate in revenue from this charge?**
- 2 A. We set it to generate \$500,000 in revenue.
- 3
- 4 **Q. Will this be indicated as a separate charge on the tariff and billing to customers?**
- 5 A. We have listed it separately in the proposed tariff attached to this docket. In applying it to
- 6 the billing we are requesting the Commission to allow it to be included or added to the
- 7 customer service charge for billing. This will be easier to apply for billing since it will be
- 8 based on meter size, as is the customer service charge. If accepted and approved by the
- 9 Commission, we will provide the combined in a tariff with the compliance filing for
- 10 approval.
- 11
- 12 **Q. How is the KCWA dealing with the accounting standards that have required the**
- 13 **identification and reporting of other post employee benefits exposure (OPEB)?**
- 14 A. We have adopted the standard and recording/reporting requirements and annually have a
- 15 professional prepare and report on our exposure. The exposure will continue to build unless
- 16 we establish a trust account and make deposits annually. The current standard requires it
- 17 added as a line item to our financial statements, which it now is. We currently budget on a
- 18 pay as you go requirement, but no deposits in a trust/restricted account for the future
- 19 obligation.
- 20
- 21 **Q. Are you proposing to establish a trust account to offset this obligation?**
- 22 A. Yes – we would like to begin an account to offset the obligation each year by building it
- 23 slowly over time. Mr. Woodcock’s testimony will elaborate on our proposal. It is important
- 24 to emphasize the gradual process that in time will strengthen through the trust account and
- 25 offset the yearly effect of the obligation.
- 26
- 27 **Q. Previously you have been required to prepare plans and studies to meet state**
- 28 **regulated functions. Are you requesting funding for any of those?**
- 29 A. Yes, as in previous dockets we would like a small set aside to accomplish the updates and
- 30 revision to studies required.
- 31

1 **Q. Briefly what studies are you contemplating?**

- 2 A. 1. Water Supply System Management Plan
3 2. Capital Improvement Program
4 3. Infrastructure Renewal & Replacement Plan
5 4. Revised Vulnerability Assessment
6 5. Revised Conservation Program (Proposed)

7
8 **Q. What is the annual proposed cost?**

9 A. \$40,000/year annualized, Mr. Woodcocks' testimony will elaborate on the proposal.

10

11 **Q. Are you proposing any wage or salary increases in this filing?**

12 A. Yes – our estimate is 2% on base wages – Mr. Woodcocks' testimony will elaborate on
13 that.

14

15 **Q. Are you current with the restricted operating revenue allowance?**

16 A. Yes, the operating revenue allowance restricted is up to date and fully funded. Mr.
17 Woodcocks' testimony will review what is held in the restricted account.

18

19 **Q. You recently have refinanced a bond issue and paid off a bond issue, is that correct?**

20 A. Yes.

21

22 **Q. What has been done with the debt service savings to those two issues?**

23 A. The excess debt service savings have been restricted in trust accounts. Mr. Woodcocks'
24 testimony will discuss those accounts, savings and balances. The Commission has recently
25 released those funds to a capital account. We ask that it be continued.

26

27 **Q. Does this conclude your testimony?**

28 A. Yes

**PRE-FILED TESTIMONY
OF
CHRISTOPHER PN WOODCOCK**

RHODE ISLAND PUBLIC UTILITIES COMMISSION

**DOCKET NO.
KENT COUNTY WATER AUTHORITY**

**PREFILED TESTIMONY OF
CHRISTOPHER P.N. WOODCOCK
ON BEHALF OF
KENT COUNTY WATER AUTHORITY**

Woodcock & Associates, Inc.
18 Increase Ward Drive
Northborough MA 01532

1
2
3
**PREFILED TESTIMONY OF
CHRISTOPHER P.N. WOODCOCK**

4 **Q: Please state your name and business address?**

5 A: My name is Christopher P.N. Woodcock and my business address is 18 Increase Ward
6 Drive, Northborough, Massachusetts 01532.

7

8 **Q: By whom are you employed and in what capacity?**

9 A: I am the President of Woodcock & Associates, Inc. a consulting firm specializing in water
10 and wastewater rate and financial studies.

11

12 **Prior Experience**

13 **Q: Please describe your qualifications and experience.**

14 A: I have undergraduate degrees in Economics and in Civil Engineering from Tufts University in
15 Medford, Massachusetts. After graduating in 1974, I was employed by the environmental
16 consulting firm of Camp, Dresser, and McKee Inc. (now CDM-Smith). For approximately 18
17 months I worked in the firm's environmental engineering group performing such tasks as
18 designing water mains, sewer collection and interception systems, pumping facilities and
19 portions of a wastewater treatment facility. From approximately January 1976, I worked in
20 the firm's management and financial consulting services group, gaining increasing responsi-
21 bility. At the time of my resignation, I was a corporate Vice President and appointed the
22 leader of the group overseeing rate and financial studies. In my career, I have worked on s
23 500 water and wastewater rate and financial studies, primarily in the United States, but
24 also for government agencies overseas. I also have worked on a number of engineering
25 and financial feasibility studies in support of revenue bond issues, I have drafted and re-

1 viewed revenue bond indentures, and I worked on several valuation studies, capital im-
2 provement financing analyses, and management audits of public works agencies. In addi-
3 tion to my professional experience I have held elected and appointed positions on municipi-
4 pal boards overseeing public works functions.

5

6 **Q: Have you previously testified before state regulatory commissions or courts on rate re-**
7 **lated matters?**

8 A: Yes, in addition to testimony in support of water rates submitted to the Rhode Island Public
9 Utilities Commission, I have provided testimony on rate related matters before utility com-
10 missions in Massachusetts, Maine, Connecticut, New York, New Hampshire, Maryland,
11 Texas, and Alberta, Canada. I have also been retained as an expert witness on utility rate
12 related matters in proceedings in state courts in Massachusetts, Michigan, California, Ar-
13 kansas, Florida, New Jersey, Maryland, Ohio, Virginia, and Pennsylvania, as well as the Fed-
14 eral Court in Michigan. I have been selected to several arbitration panels related to dis-
15 putes over water rates and charges, I have provided testimony on rate related matters to
16 the Michigan and Massachusetts legislatures, and I have provided testimony at administra-
17 tive hearings on a number of occasions.

18

19 **Q: Do you belong to any professional organizations or committees?**

20 A: Yes, I am a member of the Water Environment Federation, the Rhode Island Water Works
21 Association, the Massachusetts Water Works Association, the New England Water Works
22 Association, and the American Water Works Association. For the Water Environment Fed-
23 eration, I was a member of the committee that prepared the manual on Wastewater Rates
24 and Financing. I am past chairman and a current member of the New England Water
25 Works Association's Financial Management Committee. In my capacity as Past President of
26 the New England Water Works Association I also sat on the Board of Directors as well as
27 chairing and sitting on a number of other administrative committees. For the American

1 Water Works Association, I am past chairman of the Financial Management Committee and
2 the Rates and Charges Committee that has prepared the manuals on Revenue Require-
3 ments, Water Rates, Alternative Rate Structures, and Water Rates and Related Charges. I
4 have been reappointed to and am currently the longest standing member of the AWWA
5 Rates & Charges Committee. I am currently leading the final preparation of the 7th Edition
6 of AWWA's M1 Manual on Water Rates.

7

8 **Q: Are you the same Christopher Woodcock that has prefiled testimony on behalf of the**
9 **Kent County Water Authority in other rate filings?**

10 A: Yes, I am.

11

12 **Summary**

13 **Q: What is the purpose of your testimony in this docket?**

14 A: My testimony presents a summary of the test year and rate year expenses and revenues,
15 the allocation of costs to various cost components, the distribution of those costs to cus-
16 tomer classes, and the development of new water rates and charges for the Authority. In
17 addition, the Authority has included several alternatives for the Commission to consider:
18 (a) seasonal rate proposals, and (b) a revision to how public fire protection costs might be
19 recovered.

20

21 **Q: What are the test year and rate years proposed in this docket?**

22 A: The test year is the Authority's fiscal year that ended June 30, 2015. The proposed rate
23 year is Fiscal Year 2017 (July 1, 2016 – June 30, 2017). In addition, we have proposed sev-
24 eral step increases for FY 2018 and FY 2019.

25

1 **Q: Can you summarize your findings?**

2 A: Although the Authority filed for a pass through increase in 2013 (PUC Docket 4417), the Au-
3 thority has not filed a general rate increase since January 27, 2010 (PUC Docket 4142). The
4 Authority is proposing a meter replacement program that includes \$2 million in that rate
5 year. Because the Authority's debt service costs have dropped from the amount author-
6 ized in Docket 4142 by \$1.75 million, KCWA is requesting that these savings be applied to
7 the capital improvement program discussed in Mr. Brown and Mr. Nicholson's testimony.
8 The proposed change from the test year capital or fixed costs accounts for more than 90%
9 of the requested increase. In total, the Authority is requesting an increase in revenues of
10 some \$3.3 million.

11

12 The Authority is also proposing the implementation of a new demand surcharge that would
13 be a fixed charge based on meter size. The intent of this new charge is to provide for more
14 fixed revenues to help better match the large percentage of fixed expenses. Because this is
15 a new charge, we are only seeking to fund \$500,000 of the Authority's debt service from
16 this charge.

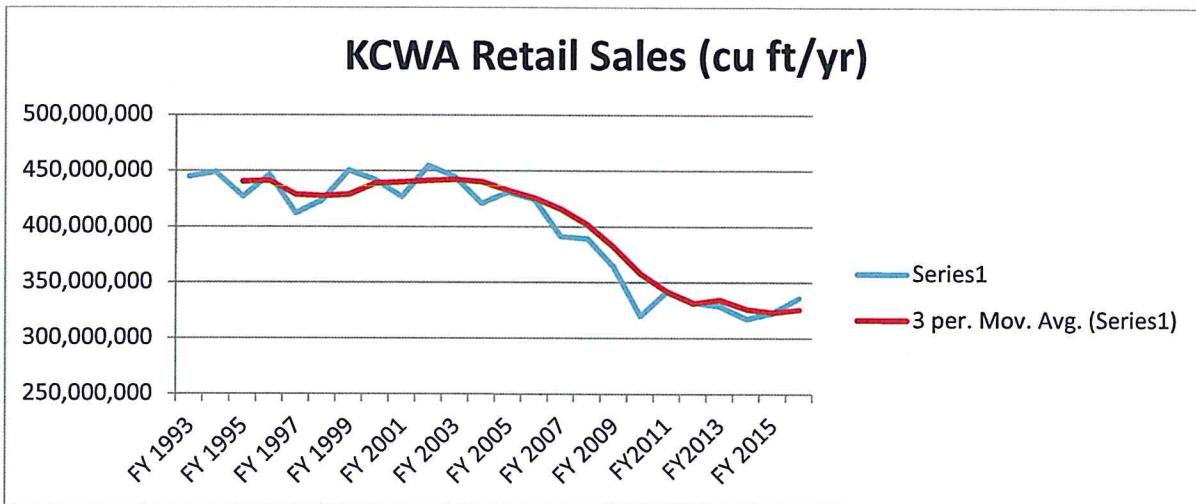
17

18 **Q: Over the past decade, Rhode Island's water utilities have shown a general trend towards**
19 **reduced water sales. Has this been true for the Authority as well?**

20 A: Yes it has. A comparison of the water sales in Docket 4142 (rate year ending 2/28/2011)
21 and those for the proposed rate year in this docket (ending 6/30/17) are as follows:

	<u>Doc. 4142</u>	<u>Proposed</u>
Small (5/8-2" meters)	2,962,736	2,939,584
Medium (3&4" meters)	128,324	66,721
Large (6" & up meters)	<u>252,345</u>	<u>242,389</u>
Total Retail	3,343,404	3,248,694

22 As shown on the following graph, the downward trend may be leveling off somewhat.



1

2 It's noteworthy that 5 of the Authority's lowest sales months have occurred in the 24
 3 months between February 2014 and this filing. The reduction in sales has meant that the
 4 Authority has been unable to collect the full amount of revenues allowed.

5

6 **Q: Can you summarize the causes of the requested increase?**

7 **A:** The following table presents a summary of the revenues and expenses as approved in the
 8 Authority's last rate increases (Docket 4142, 4067 & 4417), for the test year, and for the
 9 rate year. As this table shows, the test year revenues are some \$200,000 less than those
 10 authorized in Docket 4142 as adjusted by pass through increases in Docket 4067 and 4417.
 11 In large part this is due to the reduction in retail sales discussed earlier.

12

1
2

Comparison of Docket 4142, Test Year and Rate Year Expenses

	<u>Doc. 4142/4417</u>	<u>Test Year</u>	<u>Rate Year</u>
Revenues			
Service Charges	\$1,256,460	\$1,268,303	\$1,892,292
Demand Surcharge		\$0	\$499,168
Metered Rates *	\$16,811,373	\$16,668,176	\$17,671,573
Fire Protection	\$1,494,667	\$1,469,032	\$2,638,812
Miscellaneous	<u>\$354,259</u>	<u>\$323,122</u>	<u>\$323,122</u>
<i>Total Revenue</i>	\$19,916,759	\$19,728,633	\$23,024,967
Expenses			
<u>O&M</u>			
Supply *	\$4,592,462	\$4,999,638	\$4,349,431
Pumping	\$778,979	\$812,335	\$1,025,140
Treatment	\$340,376	\$310,572	\$445,916
T&D	\$1,239,798	\$1,164,782	\$1,304,664
Customer	\$304,350	\$470,456	\$493,265
Admin	<u>\$2,278,459</u>	<u>\$2,612,530</u>	<u>\$2,933,490</u>
Total O&M	\$9,534,424	\$10,370,313	\$10,551,907
<u>Fixed Charges</u>			
Debt Service	\$3,932,319	\$2,179,500	\$2,178,500
Reserves and Coverage	\$393,620	\$77,607	\$159,375
Renewal & Replacement	\$100,000	\$100,000	\$100,000
Infrastructure Replacement	\$5,400,000	\$5,400,000	\$5,400,000
Meter Replacement		\$0	\$2,000,000
CIP		\$0	\$1,753,819
Payroll Taxes	\$150,775	\$154,417	\$175,621
PILOT	<u>\$23,123</u>	<u>\$23,123</u>	<u>\$23,123</u>
Total Fixed	\$9,999,837	\$7,934,647	\$11,790,438
<u>Operating Revenue</u>	<u>\$583,313</u>	<u>\$583,313</u>	<u>\$681,007</u>
<i>Total Expenses</i>	\$20,117,574	\$18,888,273	\$23,023,351

* Adjusted for pass through expenses approved by the Commission.

3
4
5
6

The rate year in Docket 4142 ended February 2011. The proposed rate year for this docket ends June 30, 2017. In this nearly 6½ year period the Authority's operating costs are projected to increase by about 11%; that is nearly a 1.5% increase per year (compounded).

1 Nationally, water utility expenses have been increasing at nearly twice the rate of inflation.
2 I believe the Authority's commitment to controlling its costs is evident in this comparison.

3
4 The comparison of expenses also shows that the Authority has been able to reduce its an-
5 nual debt service at a time when most utilities are seeing increases in debt service. The
6 Kent County Water Authority must replace and upgrade its infrastructure however. As the
7 comparison demonstrates, we are seeking a significant increase for meter replacements
8 and capital projects.

9
10 As outlined in Mr. Nicholson's testimony, the Authority has significant infrastructure and
11 capital improvement needs that are proposed to be spread over time. Because the capital
12 expenses will be ongoing, the Authority has chosen to finance its capital program through
13 rate revenues. This approach will save the Authority's rate payers the cost of financing
14 bond issues as well as the interest cost associated with new bonds. I believe this pay-as-
15 you-go approach is appropriate for the Authority when one considers the long term capital
16 program that will require capital funds for the foreseeable future.

17

18 **Description of Exhibits**

19 **Q: Have you prepared any exhibits to go along with your testimony?**

20 A: Yes I have. The exhibits attached to my testimony have the same numbering as earlier fil-
21 ings. I have included:

22 Schedule 1: This schedule presents the test year (FY 2015) along with the adjust-
23 ments that were used to derive the rate year (FY 2017) revenue requirements.

24 Attached are several supporting tables that demonstrate the needed increase:

25 Schedule 1A. This schedule presents the detail of the test year miscel-
26 laneous revenues as well as the annual revenues from current rates
27 and charges at the rate year usage levels.

1 Schedule 1B. This presents the test year labor costs and the adjust-
2 ments to the rate year.

3 Schedule 1C. This presents the derivation of the adjustments to the
4 test year costs that were used to derive the rate year revenue require-
5 ments. As discussed above, it also shows the production from the Au-
6 thority's own sources. This schedule also includes a graphic represen-
7 tation of the water purchases and production over the past two dec-
8 ades.

9 Schedule 1D This schedule presents the details of other adjustments to
10 many of the other expenses we are proposing in this docket. This
11 schedule includes five pages of details and explanations for many of
12 the adjustments.

13 Schedule 1E This schedule presents the historic regulatory expenses of
14 the Authority. As the Commission is aware, the Authority incurs regu-
15 latory expenses for its own rate filings as well as for intervention in
16 dockets filed by Providence Water and subsequent pass through dock-
17 ets. Accordingly, the cost of any particular rate filing is not particularly
18 relevant to the Authority's overall annual regulatory expense, and the
19 overall cost of *all* dockets the Authority participates in should to be
20 considered. For this docket we are proposing to amortize the esti-
21 mated cost of this filing plus the estimated cost of other rate cases we
22 participate in over a three-year period. The annual cost of this is
23 \$60,000. In addition, we have included the cost of the Division's an-
24 nual assessment.

25 Schedule 2 This schedule presents the units of service including the number of
26 meters by size and billing frequency, the number of billings, the number of pri-
27 vate and public fire services by size of connection, and water sales. We have
28 made adjustments to the test year sales by analyzing the trend in monthly retail

1 purchases and projecting the rate year sales based on a running three-year aver-
2 age of the prior months. Based on this analysis, the projected rate year sales are
3 projected to increase about 0.5% from the test year. For meters and fire ser-
4 vices, we analyzed the trend in numbers from 2009 to the test year and used
5 these amounts to project the rate year numbers of meters and fire services.
6 Schedule 3 presents the allocation of the rate year costs to various cost of ser-
7 vice components. These are the same components and format used in past full
8 rate filings. Schedule 3 also has several supporting schedules.

9 Schedule 3A This schedule presents the allocation of the rate year labor
10 costs. These are a part of the overall operating costs, but have been
11 allocated separately in order to better assign labor related costs such
12 as pensions and benefits.

13 Schedule 3B contains an explanation for each of the symbols or alloca-
14 tors that were used in the prior schedules.

15 Schedule 4 summarizes the proposed fire protection charges. The supporting
16 schedules are as follows:

17 Schedule 4A presents the allocation of total fire service expenses (from
18 Schedule 3) to Public Fire Service and to Private Fire Service.

19 Schedule 4B shows the calculation of the public and private fire protec-
20 tion charges.

21 Schedule 5 summarizes the proposed service charges. There are also five sup-
22 porting schedules,

23 Schedule 5A shows the allocation of the total customer service expenses be-
24 tween costs related to meters and services and costs related to billing, meter
25 reading, and collection.

26 Schedule 5B shows the allocation of the customer service labor costs between
27 meters and services and billing.

1 Schedule 5C presents the basis for the allocation symbols used in schedules 5A
2 and 5B.

3 Schedule 5D shows the derivation of the meter equivalents that are used to de-
4 rive the meters and services portion of the service charge. These are the same
5 meter equivalents that we have presented to the Commission a number of years
6 ago and have since been used by most water utilities in RI. This schedule also
7 shows a new meter demand factor. This new factor was developed to add a new
8 component to the service charges that I will discuss momentarily.

9 Schedule 5E shows the calculation of the two components of the proposed ser-
10 vice charge we have included in the past plus a new component we have termed
11 the Demand Surcharge.

12 Schedule 6.0 presents the allocation of general water costs (metered rates). Fol-
13 lowing AWWA's base-extra capacity method and procedures from prior KCWA
14 dockets, the costs are first allocated to base (average use), maximum day and
15 peak hour cost components. This schedule is supported by two additional sched-
16 ules

17 Schedule 6A presents the allocation of general water labor costs to base (aver-
18 age use), maximum day and peak hour cost components.

19 Schedule 6B presents the basis for the allocation symbols used in schedules 6
20 and 6A.

21 Schedule 7 presents the allocation of the base, maximum day and peak hour
22 costs from Schedule 6 to the Authority's three customer classes. As the Commis-
23 sion may recall, the Authority was the first regulated water utility in Rhode Island
24 to establish rates for different customer classes based on different demand pat-
25 terns of the classes. Rather than using the more traditional residential, commer-
26 cial, industrial, and municipal classes, the Kent County Water Authority devel-
27 oped classes based on meter size. We believe this is a far better distinction of

1 the different demands and patterns than the traditional classes. It was devel-
2 oped after intervention by a large water user and has since been adopted by
3 other water utilities in Rhode Island.

4 Schedule 8 presents the calculation of the metered water rates for the various
5 classes (meter sizes).

6 Schedule 9 presents a summary of the current rates and the rates derived from
7 the cost of service study, including the dollar and percentage change to each.

8 Schedule 10 presents the impact of the proposed rates and charges on various
9 types of customers.

10 Schedule 11 contains the proof of revenues, showing the annual revenues under
11 the existing and proposed rates at the rate year usage levels. Because the rates
12 are rounded to the nearest penny, the proposed rates provide slightly different
13 total revenues from those required.

14 Schedule 12 is a summary of the test year and rate year revenues and expenses.
15 The test year revenues are those derived from Schedule 11; that is the revenues
16 at the current rates with the rate year usages.

17 Schedule 13 presents the alternative seasonal rates. As discussed later, this is an
18 alternative that the KCWA offers for consideration by the Commission to help
19 achieve wiser use of water by the Authority's rate payers. There are two alterna-
20 tives that will also be explained later in my testimony.

21 Schedule 14 presents an alternative means to recover public fire protection
22 charges.

23 Schedule 15 shows the Authority's proposed step increases for FY 2018 and FY
24 2019.

25

1 **Adjustments to Test Year Expenses**

2 **Q: Returning to Schedule 1C, please describe how you determined the rate year purchased**
3 **water costs.**

4 A: Aside from the IFR expenses, this is the Authority's single largest expense. The Authority is
5 in the process of bringing several of its own wells back on line or increasing their use to
6 help reduce purchases of Providence Water.

7

8 The Authority's East Greenwich well has been off-line for several years. It is expected to be
9 back on-line in November 2016. The Mishnock well has been running at reduced capacity;
10 it is expected to have increased use in the rate year. For the rate year we have assumed
11 these two supplies will be back and that KCWA can reduce its purchases from Providence
12 Water. To derive the total purchases from Providence in the rate year, we have adjusted
13 the test year Providence Water purchases based on an analysis of monthly sales and the
14 three-year historic average use.

15

16 As shown on Sch. 1C, the Authority's purchases from Providence consist of the direct pur-
17 chases from Providence Water plus the purchases of Providence water from Warwick¹. Be-
18 cause the Authority also sells water to Warwick, these sales must be netted out of the total
19 Providence Water Purchases to derive the total cost of purchased water. I have used the
20 current wholesale rate for Providence Water approved in Docket 4406 – \$1,731.16 per mil-
21 lion gallons – to determine the rate year purchased water costs.

22

¹ The Authority and Warwick have an agreement to purchase and sell Providence water to each other at Providence Water's wholesale rate without any mark-ups.

1 **Q: Turning to Schedule 1D, please discuss the first item, the contribution to reserve ac-**
2 **counts.**

3 A: These are accounts that are held by the (bond) Trustee to help secure the Authority's reve-
4 nue bond issues. These reserves were established under the Authority's General Bond Res-
5 olution that was adopted July 6, 1994. I believe this bond resolution was the first revenue
6 bond resolution adopted by a regulated water utility in Rhode Island, and it formed the ba-
7 sis for those that have followed the ensuing two plus decades. Under the bond resolution,
8 various accounts are established including an operation and maintenance (O&M) reserve
9 and a renewal and replacement (R&R) reserve. Under the Authority's bond resolution, the
10 O&M reserve must be funded with an amount at least equal to 25% of the current operat-
11 ing budget (including taxes). As the Authority's operating costs increase, incremental de-
12 posits are typically required for these increases. While the resolution requires this reserve
13 to be funded based on the approved budget, we have historically asked the Commission for
14 sufficient funding based on the rate year request.

15

16 The R&R reserve must be funded at 1% of the value of the Authority's net utility plant in
17 service from its prior audit. Like the O&M reserve, this reserve is typically funded in Octo-
18 ber of each year after the audit becomes available. We have included additional funding
19 for this reserve based on an assumption of an additional \$11 million of new projects that
20 will be added to the plant in service through the rate year.

21

22 **Q: What have you included for various engineering studies?**

23 A: KCWA must undertake various engineering studies that are required. These include water
24 supply, infrastructure replacement, conservation and vulnerability studies. These studies
25 are required to be performed periodically (generally every 5 years), so I have normalized
26 the total cost over five years.

27

1 **Q: Please discuss the allowance for debt service that is being sought.**

2 A: Schedule 1D shows the Authority's single remaining outstanding bond issue payments. All
3 prior bonds have been retired with the 2012 series A bonds being the last remaining bond
4 issue. As noted on this schedule, the payments are due to the bondholders in January and
5 July. While the July payments are technically due the fiscal year following the January pay-
6 ments, the Authority is required to make monthly deposits to another trustee held account
7 so there are sufficient funds to make the payments when due. Accordingly, I have included
8 the amounts in this exhibit that the Authority will need to make within each fiscal year.

9

10 **Q: Is the Authority seeking any change to the amount previously allowed by the Commission
11 for Infrastructure Replacement (IFR)?**

12 A: No they are not. While the currently approved IFR plan includes \$7 million per year, the
13 Authority is only requesting the \$5.4 million that has been authorized in previous dockets
14 at this time.

15

16 **Q: Are you proposing any change to the Authority's Payment in Lieu of Tax (PILOT) pay-
17 ments?**

18 A: No we are not. The Authority is required to make payments to the towns and districts
19 based on the amount of tax that was being paid at the time KCWA acquired property. We
20 do not anticipate any additional acquisitions that would increase the tax payments. It
21 should be noted, that the consolidation of some fire districts has changed the agencies that
22 payments are made to from those we have shown in prior dockets.

23

24 **Q: Please discuss the adjustments you propose for insurance expenses.**

25 A: This item includes both property/liability insurance as well as worker's compensation insur-
26 ance payments. This portion of the schedule shows the payments from 2012 through the

1 rate year (2015). Based on the average annual changes over the 2012 through 2015
2 timeframe, I have projected the rate year amounts.

3

4 **Q: Page 3 of this schedule shows the adjustments you propose to employee benefits. Please**
5 **describe what you propose.**

6 A: This portion of the schedule shows the detail of payments for the past two years. I have
7 used these to derive a percentage of salary costs that reflect the cost of the benefit pay-
8 ments. First, I have removed the payments related to retirees (past employees that con-
9 tinue to receive benefits but whose salary costs are no longer incurred by the Authority).
10 This gives the benefit costs for current employees upon which a percentage of current sal-
11 ary can be determined. Based on the projected salary costs, I can calculate the employee
12 benefit costs for future years.

13

14 After deriving the cost for the current employees it is necessary to add two more compo-
15 nents. The first adjustment is to add back the benefit costs for retirees. I have projected
16 these to increase based on the inflation rate we are proposing in this docket. The second
17 addition involves the Authority's OPEB liability. This liability needs to be funded, and the
18 Authority is proposing to include \$80,000 per year for this liability.

19

20 **Q: Page 4 of Schedule 1D shows the test year and projected salary costs. Can you please dis-**
21 **cuss these?**

22 A: This presents the Authority's proposed salary costs and staffing plans. As noted on this
23 schedule and discussed by Mr. Brown, the Authority is seeking several staffing changes to
24 enhance their operations.

25

26 The base of this schedule also shows the rate year payroll tax cost (FICA) that is based on a
27 percentage of the salary costs.

1

2 **Q: The next portion of the schedule shows the inflation rate you are proposing in this**
3 **docket. Can you please discuss this?**

4 A: Yes. In recent water utility dockets before the Commission, the Division has proposed using
5 the Gross Domestic Product-Price Index (GDP-PI). The Division (Docket 4550) acknowl-
6 edges that both the CPI and GDP-PI are measures of inflation; however, the Division has re-
7 cently been urging the Commission to consider the GDP-PI because it considers “a wider
8 array of goods and services.”

9

10 As I testified in that same docket, I believe the Commission should not focus on “broader”
11 measures of inflation, but, if possible, should consider the impacts of inflation on the water
12 sector. Fortunately, the US Bureau of Labor Statistics includes the cost of “water and sew-
13 erage maintenance” in its calculations of the CPI-U. We do not have to be chained to the
14 much broader index that includes business capital expenses as a component. After all, we
15 are not looking to apply an inflation rate to capital expenses, but rather to some of KCWA’s
16 ongoing operating costs.

17

18 The CPI-U is a broadly used measure of inflation in the country. Pawtucket Water’s operat-
19 ing contracting for their new water treatment plant operations is tied to the CPI-U (not the
20 GDP-PI). I don’t believe the reasons offered as to why the GDP-PI should be substituted for
21 the more widely accepted CPI are at all convincing. Rather, the use of a broadly accepted
22 index with particular attention to the water sector makes more sense. It is interesting to
23 note that the Commission’s own Rules of Practice (Section 2.6 (c) (4)) only references the
24 Consumer Price Index for inflationary adjustments to the test year.

25

26 The following table shows the percentage change in the CPI-U and also shows the specific
27 category for water and sewerage maintenance. As this table shows, the index for water

1 and sewer has been growing at a much faster rate than the general index. By looking at
 2 the CPI-U we can see this distinction; a distinction that is all but hidden by the broader
 3 GDP-PI.

4
 5 For this docket I am suggesting that the Commission use an inflation rate of 3.08% per
 6 year. This recommended percentage is based on the lower general rate of inflation in re-
 7 cent years combined with the lower historical multiplier for water and sewerage. In short, I
 8 have picked the 2015 general CPI-U change of 0.70% (one of the lowest in recent years)
 9 multiplied an average of the water and sewer multiplier (rather than using the higher mul-
 10 tiplier we have seen in recent years. I would note that the inflation rate I am proposing
 11 (3.08%) is lower than the water and sewer rate in any recent years .

	<u>% Change: CPI-U</u>		
	<u>(1) All</u>	<u>(2) Water</u>	<u>Multiplier</u>
	<u>Items</u>	<u>& Sewer</u>	<u>(1 x 2)</u>
-			
2009	2.70%	6.90%	2.6
2010	1.50%	6.80%	4.5
2011	3.00%	5.30%	1.8
2012	1.70%	6.70%	3.9
2013	1.50%	3.80%	2.5
2014	0.60%	5.60%	9.3
2015	0.70%	4.30%	6.1
Average	1.67%	5.63%	4.4
Recent	0.70%		
times multiplier	4.4	=	3.08%

12
 13 In reviewing this critical item, I'd ask that the Commission keep in mind the citations I pro-
 14 vided in Docket 4550 that supported my position that water (and sewer) costs are clearly
 15 rising considerably faster than the overall rate of inflation.

16

1 **Q: Didn't the Division claim that the water and sewerage index you are proposing applies to**
2 **what people pay for water rather than the cost of operating water and sewerage sys-**
3 **tems?**

4 A: Yes they did; however, I don't believe these assertions are totally correct nor do I believe
5 they are particularly relevant. Essentially, the Division is suggesting that just because water
6 rates are rising much faster than inflation, it does not necessarily mean that the costs of
7 operations are also increasing much faster. There is no evidence to support this sugges-
8 tion. For decades the cost (and price) of water has been increasing for numerous reasons
9 including the cost of meeting new regulatory requirements and the high cost of testing for
10 new constituents (regulated and unregulated). While water rates may, in part, be increas-
11 ing due to declining water use, this does not explain a difference in the indices that shows
12 water costs increasing more than four times the cost of general inflation.

13

14 **Q: What amount is the Authority seeking for its Operating Revenue allowance?**

15 A: We are asking for the full 3% (half restricted, half unrestricted) that the Commission has
16 allowed municipal water utilities in recent years. We expect that the same conditions and
17 restrictions will remain.

18

19 **Q: Please discuss the capital item for meter replacement.**

20 A: The Authority is seeking approval to replace its water meters. The entire program is esti-
21 mated to cost \$6.6 million. We are looking to fund this from rates over three years, with
22 \$2 million in the rate year, \$2 million the next year, and the balance the third year.

23

24 **Q: Have you included an analysis of the activity in the various restricted accounts during the**
25 **rate year?**

26 A: Yes, the last item on Schedule 1D shows the activity in each of these accounts.

1

2 **Q: What does Schedule 1E show?**

3 A: This schedule shows detail on the Authority's regulatory and rate case expenses, and the
4 development of the rate year amounts we are seeking. Unlike most other regulated water
5 suppliers in Rhode Island, the Kent County Water Authority incurs the cost of its own rate
6 filings, plus it typically is the lead agency intervening in applications filed by Providence
7 Water. The Authority must assume all these costs unless other suppliers agree to assist.
8 Lastly, when Providence Water files for rate adjustments, KCWA also must file with the
9 Commission to pass through the proposed Providence Water increases. Accordingly,
10 KCWA has numerous rate filings before the Commission that its rate payers must fund.

11

12 **Q: Does Schedule 1E show anything else?**

13 A: As discussed earlier, the Authority is looking to increase the use of its own well supplies.
14 This schedule also presents the increased chemical and power costs that are associated
15 with increased use of their own wells.

16

17 **Water Use, Meters, Fire Services**

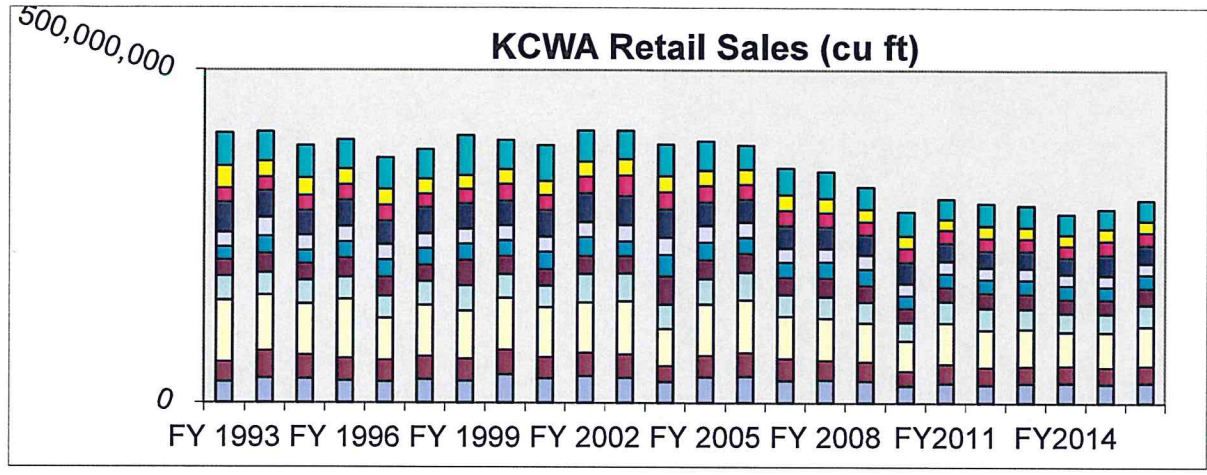
18 **Q: Please describe Schedule 2 in more detail.**

19 A: This schedule shows the test year and rate year water sales, numbers of different size me-
20 ters, and numbers of fire services.

21

22 The first item is water sales. We have shown the test year sales based on the Authority's
23 billing records. The chart below shows a history of sales by fiscal year through December
24 2015. Based on the average annual change for each month over the most recent five-year
25 period, we have projected the monthly sales through the rate year. For the rate year we

1 are projecting a small increase in sales (324.9 million gallons/year in FY 2017 vs. 322.8 mil-
 2 lion in FY 2015). This is about a 0.63% increase.



3
 4
 5 **Q: Have you adjusted the number of water meters by size?**

6 A: Yes. I looked at the change in the numbers of meters between October 2009 and the end
 7 of the test year (June 30, 2015). I have used the annual change in numbers of meters by
 8 size to project the rate year numbers of meters. Overall, we are projecting a net change of
 9 3 meters from 26,848 to 26,851.

10
 11 **Q: Have you also made adjustments to the number of fire services and hydrants?**

12 A: Yes. Based on the annual change in numbers of fire hydrants over the past six years, I am
 13 projecting 1.7 new hydrants per year or three new hydrants between the test year and rate
 14 year.

15
 16 In the case of private fire services and hydrants, these have also remained relatively stable
 17 over the past six years. I am projecting two fewer 6" connections, three fewer 8" connec-
 18 tions, and 6 fewer private hydrants.

19

1 **Cost Allocation Study**

2 **Q: Schedule 3 and its supporting schedules present your cost allocation study. Have you**
3 **made any changes to the past studies that have been accepted by the Commission?**

4 A: There are two changes I have made.

5

6 First, the Authority's capital costs (debt service, IFR, CIP) are allocated based on the alloca-
7 tion of its total assets. As the Commission is aware, this is the commonly accepted method
8 in Rhode Island and is put forth in the AWWA M1 Manual guidance on cost of service stud-
9 ies. For this study, I have updated the asset values based on the Authority's audit for the
10 year ending June 30, 2015. The changes are rather minimal, but do reflect the most recent
11 assets.

12

13 The second change involves a new allocation factor. As discussed earlier, we are seeking
14 funding for the meter replacement program. Because the Authority does not own the cus-
15 tomer's water meters, there are virtually no water meter assets. Consequently, nearly no
16 capital costs are allocated to metering. Because of this rather unique situation, and be-
17 cause this is a cost directly attributable to meters, there should be some allocation of the
18 program costs to meters. Because it is such a large increase, allocating this expense to the
19 customer function (recovered through the service charge) would result in a huge increase
20 to the customer service charges. Rather than a large increase to the service charges, we
21 are proposing to phase-in the recovery of the meter replacement program by including
22 about 10% per year in the service charge, with the balance recovered through the metered
23 rates.

24

1 **Q: Have you basically followed the previous filings in the allocations and rate determina-**
2 **tions for the Fire Charges (Schedule 4), Service Charges (Schedule 5), and Metered Rates**
3 **(Schedules 6-9)?**

4 A: Yes I have. The only change has to do with the service charges. The Authority is concerned
5 that the volatility in water sales has caused the revenues to fluctuate unexpectedly from
6 year to year. To help stabilize the revenues, the Authority is looking to increase its fixed
7 charges (the customer service charges). The Authority is asking the Commission to approve
8 an additional allocation to the service charges to help recover some of its fixed costs
9 through the fixed charges. We are proposing a demand surcharge in this filing.

10

11 I would note that the overall allocation to fire service was about 7% in Docket 4142, and is
12 about 11.5% in the docket. The O&M allocation increased from 5.5% to 6.3%, primarily
13 due to changes in the operating costs. The capital or fixed share of expenses increased
14 from 8.4% to 16.2%. This was largely due to a change in state law that now allows IFR costs
15 to be recovered through fixed charges like the fire protection charges. In the past the fire
16 related IFR costs had to be recovered through a consumption base charge.

17

18 **Summary of Rates**

19 **Q: What does Schedule 9 show?**

20 A: This schedule compares the current rates and charges to the proposed rates and charges.
21 The proposed rates for small meters (5/8" – 2") and large meters (6" and up) show about a
22 5.5 – 6.5% increase. The rate for medium size meters shows a slight decrease. Since the
23 Authority's last rate filing, the sales to medium size meters has dropped considerably.

24

25 Generally, the service charges are showing larger increases (about 50%) as the Authority is
26 trying to stabilize its revenues. Both public and private fire charges show about a 75% in-
27 crease. The increase to the service charge and fire service allocations are a direct result of

1 the change in the infrastructure act that now allows these costs to be assigned to these
2 two types of charges.

3

4 **Q: How will the proposed rates and charges impact customers?**

5 A: Schedule 10 shows the impact on various size customers. Because of the proposed
6 changes to the service charges, the smaller volume customers will see bigger increases
7 than those that use more water.

8

9 The average resident using 2000 cubic feet per quarter will see about an \$14.61 increase in
10 their quarterly bill (less than \$5/per month). Customers can save the entire increase by re-
11 ducing water use by about 14 gallons per day.

12

13 **Q: Have you checked to see if the rates you are proposing provide the revenue require-
14 ments?**

15 A: Yes. Schedule 11 shows these calculations. Because the rates and charges are rounded to
16 the nearest penny, they will not match exactly, however, this schedule demonstrates that
17 the estimated revenues are quite close to the required revenues.

18

19 **Q: Have you summarized the proposed expenses and revenues?**

20 A: Yes, Schedule 12 shows this summary.

21

1 **Alternative Rates and Charges**

2 **Q: You indicated earlier that KCWA has also developed some alternative rates and charges**
3 **for consideration. Please describe these.**

4 A: In the past, the Commission has asked KCWA to present an alternative conservation or sea-
5 sonal rate. Schedule 13 presents two seasonal rate alternatives. KCWA does not recom-
6 mend that either of these be adopted; however, if the Commission chooses a seasonal rate
7 alternative, we suggest the first alternative – the seasonal surcharge.

8

9 The top portion of Schedule 13 shows the first alternative. Under this alternative, we have
10 taken a portion of the maximum day costs from each class and 50% of the peak hour costs
11 from each class. The maximum day and peak hour costs are typically associated with meet-
12 ing peak summer period demands. Our calculation takes portions of these costs from the
13 cost allocation study and assigns them to a surcharge for each class that would apply to the
14 summer (July to September) period water use. Because this would provide additional reve-
15 nue, the added funds from this summer surcharge is removed from the base charge for
16 each class for the other months of the year.

17

18 The alternative seasonal surcharge is similar but applies the same summer surcharge to
19 every class of customers. The first alternative looked at different surcharges for each class.

20

21 **Q: Why doesn't KCWA recommend either of the seasonal rates at this time?**

22 A: There are several reasons. First, KCWA, like many other RI water utilities, has experienced
23 decreases in water sales over the past two decades. Customers seem to be conserving wa-
24 ter without a seasonal rate alternative. While reduced water sales may also reduce energy
25 costs for water production and wastewater treatment, the Commission needs to balance
26 the desire to reduce wasteful use with the impacts on our carbon footprint and customer
27 concerns about revenue and rate stability.

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Because the Authority bills customers every month, there is not a clear “summer” billing period that is the same for all customers: some get bills for May, June and July use, some for June, July and August, and some for July, August, and September. As a result, there is not a constant “summer” period for all customers. Until KCWA undertakes monthly billing, I do not believe a seasonal rate should be considered.

Q: Is there another alternative the Authority would like the Commission to consider?

A: Yes. The Authority provides service to a number of communities and fire districts. Payments from some of the fire districts has been lagging (or, as Mr. Brown discusses, non-existent). Recovery of these amounts that are due are questionable.

The Commission is aware of several RI cities that have declined to pay public fire protection costs and instead, the water utilities bill some customers directly for public fire protection. While no city has requested this of the Authority, the recent non-payment from smaller fire districts raises a question about continuing to bill an entity that will not pay for the service. As a result, KCWA is asking the Commission to consider the elimination of public fire protection charges to municipalities and fire districts, instead allowing a direct charge for fire protection to the individual retail customers.

Schedule 14 shows the proposed new public fire service charges. In this schedule we have taken all public fire service costs and derived direct charges to retail customers based on the size of their water meter. This alternative charge would provide the same annual revenues as the proposed public fire service charges (per hydrant charges)

1 **Step Increases**

2 **Q: Does the Authority propose any step increases in this filing?**

3 A: Yes we do. Schedule 15 shows the derivation of proposed step increases in FY 2108 and FY
4 2019. For FY 2018 (the year following the rate year), we show a 3.85% increase, with a
5 6.28% increase projected the next year. These would, of course, be subject to further
6 Commission review.

7

8 **Q: Does this conclude your direct testimony?**

9 A: Yes.

PRO FORMA EXPENSES

Expense Item	Test Year	Summary of	Rate Year	Adjustments Detail				
	June 30, 2015	Adjustments	7/1/16-6/30/17	Labor Increase (Sch 1B/1D)	One Time Costs	Other Adjustments	Supporting Schedule	Non-Labor Inflation
SOURCE OF SUPPLY								
maint of wells/supply study	\$0	\$40,000	\$40,000	\$0	\$40,000		Sch. 1D	
purchased water	\$4,999,638	-\$690,207	\$4,309,431	\$0	-\$690,207		Sch. 1C	
Subtotal	\$4,999,638	-\$650,207	\$4,349,431	\$0	-\$650,207			\$0
PUMPING OPERATIONS								
fuel for pumping	\$22,662	\$1,418	\$24,080	\$0				\$1,418
power	\$606,405	\$163,277	\$769,682	\$0				
labor-pumping	\$82,493	\$3,428	\$85,921	\$3,160		\$163,277	Sch. 1E	\$268
pumping expense	\$0	\$0	\$0	\$0				\$0
maint. - structures & improv	\$63,789	\$22,768	\$86,557	\$22,228				\$540
diesel oil	\$0	\$0	\$0	\$0				\$0
maint. - equip	\$36,986	\$21,914	\$58,900	\$20,728				\$1,186
Subtotal	\$812,335	\$212,805	\$1,025,140	\$46,116	\$0	\$163,277		\$3,412
WATER TREATMENT								
chemicals	\$40,519	\$122,393	\$162,912	\$0				
labor	\$186,426	\$7,720	\$194,146	\$7,189		\$122,393	Sch. 1E	\$531
operating / Mishnock	\$65,420	\$4,093	\$69,513	\$0				\$4,093
maint. - water treat equip	\$17,556	\$1,098	\$18,654	\$0				\$1,098
maint. - structure	\$651	\$41	\$692	\$0				\$41
Subtotal	\$310,572	\$135,344	\$445,916	\$7,189	\$0	\$122,393		\$5,763
TRANS & DISTR. EXPENSE								
storage facilities exp.	\$0	\$0	\$0	\$0				\$0
labor	\$23,745	\$1,486	\$25,231	\$0				\$1,486
supplies	\$106,875	\$6,686	\$113,561	\$0				\$6,686
labor-meter	\$52,568	\$2,198	\$54,766	\$1,988				\$210
meter - supp & exp	\$12	\$1	\$13	\$0				\$1
cust. install.	\$0	\$0	\$0	\$0				\$0
misc.	\$13,258	\$829	\$14,087	\$0				\$829
maint - struct. & improv.	\$57,000	\$3,566	\$60,566	\$0				\$3,566
maint.- res & stdp	\$20,465	\$887	\$21,352	\$717				\$170
maint. - mains	\$565,681	\$67,271	\$632,952	\$54,800				\$12,471
maint. - service	\$105,892	\$45,060	\$150,952	\$42,852				\$2,208
maint. - meters	\$139,823	\$7,705	\$147,528	\$1,901				\$5,803
maint. - hydrants	\$79,531	\$4,194	\$83,725	\$1,426				\$2,768
construction labor	-\$68	\$0	-\$68	\$0				\$0
Subtotal	\$1,164,782	\$139,882	\$1,304,664	\$103,685	\$0	\$0		\$36,198

PRO FORMA EXPENSES

Expense Item	Test Year	Summary of	Rate Year	Adjustments Detail			Non-Labor Inflation
	June 30, 2015	Adjustments	7/1/16-6/30/17	Labor Increase (Sch. 1B)	One Time Costs	Other Adjustments	
CUSTOMER ACCOUNT							
labor- meter read	\$110,533	\$4,597	\$115,130	\$4,226			\$370
cust record labor	\$204,210	\$8,471	\$212,681	\$7,848			\$623
cust records sup	\$95,811	\$5,994	\$101,805	\$0			\$5,994
meter read supplies	\$2,505	\$157	\$2,662	\$0			\$157
uncollectible	\$57,397	\$3,591	\$60,988	\$0			\$3,591
Subtotal	\$470,456	\$22,809	\$493,265	\$12,074	\$0	\$0	\$10,735
ADMIN. & GENERAL							
salaries	\$428,341	\$44,089	\$472,430	\$17,291			\$26,798
office supplies & expenses	\$257,632	\$16,118	\$273,750	\$0			\$16,118
insurance (property/liability/wc)	\$249,166	\$26,885	\$276,051	\$0		\$26,885	Sch. 1D
OPEB Trust Contrib.	\$0	\$80,000	\$80,000	\$0		\$80,000	Sch. 1D
employee benefits	\$927,939	\$108,351	\$1,036,290	\$0		\$108,351	Sch. 1D
maint. - plant	\$146,750	\$6,601	\$153,351	\$4,703			\$1,898
maint. - vehicles	\$60,303	\$3,695	\$63,998	\$142			\$3,553
miscellaneous	\$15,840	\$991	\$16,831	\$0			\$991
vacation, holiday, sick	\$299,762	\$12,829	\$312,591	\$12,829			\$0
regul. exp.	\$136,920	\$15,778	\$152,698	\$0		\$15,778	Sch. 1E
outside service	\$89,877	\$5,623	\$95,500	\$0			\$5,623
Subtotal	\$2,612,530	\$320,960	\$2,933,490	\$34,965	\$0	\$231,015	\$54,980
TOTAL O&M	\$10,370,313	\$181,594	\$10,551,907	\$204,029	\$0	-\$133,522	\$111,088

PRO FORMA EXPENSES

Expense Item	Test Year		Summary of Adjustments	Rate Year 7/1/16-6/30/17	Adjustments Detail			Non-Labor Inflation
	Existing	New			Labor Increase (Sch 1B/1D)	Time Costs	One Other	
FIXED CHARGES								
Debt Service								
Reserves and Coverage								
O&M Reserve	\$2,179,500	\$0	(\$1,000)	\$2,178,500				
R&R Reserve	\$77,607	\$0	\$49,375	\$49,375				
Renewal & Replacement - Equip	\$100,000	\$100,000	\$32,393	\$110,000				
Infrastructure Replacement	\$5,400,000	\$0	\$0	\$100,000				
Meter Replacement	\$0	\$0	\$2,000,000	\$5,400,000				
CIP	\$0	\$0	\$1,753,819	\$2,000,000				
Payroll Taxes	\$154,417	\$0	\$21,204	\$175,621				
PILOT	\$23,123	\$0	\$0	\$23,123				
SUBTOTAL FIXED	\$7,934,647	\$0	\$3,855,791	\$11,790,438	\$0	\$0	\$0	\$0
OPERATING REVENUE	\$583,313	\$0	\$97,694	\$681,007	\$0	\$97,694	\$0	\$0
TOTAL EXPENSES	\$18,888,273	\$0	\$4,135,079	\$23,023,351	\$204,029	\$0	\$0	\$111,088
Less:								
Miscellaneous Income								
Interest Income	(\$235,485)		\$0	(\$235,485)				
Merchand & Jobbing	(\$16,230)		\$0	(\$16,230)				
6.9% of Water Prot Fee	(\$46,107)		\$526	(\$45,581)				
NET REQUIRED FROM RATES	\$18,564,625	\$0	\$4,135,605	\$22,700,230				\$111,088

TEST YEAR & PRO FORMA REVENUES

<u>Revenues</u>	<u>Test Year</u> <u>Revenues</u>	<u>Adjustments</u>	<u>Normalized</u> <u>Test Year</u>	
Miscellaneous				
Less:	\$0	\$0	\$0	
Miscellaneous Income	\$235,485	\$0	\$235,485	
Interest Income	\$25,826	\$0	\$25,826	
Merchand & Jobbing	\$16,230	\$0	\$16,230	
6.9% of Water Prot Fee	\$46,107	\$526	\$46,633	(2)
Total Misc.	\$323,648		\$324,174	
Metered Rates	\$17,780,588	\$155,891	\$17,936,479	(1)
Public Fire	\$1,309,184	\$157	\$1,309,341	(1)
Private Fire	\$167,510	-\$7,819	\$159,691	(1)
Total Revenue	\$19,580,930	\$148,229	\$19,729,686	
<u>Required Revenue</u>			\$23,023,351	
<u>Required Revenue from Rates</u>			\$22,699,177	
<u>Rate Increase Needed</u>			\$3,293,666	

NOTES:

(1) Normalized Test Year Revenues at Current Rates based on Sch. 11 - current rates for full year.

(2) WP revenue based on rate of \$0.01511 with 95% non-exempt customers.

Non-exempt Use RY = 3,086,260 ccf

Rate (\$/ccf) \$0.01511

RY Revenue \$46,633

TEST YEAR & RATE YEAR LABOR COSTS

EXPENSE ITEM	Test Year		Rate Year
	June 30, 2015	Adjustments (1)	
SOURCE OF SUPPLY			
PUMPING OPERATIONS			
labor-pumping	\$78,206	\$3,160	\$81,365
maint. - structures & improv	\$55,160	\$22,228	\$77,388
maint. - equip	\$18,027	\$20,728	\$38,755
WATER TREATMENT			
labor	\$177,937	\$7,189	\$185,126
TRANS & DISTR. EXPENSE			
labor-meter	\$49,219	\$1,988	\$51,207
maint.- res & stdp	\$17,751	\$717	\$18,468
maint. - mains	\$366,344	\$54,800	\$421,144
maint. - service	\$70,596	\$42,852	\$113,448
maint. - meters	\$47,062	\$1,901	\$48,963
maint. - hydrants	\$35,288	\$1,426	\$36,713
CUSTOMER ACCOUNT			
labor- meter read	\$104,614	\$4,226	\$108,840
cust record labor	\$194,254	\$7,848	\$202,101
ADMIN. & GENERAL			
salaries	\$435,569	\$17,291	\$452,860
maint. - plant	\$116,408	\$4,703	\$121,111
maint. - vehicles	\$3,516	\$142	\$3,658
vacation, holiday, sick	\$317,555	\$12,829	\$330,384
SUBTOTAL LABOR	\$2,087,504	\$204,029	\$2,291,533
Capitalized Labor	\$4,000	\$162	\$4,162
TOTAL LABOR COSTS	\$2,091,505	\$204,191	\$2,295,695

(1) See Schedule 1D

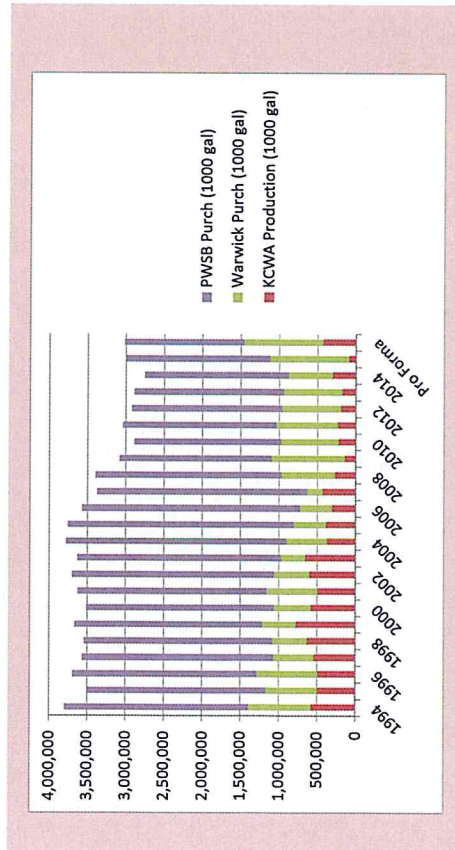
WHOLESALE WATER COSTS

Wholesale Water Purchases

PWSB Rate (/mg)	<u>Rate (\$/mg)</u>	<u>Purchases (mg)</u>	<u>Cost</u>
	\$1,731.16	2,489,331	\$4,309,431
Net Wholesale Purchases (gallons) - Rate Year			
Warwick Purchases		1,028,956,000	
PWSB Purchases		1,562,729,231	
Total Purchases		2,591,685,231	
Sales To Warwick		-102,354,000	
Net Purchases		2,489,331,231	
Rate Year Sales		2,489,331,231	

Fiscal Yr -->	2011	2012	2013	2014	2015	Pro Forma
KCWA Production (1000 gal)	231,080	195,110	175,420	304,651	92,176	430,800 (1)
Warwick Purch (1000 gal)	808,282	766,301	763,513	572,651	1,028,956	1,028,956 (2)
PWSB Purch (1000 gal)	1,999,838	1,962,717	1,952,095	1,883,039	1,882,339	1,562,729
Total	3,039,200	2,924,128	2,891,028	2,760,341	3,003,471	3,022,485 (3)
Total Purchased	2,808,120	2,729,018	2,715,608	2,455,690	2,911,295	2,591,685
Sales To Warwick (1000 gal)	73,595	92,976	91,487	92,039	102,354	102,354 (2)
Net Purchases	2,734,525	2,636,042	2,624,121	2,363,651	2,808,941	2,489,331

(1) KCWA rate year (FY 2017) production based on E. Greenwich start-up 11/16 and projections based on past monthly use, Mishnock on line 2/17
 (2) No change projected in purchases from or sales to Warwick from 2015 values
 (3) Overall amount changed from 2015 in same proportion as sales.



EXPLANATION OF ADJUSTMENTS TO TEST YEAR COSTS

<u>Adjustment to:</u>	<u>Explanation</u>	
Fixed Charges Associated with Debt Service:		
O&M Reserve	Set to achieve reserve level equal to 25% of operating costs.	
	"O&M" Costs (Sch. 1) =	\$10,551,907
	Payroll Taxes	\$175,621
	PILOT	\$23,123
	Total Operating	\$10,750,651
	Required O&M Reserve (25%)	\$2,687,663
	Balance 6/30/15	\$2,382,240
	Additions October 2015	\$256,048
	Estim. Balance Start of Rate Year	\$2,638,288
	Required deposit =	\$49,375
R&R Reserve	Set to equal 1% of Net Utility Plant (NUP)	
	NUP Value (6/30/15)	\$137,597,235
	Estimated Additions	\$11,000,000
	Pro Forma NUP	\$148,597,235
	Required Balance (1%)	\$1,485,972
	Balance 6/30/15	\$1,350,565
	Additions October 2015	\$25,407
	Estim. Balance Start of Rate Year	\$1,375,972
	Addition to Reserve Required	\$110,000

Source of Supply Operations (studies)

Cost of Water Supply, CIP, & IFR Plans =	\$125,000
Cost of Conservation Program =	\$25,000
New Vulnerability Study =	\$50,000
	Total
	\$200,000
Normalize over 5 yrs	\$40,000
Change over Test Year	\$40,000

Admin - Fees
Based on the May 2015 notice from the Dept. of Health, the annual PWS Renewal Fee is \$32,500

EXPLANATION OF ADJUSTMENTS TO TEST YEAR COSTS

Debt Service <u>2012 Series A Bonds</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Principal	\$1,485,000	\$1,540,000	\$1,605,000	1,690,000	\$1,775,000	\$1,870,000
Interest	<u>\$694,500</u>	<u>\$635,100</u>	<u>\$573,500</u>	<u>493,250</u>	<u>\$408,750</u>	<u>\$320,000</u>
Total	\$2,179,500	\$2,175,100	\$2,178,500	\$2,183,250	\$2,183,750	\$2,190,000
<u>New Debt</u>						
Principal	\$0	\$0	\$0	\$0	\$0	\$0
Interest	\$0	\$0	\$0	\$0	\$0	\$0
Total	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total Debt	\$2,179,500	\$2,175,100	\$2,178,500	\$2,183,250	\$2,183,750	\$2,190,000

Note that payments on bonds are due in January and July. Although the July payment is due the fiscal year following the due date, the funds must be accumulated the prior months to have sufficient amounts to make the payments.

Infrastructure Replacement

Based on most recently approved IFR Report for KCWA the annual IFR requirement is **\$7,000,000**. However, to minimize the current requested adjustment, the Authority is requesting the increase through the step adjustments proposed. Increase over test year = **\$0**

PILOT

based on following payments in lieu of taxes:

City & Towns	Totals
W. Warwick	\$8,264.82
Warwick	\$58.00
Coventry	\$12,813.37
Scituate	\$260.05
W. Greenwich	\$364.43
<u>Fire Districts</u>	
Cent. Cov.-Cov.	\$302.50
Cent.Cov.-Harris	\$50.00
Cent.Cov.-Tiogue	\$121.00
Cent Coventry	\$349.00
Hopkins Hills	<u>\$540.00</u>
	\$23,123.17

Insurance - Liability/Property/Worker's Comp

	FY 12	FY 13	FY 14	FY 15	Rate Year	Avg Increase
Liability/Property Insurance	130,590	146,686	156,105	166,811	196,382	8.5%
Worker's Comp. Insurance	<u>62,127</u>	<u>65,154</u>	<u>80,541</u>	<u>95,521</u>	<u>105,828</u>	11.24%
Total	\$192,717	\$211,840	\$236,646	\$252,332	\$276,051	9.40%

Estimated Rate Year amounts based on average annual increases over past four years.

EXPLANATION OF ADJUSTMENTS TO TEST YEAR COSTS

Benefits	FY 2014	Test Yr (FY15)	Estim. FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Medical - Blue Cross	\$510,912	\$528,254	\$575,151				
Delta Dental	\$41,303	\$46,702	\$47,779				
Group P-65 Retirees	\$74,314	\$73,682	\$73,682				
Life Insurance	\$5,826	\$6,487	\$6,445				
Disability Insurance	\$7,768	\$8,867	\$771				
Coastline Employee Assist	\$1,200	\$1,500	\$1,500				
Education	\$8,835	\$29,218	\$9,053				
Pension Contribution	\$311,745	\$228,129	\$246,738				
Xmas Bonus	\$5,100	\$5,100	\$5,100				
Total	\$967,003	\$927,939	\$966,219				
Less Retiree Costs (*)	-\$72,808	-\$46,337	-\$79,433				
Net for Current Employees	\$894,195	\$881,602	\$886,785	\$954,410	\$1,010,224	\$1,030,429	\$1,051,038
Labor Costs	\$1,956,599	\$2,091,505	\$2,133,035	\$2,295,695	\$2,341,609	\$2,388,441	\$2,436,210
Benefits as % of Current Labor	45.70%	42.15%	41.57%	43.14%	43.14%	43.14%	43.14%
Retiree Costs (**)				\$81,880	\$84,403	\$87,003	\$89,683
Plus Benefits (above)				\$954,410	\$1,010,224	\$1,030,429	\$1,051,038
Total Benefits				\$1,036,290	\$1,094,627	\$1,117,432	\$1,140,721
Change in Benefits for RY				\$108,351			
Annual Increase After Rate Year					166,688	\$22,805	\$23,289

* includes payments to retired employees for Delta-Dental, Group 65 Retirees and Life Insurance
 ** rate year and beyond costs for retirees increased from 2016 based on estimated inflation rate (see below), FY 16 based on first 7 months

New OPEB Contribution to Trust	FY 2017	FY 2018	FY 2019	FY 2020
	\$80,000	\$80,000	\$80,000	\$80,000

EXPLANATION OF ADJUSTMENTS TO TEST YEAR COSTS

Labor Adjustments

Test year (FY 2015) labor increased to FY 2016 based on 2% increase and actual 2015 OT For Rate Year, the FY 2016 labor costs were increased 2% for existing positions, with OT at FY 2015/2016 levels plus: Two operators to replace transfers to Treatment Plant @ \$40,000 each (split between maint of mains and services) One additional Maintenance Mechanic @ \$40,000 (split between pumping structures and equipment) FY 2018 increased at 2%

	<u>Test Yr (FY15)</u>	<u>FY 2016</u>	<u>Rate Yr (FY 17)</u>	<u>FY 2018</u>
<i>Pumping Expense</i>				
Pumping Labor	\$78,206	\$79,770	\$81,365	\$82,993
Maint. Structure	\$55,160	\$56,263	\$77,388	\$78,936
Maint. Equip.	\$18,027	\$18,387	\$38,755	\$39,530
<i>Water Treatment Expense</i>				
Operator Labor	\$177,937	\$181,496	\$185,126	\$188,829
<i>Transmission & Distribution</i>				
Meter Labor	\$49,219	\$50,203	\$51,207	\$52,231
Maint. Reser. & Standpipes	\$17,751	\$18,106	\$18,468	\$18,837
Maint. Mains	\$366,344	\$373,671	\$421,144	\$429,567
Maint. Services	\$70,596	\$72,007	\$113,448	\$115,717
Maint. Meters	\$47,062	\$48,003	\$48,963	\$49,942
Maint. Hydrants	\$35,288	\$35,993	\$36,713	\$37,448
<i>Customer Accounts</i>				
Meter Reading	\$104,614	\$106,706	\$108,840	\$111,017
Customer Records	\$194,254	\$198,139	\$202,101	\$206,143
<i>Admin. & General</i>				
Salaries (Admin & Board)	\$435,569	\$443,980	\$452,860	\$461,917
Genrl Plant Maint.	\$116,408	\$118,737	\$121,111	\$123,533
Vehicle Maint.	\$3,516	\$3,586	\$3,658	\$3,731
Vac., Holiday, Sick	\$317,555	\$323,906	\$330,384	\$336,992
Capitalized Labor	\$4,000	\$4,080	\$4,162	\$4,245
Totals	\$2,091,505	\$2,133,035	\$2,295,695	\$2,341,609

Payroll Taxes

FICA set at 7.65% of salary 175,621

Non-Labor Inflation

Non-labor items increased from test year using an average annual increase of 3.08% per year or 6.26% over 2 years to account for inflation.

Power

See Schedule 1E

Operating Revenue

See testimony-operating revenue based on total rate revenues (total less misc. revenues) at 3.00% 1.5% restricted/1.5% non-restricted

EXPLANATION OF ADJUSTMENTS TO TEST YEAR COSTS

Capital Spending

Meter Replacement

The authority is planning to replace all the customer owned water meters. The total estimated cost is \$6.6 million. For the rate year, initial funding of \$2,000,000 is requested. In FY 2018 funding of \$2,000,000 is requested. For FY 2019, the balance is included.

Capital Improvement Program

The Authority has developed a capital improvement program (CIP) that it is looking to finance from rates. With the refinancing of its debt, available funds in the Restricted Debt Account, and available balances in the Restricted Operating Revenue Account, the Authority proposes to use these savings to help phase-in the program. The Authority is looking for authorization equal to the reduction in the debt service that had been authorized by the PUC. Authorized Debt Doc. 4142 = \$3,932,319 Difference from rate year debt = \$1,753,819

Restricted Funds Activity for Rate Year

	<u>R&R Reserve</u>	<u>O&M Reserve</u>	<u>Debt</u>	<u>IFR</u>	<u>R&R Equip</u>	<u>Res. Oper. Rev.*</u>
Beginning Balance (7/1/14)	1,272,826	2,493,284	2,026,555	6,277,494	262,937	1,507,265
Funding	77,607	0	2,179,500	5,400,000	100,000	291,656
Interest	132	242	98	676	20	133
Expenditures (actual) *	0	111,286	2,373,650	4,391,122	303,930	0
Ending Balance (6/30/15)	1,350,565	2,382,240	1,832,503	7,287,048	59,027	1,799,054
	<u>2012 Refunding</u>	<u>2004 Series A</u>	<u>Total Debt</u>			
Beginning Balance (7/1/14)	1,800,909	225,646	2,026,555			
Funding (TY)	2,179,500	0	2,179,500			
Interest	92	6	98			
Expenditures (actual)	2,148,000	225,650	2,373,650			
Ending Balance (6/30/15)	1,832,501	2	1,832,503			

* Note -\$607,077 was withdrawn from the Restricted Operating Revenue Account after June 30, 2015 reducing this account

SUPPLEMENTAL DATA

Regulatory Expenses

Fiscal Year	Annual Assmnt	Legal	Consultants	DPUC Fees	Total
2011	45,874	0	600	3,769	50,243
2012	53,179	0	1,800	698	55,677
2013	64,890	22,920	17,000	2,960	107,770
2014	97,253	30,289	53,328	908	181,778
2015	84,080	12,507	39,876	457	136,921
Estimated Rate Case Expense - this docket					130,000
Other Rate Case (Prov Water, Pass Thru)					50,000
Amortized over 3 yrs					60,000
DPUC Assessment (Estim RY) *					92,698
Rate Year Regulatory Expense =					152,698

Note: Estimated costs for current docket do NOT include KCWA regulatory costs for intervention in filings by Providence Water nor do they include costs for pass through rate filings to pass on wholesale rate increases.

* PUC Assessments

FY 2011	\$45,874	
FY 2012	\$53,179	15.92%
FY 2013	\$64,890	22.02%
FY 2014	\$97,253	49.87%
FY 2015	\$84,080	-13.55%
Average increase =	18.57%	
Estimated Annual Change =	5.00%	
Estim FY 2016 (RY)	\$88,284	
Estim FY 2017 (RY)	\$92,698	

SUPPLEMENTAL DATA

Chemical Costs

East Greenwich

	Production (1000 gal/yr)	Chlorine Gallons	Tetrapotassium Pyrophosphate Gallons	Potassium Hydroxide Gallons	Chem Delivery and Freight PyroPhos	Chem Delivery and Freight POT HYD
FY 2011	232,130	533	271	26,025	\$427	\$1,305
FY 2012	190,990	439	223	19,904	\$496	\$2,025
FY 2013	175,282	403	205	19,560	\$525	\$2,120
FY 2014	223,338	513	261	25,576	\$555	\$2,835
FY 2015	off line					
FY 2016	off line					
FY 2017 Proj	138,819	319	162	15,384	\$556	\$1,400
COST/GAL (12/15)		\$2.43	\$10.46	\$6.70		
FY 2016 COST		\$775	\$1,695	\$103,073	\$556	\$1,400
			Total FY 2017 chemical costs (E. Greenwich)			\$107,498

	Production (1000 gal/yr)	Potassium Permanganate Gallons	Chlorine Gallons	Potassium Hydroxide Gallons	Citric Acid Gallons	Sodium Bisulfite Gallons	Sulfuric Acid Gallons	Chemical Deliver Fees	Lab Chems \$/FY
Mishnock	0	0	0	0	0	0	0	\$0	\$0
FY 2013	50,000	3,481	376	399	125	188	4	\$575	\$3,600
FY 2014	100,000	7,080	780	820	250	375	8	\$1,236	\$3,600
FY 2015	100,000	7,080	780	820	250	375	8	\$1,418	\$3,600
FY 2016	292,000	20,674	2,278	2,394	250	375	8	\$14,818	\$4,000
FY 2017 PROJ USE COST/GAL		\$1.08	\$2.43	\$6.70	\$11.06	\$4.69	\$3.54	\$28	
FY 2017 COST		\$22,328	\$5,536	\$16,040	\$2,765	\$1,759	\$48,455	\$3,358	\$3,600
FY 2017 Chemical Costs									
E. Greenwich	\$107,498	\$7,646	\$1,895	\$5,494	\$2,765	\$1,759	\$28	1,236	3,600
Mishnock	\$48,455								
Mishnock Delivery	\$3,358								
Lab Chemicals	\$3,600								
Total - Rate Year	\$162,912								
Increase over Test Year	\$122,393								

Treatment Power Costs

	East Greenwich	Mishnock	Both
	Power KWH USED	Power KWH USED	Power KWH USED
FY 2011	454,207		
FY 2012	465,600		
FY 2013	387,360		
FY 2014	547,920	188,547	
FY 2015		346,320	
FY 2016		346,320	
FY 2017 Proj	313,385	908,907	
			Increase over test year
			\$163,277
			\$55,413
			\$57,734
			\$50,357
			\$105,268
			\$64,069
			\$64,416
			\$227,346

AVG Power

\$/KWH

\$/KWH

\$/KWH

\$/KWH

\$/KWH

\$/KWH

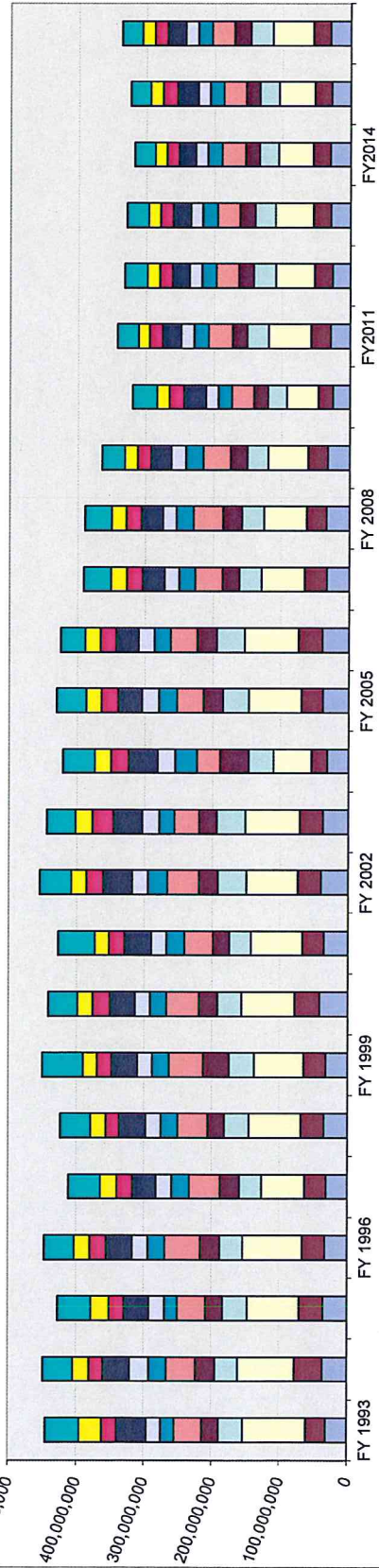
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\$/KWH

UNITS OF SERVICE

	Test Year Actual	Adjustments	Rate Year Projected
<u>Metered Water Sales (100 cubic feet)</u>			
Small (5/8-2" meters)	2,921,091	18,493	2,939,584
Medium (3&4" meters)	66,302	420	66,721
Large (6" & up meters)	240,864	1,525	242,389
	3,228,257		3,248,694
<u>Meters By Size</u>			
<u>Quarterly</u>	<u>June 2015</u>		
5/8 & 3/4	22,099	-19	22,080
1	3,636	14	3,650
1 1/2	322	2	324
2	503	-1	502
3	13	-2	11
4	84	5	89
6	85	4	89
8 & up	65	2	67
<u>Monthly</u>			
5/8 & 3/4	5	0	5
1	1	0	1
1 1/2	9	0	9
2	9	-1	8
3	1	0	1
4	4	-1	3
6	7	0	7
8 & up	5	0	5
<u>Public Fire Service (Sept 2015)</u>			
Public Fire Hydrants	2,346	3	2,349
Bills	32		32
<u>Private Fire Service</u>			
<u>Size (in)</u>			
4	16	0	16
6	97	-2	95
8	19	-3	16
10	1	0	1
12	1	0	1
Hydrants	128	-6	122

KCWA Retail Sales (cu ft)



**ALLOCATION OF RATE YEAR EXPENSES TO
GENERAL WATER, FIRE, AND CUSTOMER SERVICE**

EXPENSE ITEM	RATE YEAR EXPENSE	ALLOC. SYMBOL (1)	GENERAL WATER		FIRE SERVICE		CUST. SERVICE	
			%	AMOUNT	%	AMOUNT	%	AMOUNT
SOURCE OF SUPPLY								
maint of wells/supply study	\$40,000	A	99.5%	\$39,800	0.5%	\$200	0.0%	0
purchased water	\$4,309,431	A	99.5%	\$4,287,884	0.5%	\$21,547	0.0%	0
PUMPING OPERATIONS								
fuel for pumping	\$24,080	A	99.5%	\$23,959	0.5%	\$120	0.0%	0
power	\$769,682	A	99.5%	\$765,834	0.5%	\$3,848	0.0%	0
labor-pumping	\$85,921	P	79.7%	\$68,513	20.3%	\$17,408	0.0%	0
pumping expense	\$0	P	79.7%	\$0	20.3%	\$0	0.0%	0
maint. - structures & improv	\$86,557	P	79.7%	\$69,021	20.3%	\$17,537	0.0%	0
diesel oil	\$0	P	79.7%	\$0	20.3%	\$0	0.0%	0
maint. - equip	\$58,900	P	79.7%	\$46,967	20.3%	\$11,933	0.0%	0
WATER TREATMENT								
chemicals	\$162,912	A	99.5%	\$162,097	0.5%	\$815	0.0%	0
labor	\$194,146	A	99.5%	\$193,175	0.5%	\$971	0.0%	0
operating / Mishnock	\$69,513	A	99.5%	\$69,165	0.5%	\$348	0.0%	0
maint. - water treat equip	\$18,654	A	99.5%	\$18,561	0.5%	\$93	0.0%	0
maint. - structure	\$692	A	99.5%	\$688	0.5%	\$3	0.0%	0
TRANS & DISTR. EXPENSE								
storage facilities exp.	\$0	D	75.0%	\$0	25.0%	\$0	0.0%	0
labor	\$25,231	B	74.8%	\$18,872	25.2%	\$6,358	0.0%	0
supplies	\$113,561	B	74.8%	\$84,944	25.2%	\$28,617	0.0%	0
labor-meter	\$54,766	C	0.0%	\$0	0.0%	\$0	100.0%	54,766
meter - supp & exp	\$13	C	0.0%	\$0	0.0%	\$0	100.0%	13
cust. install.	\$0	C	0.0%	\$0	0.0%	\$0	100.0%	0
misc.	\$14,087	F	48.3%	\$6,799	23.0%	\$3,242	28.7%	4,046
maint - struct. & improv.	\$60,566	F	48.3%	\$29,232	23.0%	\$13,940	28.7%	17,394
maint. - res & stdp	\$21,352	D	75.0%	\$16,014	25.0%	\$5,338	0.0%	0
maint. - mains	\$632,952	B	74.8%	\$473,448	25.2%	\$159,504	0.0%	0
maint. - service	\$150,952	C	0.0%	\$0	0.0%	\$0	100.0%	150,952
maint. - meters	\$147,528	C	0.0%	\$0	0.0%	\$0	100.0%	147,528
maint. - hydrants	\$83,725	E	0.5%	\$419	99.5%	\$83,306	0.0%	0
construction labor	(\$68)	F	48.3%	(\$33)	23.0%	(\$16)	28.7%	(20)
CUSTOMER ACCOUNT								
labor- meter read	\$115,130	C	0.0%	\$0	0.0%	\$0	100.0%	115,130
cust record labor	\$212,681	C	0.0%	\$0	0.0%	\$0	100.0%	212,681
cust records sup	\$101,805	C	0.0%	\$0	0.0%	\$0	100.0%	101,805
meter read supplies	\$2,662	C	0.0%	\$0	0.0%	\$0	100.0%	2,662
uncollectible	\$60,988	C	0.0%	\$0	0.0%	\$0	100.0%	60,988
ADMIN. & GENERAL								
salaries	\$472,430	G	73.1%	\$345,580	7.7%	\$36,364	19.2%	90,486
office supplies & expenses	\$273,750	G	73.1%	\$200,247	7.7%	\$21,071	19.2%	52,432
insurance (property/liability/wc)	\$276,051	G	73.1%	\$201,930	7.7%	\$21,248	19.2%	52,873
OPEB Trust Contrib.	\$80,000	H	55.7%	\$44,597	11.9%	\$9,491	32.4%	25,911
employee benefits	\$1,036,290	H	55.7%	\$577,699	11.9%	\$122,949	32.4%	335,643
maint. - plant	\$153,351	G	73.1%	\$112,176	7.7%	\$11,804	19.2%	29,372
maint. - vehicles	\$63,998	G	73.1%	\$46,814	7.7%	\$4,926	19.2%	12,258
miscellaneous	\$16,831	G	73.1%	\$12,312	7.7%	\$1,296	19.2%	3,224
vacation, holiday, sick	\$312,591	H	55.7%	\$174,260	11.9%	\$37,087	32.4%	101,245
regul. exp.	\$152,698	G	73.1%	\$111,698	7.7%	\$11,753	19.2%	29,247
outside service	<u>\$95,500</u>	G	73.1%	<u>\$69,858</u>	7.7%	<u>\$7,351</u>	19.2%	<u>18,291</u>
SUBTOTAL O&M	\$10,551,907	G	78.4%	\$8,272,531	6.3%	\$660,453	15.3%	1,618,923

**ALLOCATION OF RATE YEAR EXPENSES TO
GENERAL WATER, FIRE, AND CUSTOMER SERVICE**

EXPENSE ITEM	RATE YEAR EXPENSE	ALLOC. SYMBOL (1)	GENERAL WATER		FIRE SERVICE		CUST. SERVICE	
			%	AMOUNT	%	AMOUNT	%	AMOUNT
FIXED CHARGES								
Debt Service	\$2,178,500	J	78.2%	\$1,703,232	19.8%	\$430,431	2.1%	\$44,837
O&M Reserve	\$49,375	G	73.1%	\$36,118	7.7%	\$3,800	19.2%	\$9,457
R&R Reserve	\$110,000	J	78.2%	\$86,002	19.8%	\$21,734	2.1%	\$2,264
Renewal & Replacement - Equip	\$100,000	J	78.2%	\$78,184	19.8%	\$19,758	2.1%	\$2,058
Infrastructure Replacement	\$5,400,000	I	78.2%	\$4,221,920	19.8%	\$1,066,940	2.1%	\$111,140
Meter Replacement	\$2,000,000	M	100.0%	\$2,000,000	0.0%	\$0	0.0%	0
CIP	\$1,753,819	I	78.2%	\$1,371,200	19.8%	\$346,522	2.1%	\$36,096
Payroll Taxes	\$175,621	H	55.7%	\$97,903	11.9%	\$20,836	32.4%	\$56,882
PILOT	\$23,123	L	77.9%	\$18,008	21.0%	\$4,864	1.1%	\$251
SUBTOTAL FIXED	\$11,790,438		81.5%	\$9,612,566	16.2%	\$1,914,887	2.2%	\$262,985
OPERATING REVENUE	\$681,007	K	80.1%	\$545,148	11.5%	\$78,498	8.4%	\$57,362
TOTAL EXPENSES	\$23,023,351	K	80.1%	\$18,430,244	11.5%	\$2,653,837	8.4%	\$1,939,270
Less:								
Miscellaneous Income	(\$235,485)	K	80.1%	(\$188,506)	11.5%	(\$27,144)	8.4%	(\$19,835)
Interest Income	(\$25,826)	K	80.1%	(\$20,674)	11.5%	(\$2,977)	8.4%	(\$2,175)
Merchand & Jobbing	(\$16,230)	K	80.1%	(\$12,992)	11.5%	(\$1,871)	8.4%	(\$1,367)
6.9% of Water Prot Fee	(\$45,581)	K	80.1%	(\$36,487)	11.5%	(\$5,254)	8.4%	(\$3,839)
Total Revenue Requirement	\$22,700,230	K	80.1%	\$18,171,585	11.5%	\$2,616,592	8.4%	\$1,912,053

(1) See Sch. 3B

**ALLOCATION OF RATE YEAR LABOR EXPENSES TO
GENERAL WATER, FIRE, AND CUSTOMER SERVICE**

EXPENSE ITEM	RATE YEAR LABOR	ALLOC. SYMBOL (1)	GENERAL WATER		FIRE SERVICE		CUST. SERVICE	
			%	AMOUNT	%	AMOUNT	%	AMOUNT
SOURCE OF SUPPLY								
maint of wells/supply study	\$0	A	99.5%	\$0	0.5%	\$0	0.0%	\$0
purchased water	\$0	A	99.5%	\$0	0.5%	\$0	0.0%	\$0
PUMPING OPERATIONS								
fuel for pumping	\$0	A	99.5%	\$0	0.5%	\$0	0.0%	\$0
power	\$0	A	99.5%	\$0	0.5%	\$0	0.0%	\$0
labor-pumping	\$81,365	P	79.7%	\$64,881	20.3%	\$16,485	0.0%	\$0
pumping expense	\$0	P	79.7%	\$0	20.3%	\$0	0.0%	\$0
maint. - structures & improv	\$77,388	P	79.7%	\$61,710	20.3%	\$15,679	0.0%	\$0
diesel oil	\$0	P	79.7%	\$0	20.3%	\$0	0.0%	\$0
maint. - equip	\$38,755	P	79.7%	\$30,903	20.3%	\$7,852	0.0%	\$0
WATER TREATMENT								
chemicals	\$0	A	99.5%	\$0	0.5%	\$0	0.0%	\$0
labor	\$185,126	A	99.5%	\$184,200	0.5%	\$926	0.0%	\$0
operating / Mishnock	\$0	A	99.5%	\$0	0.5%	\$0	0.0%	\$0
maint. - water treat equip	\$0	A	99.5%	\$0	0.5%	\$0	0.0%	\$0
maint. - structure	\$0	A	99.5%	\$0	0.5%	\$0	0.0%	\$0
TRANS & DISTR. EXPENSE								
storage facilities exp.	\$0	D	75.0%	\$0	25.0%	\$0	0.0%	\$0
labor	\$0	B	74.8%	\$0	25.2%	\$0	0.0%	\$0
supplies	\$0	B	74.8%	\$0	25.2%	\$0	0.0%	\$0
labor-meter	\$51,207	C	0.0%	\$0	0.0%	\$0	100.0%	\$51,207
meter - supp & exp	\$0	C	0.0%	\$0	0.0%	\$0	100.0%	\$0
cust. install.	\$0	C	0.0%	\$0	0.0%	\$0	100.0%	\$0
misc.	\$0	F	48.3%	\$0	23.0%	\$0	28.7%	\$0
maint - struct. & improv.	\$0	F	48.3%	\$0	23.0%	\$0	28.7%	\$0
maint. - res & stdp	\$18,468	D	75.0%	\$13,851	25.0%	\$4,617	0.0%	\$0
maint. - mains	\$421,144	B	74.8%	\$315,016	25.2%	\$106,128	0.0%	\$0
maint. - service	\$113,448	C	0.0%	\$0	0.0%	\$0	100.0%	\$113,448
maint. - meters	\$48,963	C	0.0%	\$0	0.0%	\$0	100.0%	\$48,963
maint. - hydrants	\$36,713	E	0.5%	\$184	99.5%	\$36,530	0.0%	\$0
construction labor	\$0	F	48.3%	\$0	23.0%	\$0	28.7%	\$0
CUSTOMER ACCOUNT								
labor- meter read	\$108,840	C	0.0%	\$0	0.0%	\$0	100.0%	\$108,840
cust record labor	\$202,101	C	0.0%	\$0	0.0%	\$0	100.0%	\$202,101
cust records sup	\$0	C	0.0%	\$0	0.0%	\$0	100.0%	\$0
meter read supplies	\$0	C	0.0%	\$0	0.0%	\$0	100.0%	\$0
uncollectible	\$0	C	0.0%	\$0	0.0%	\$0	100.0%	\$0
ADMIN. & GENERAL								
salaries	\$452,860	G	73.1%	\$331,265	7.7%	\$34,857	19.2%	\$86,737
office supplies & expenses	\$0	G	73.1%	\$0	7.7%	\$0	19.2%	\$0
insurance (property/liability/wc)	\$0	G	73.1%	\$0	7.7%	\$0	19.2%	\$0
OPEB Trust Contrib.	\$0	H	55.7%	\$0	11.9%	\$0	32.4%	0
employee benefits	\$0	H	55.7%	\$0	11.9%	\$0	32.4%	0
maint. - plant	\$121,111	G	73.1%	\$88,592	7.7%	\$9,322	19.2%	\$23,197
maint. - vehicles	\$3,658	G	73.1%	\$2,676	7.7%	\$282	19.2%	\$701
miscellaneous	\$0	G	73.1%	\$0	7.7%	\$0	19.2%	\$0
vacation, holiday, sick	\$330,384	H	55.7%	\$184,179	11.9%	\$39,198	32.4%	107,008
regul. exp.	\$0	G	73.1%	\$0	7.7%	\$0	19.2%	\$0
outside service	\$0	G	73.1%	\$0	7.7%	\$0	19.2%	\$0
TOTAL LABOR	\$2,291,533	H	55.7%	\$1,277,456	11.9%	\$271,875	32.4%	\$742,202

(1) See Sch. 3B

ALLOCATION SYMBOLS

ALLOCATION SYMBOL	GEN'L WATER	FIRE SERVICE	CUST SERVICE	
A	99.50%	0.50%	0.00%	Supply & Treatment
B	74.80%	25.20%	0.00%	T&D Mains
C	0.00%	0.00%	100.00%	Meters
D	75.00%	25.00%	0.00%	Storage
E	0.50%	99.50%	0.00%	Hydrants
F	48.26%	23.02%	28.72%	Misc T&D
G	73.15%	7.70%	19.15%	Direct O&M (50% of Purch Water) Benefits & Vacation
H	55.75%	11.86%	32.39%	Labor
I	78.18%	19.76%	2.06%	IFR Costs (same as Debt/Capital)
J	78.18%	19.76%	2.06%	Debt/Capital
K	80.05%	11.53%	8.42%	Total Expense
L	77.88%	21.04%	1.09%	PILOT
M	100.00%	0.00%	0.00%	Meter Replacement Program - all costs to small meter rate
P	79.74%	20.26%	0.00%	Pumping Facilities

Symbol B

	Gal/Min	%
Model Max. Day	10,410	74.84%
Fire Demand	3,500	25.16%
Max. Day Plus Fire	13,910	100.00%

Symbol J - Debt Service/CIP

Plant In Service	Symbol	Gen Water	Fire	Cust A	Cust B
Plant Value 6/30/2015					
Source of Supply	A	\$1,832,333	\$9,208	\$0	\$0
Pumping Plant	A	\$8,370,946	\$42,065	\$0	\$0
Water Treat. Plant	A	\$21,947,129	\$110,287	\$0	\$0
T&D Storage	D	\$7,272,426	\$2,424,142	\$0	\$0
T&D Mains	B	\$71,548,289	\$24,104,504	\$0	\$0
T&D Hydrants	E	\$6,812	\$1,355,527	\$0	\$0
T&D Services	C	\$0	\$0	\$2,919,253	\$0
T&D Meters	C	\$0	\$0	\$2,193	\$0
General Plant	J	\$2,426,232	\$613,144	\$63,869	\$0
General Structures	J	\$568,990	\$143,792	\$14,978	\$0
Total		\$113,973,156	\$28,802,669	\$3,000,294	\$0
Percent		78.18%	19.76%	2.06%	0.00%

Symbol L - PILOT

	Total	Symbol	Gen Water	Fire	Cust A	Cust B
Storage	\$7,258	D	\$5,443	\$1,814	\$0	\$0
Office	\$1,311	G	\$959	\$101	\$126	\$126
PS/Wells/Treatment	\$14,554	P	\$11,605	\$2,949	\$0	\$0
Total	\$23,123		\$18,008	\$4,864	\$126	\$126
Percent			77.88%	21.04%	0.54%	0.54%

Symbol M - Meter Replacement Program

The Authority is proposing to replace all residential meters that are 2" and less. Accordingly, we propose to assign all the meter replacement costs to the small meter rate (for meters 2" and less).

Symbol P - Pumping Facilities (per Decision in Dockets 2098, 2555, 3660, 4067)

	Percent	Symbol	Gen Water	Fire	Cust A	Cust B
Supply Well Pumps	20.00%	A	19.90%	0.10%	0.00%	0.00%
Distribution Pumps	80.00%	B	59.84%	20.16%	0.00%	0.00%
Total	100.00%	P	79.74%	20.26%	0.00%	0.00%

PROPOSED FIRE SERVICE CHARGES

PUBLIC FIRE SERVICE

Quarterly Charge/Hydrant = \$251.22
Plus Billing Charge = \$9.08

PRIVATE FIRE SERVICE

<u>SERVICE SIZE</u> <u>(inches)</u>	<u>QUARTERLY</u> <u>CHARGE</u>
4	\$95.89
6	\$261.25
8	\$546.47
10	\$975.49
12	\$1,570.10
HYDRANT	\$261.25

**ALLOCATION OF FIRE SERVICE EXPENSES
TO PUBLIC AND PRIVATE FIRE SERVICE**

	<u>NUMBER</u>	<u>DEMAND FACTOR (1)</u>	<u>NO. OF EQUIVS.</u>	<u>PERCENT OF DEMAND</u>	<u>NON-HYDR. REQUIRED</u>	<u>DIRECT HYDRANT</u>	<u>TOTAL</u>
PUBLIC FIRE SERVICE							
Hydrants	2,349	111.31	261,469	89.81%	\$2,256,860	\$103,563	\$2,360,423
PRIVATE FIRE SERVICE							
SIZE (IN)							
4	16	38.32	613				
6	95	111.31	10,575				
8	16	237.21	3,795				
10	1	426.58	427				
12	1	689.04	689				
HYDRANTS	<u>122</u>	111.31	<u>13,580</u>				
TOTAL-PRIV.	251		29,679	10.19%	\$256,169	\$0	\$256,169
	=====		=====	=====	=====	=====	=====
GRAND TOTALS	2,600		291,148	100.00%	\$2,513,028	\$103,563	\$2,616,592
Total Fire Allocation							\$2,616,592
Less Direct Hydrant Related							
O&M		(\$83,306)					
Debt		(\$20,257)					
Net Non-Hydrant							\$2,513,028

(1) Based on size to the 2.63 power.

DETERMINATION OF FIRE SERVICE CHARGES

<u>PUBLIC FIRE PROTECTION</u>			<u>CALCULATED</u>
			<u>CHARGE</u>
PUBLIC FIRE ALLOCATION (1)		\$2,360,423	
----- =		----- =	\$1,004.86
NUMBER OF PUBLIC HYDRANTS		2,349	
	TOTAL QUARTERLY		\$251.22
	+ BILLING		\$9.08

PRIVATE FIRE PROTECTION

PRIVATE FIRE ALLOCATION (1,2)		\$268,946	
----- =		----- =	\$9.06 /EQUIV.
NO. OF EQUIV. UNITS		29,679	

<u>SIZE (IN)</u>	<u>DEMAND</u>	<u>ANNUAL</u>	<u>QUARTERLY</u>	<u>BILLING</u>	<u>CALCULATED</u>
	<u>FACTOR</u>	<u>CHARGE</u>	<u>CHARGE</u>	<u>CHARGE</u>	<u>CHARGE</u>
4	38.32	\$347.25	\$86.81	\$9.08	\$95.89
6	111.31	\$1,008.70	\$252.17	\$9.08	\$261.25
8	237.21	\$2,149.56	\$537.39	\$9.08	\$546.47
10	426.58	\$3,865.65	\$966.41	\$9.08	\$975.49
12	689.04	\$6,244.09	\$1,561.02	\$9.08	\$1,570.10
HYDRANTS	111.31	\$1,008.70	\$252.17	\$9.08	\$261.25

(1) Allocation from Sch 4A.

(2) Private Fire includes allocated service maintenance costs as detailed below:

Service Line Maintenance Cost =	\$150,952	
Addnl Allocation to Fire Service =	\$12,777	(8.46%)

Service Line Equivalents

<u>Meter Size (in)</u>	<u>Service Size (in)</u>	<u>Equivalents *</u>
5/8 & 3/4	1	1.00
1	1.5	1.80
1 1/2	2	3.30
2	3	4.60
3	4	6.30
4	6	9.60
6	8	16.90
>8	10	29.60
Total		

Metered Water Service

<u>Number</u>	<u>Equivalents</u>
22,085	22,085
3,651	6,572
333	1,099
510	2,346
12	76
92	883
96	1,622
72	<u>2,131</u>
	36,814
	91.54%

Private Fire Service

<u>Number</u>	<u>Equivalents</u>
16	101
95	912
138	2,332
2	<u>59</u>
	3,404
	8.46%

* See Sch 5D

PROPOSED SERVICE CHARGES & DEMAND SURCHARGES

METER SIZE (inches)	<u>SERVICE CHARGE</u>		<u>DEMAND SURCHARGE</u>	
	<u>QUARTERLY</u> <u>ACCOUNTS</u>	<u>MONTHLY</u> <u>ACCOUNTS</u>	<u>QUARTERLY</u> <u>ACCOUNTS</u>	<u>MONTHLY</u> <u>ACCOUNTS</u>
5/8 &				
3/4	\$15.29	\$11.15	\$3.06	\$1.02
1	\$20.25	\$12.80	\$5.13	\$1.71
1 1/2	\$29.56	\$15.91	\$10.23	\$3.41
2	\$37.63	\$18.60	\$16.38	\$5.46
3	\$48.18	\$22.11	\$32.76	\$10.92
4	\$68.66	\$28.94	\$51.18	\$17.06
6	\$113.97	\$44.04	\$102.36	\$34.12
>8	\$192.80	\$70.32	\$163.80	\$54.60

ALLOCATION OF CUSTOMER SERVICE EXPENSES

EXPENSE ITEM	TOTAL	ALLOC.	<-CUST. METER->		<-CUST. BILL->	
	CUST. SERV.	SYMBOL (1)	%	AMOUNT	%	AMOUNT
TRANS & DISTR. EXPENSE						
labor	\$0	AA	100.00%	\$0	0.00%	0.00
supplies	\$0	AA	100.00%	\$0	0.00%	0.00
labor-meter	\$54,766	AA	100.00%	\$54,766	0.00%	0.00
meter - supp & exp	\$13	AA	100.00%	\$13	0.00%	0.00
cust. install.	\$0	AA	100.00%	\$0	0.00%	0.00
misc.	\$4,046	AA	100.00%	\$4,046	0.00%	0.00
maint - struct. & improv.	\$17,394	AA	100.00%	\$17,394	0.00%	0.00
maint.- res & stdp	\$0	AA	100.00%	\$0	0.00%	0.00
maint. - mains	\$0	AA	100.00%	\$0	0.00%	0.00
maint. - service	\$150,952	AA	100.00%	\$150,952	0.00%	0.00
maint. - meters	\$147,528	AA	100.00%	\$147,528	0.00%	0.00
maint. - hydrants	\$0	AA	100.00%	\$0	0.00%	0.00
construction labor	(\$20)	AA	100.00%	(\$20)	0.00%	0.00
CUSTOMER ACCOUNT						
labor- meter read	\$115,130	BB	0.00%	\$0	100.00%	115,129.71
cust record labor	\$212,681	BB	0.00%	\$0	100.00%	212,680.73
cust records sup	\$101,805	BB	0.00%	\$0	100.00%	101,805.08
meter read supplies	\$2,662	BB	0.00%	\$0	100.00%	2,661.72
uncollectible	\$60,988	BB	0.00%	\$0	100.00%	60,987.84
ADMIN. & GENERAL						
salaries	\$90,486	CC	42.45%	\$38,412	57.55%	52,074.01
office supplies & expenses	\$52,432	CC	42.45%	\$22,258	57.55%	30,174.34
insurance (property/liability/w/	\$52,873	CC	42.45%	\$22,445	57.55%	30,428.01
OPEB Trust Contrib.	\$25,911	CC	42.45%	\$10,999	57.55%	14,911.71
employee benefits	\$335,643	DD	41.02%	\$137,694	58.98%	197,948.32
maint. - plant	\$29,372	CC	42.45%	\$12,468	57.55%	16,903.27
maint. - vehicles	\$12,258	CC	42.45%	\$5,203	57.55%	7,054.21
miscellaneous	\$3,224	CC	42.45%	\$1,368	57.55%	1,855.21
vacation, holiday, sick	\$101,245	DD	41.02%	\$41,535	58.98%	59,710.02
regul. exp.	\$29,247	CC	42.45%	\$12,415	57.55%	16,831.30
outside service	<u>\$18,291</u>	CC	42.45%	<u>\$7,765</u>	57.55%	<u>10,526.56</u>
SUBTOTAL O&M	\$1,618,923	CC	42.45%	\$687,241	57.55%	931,682.06
FIXED CHARGES						
Debt Service	\$44,837	JJ	100.00%	\$44,837	0.00%	0.00
O&M Reserve	\$9,457	CC	42.45%	\$4,015	57.55%	5,442.40
R&R Reserve	\$2,264	JJ	100.00%	\$2,264	0.00%	0.00
O&M Reserve	\$2,058	JJ	100.00%	\$2,058	0.00%	0.00
Infrastructure Replacement	\$111,140	JJ	100.00%	\$111,140	0.00%	0.00
Meter Replacement	\$0	JJ	100.00%	\$0	0.00%	0.00
CIP	\$36,096	JJ	100.00%	\$36,096	0.00%	0.00
Payroll Taxes	\$56,882	DD	41.02%	\$23,335	58.98%	33,546.42
PILOT	<u>\$251</u>	EE	48.41%	<u>\$122</u>	51.59%	<u>129.57</u>
SUBTOTAL FIXED	\$262,985			\$223,867		39,118.39
OPERATING REVENUE	\$57,362	EE	48.41%	\$27,771	51.59%	29,590.53
TOTAL EXPENSES	\$1,939,270	EE	48.41%	\$938,879	51.59%	1,000,390.97
Less:						
Miscellaneous Income	(\$19,835)	EE	48.41%	(\$9,603)	51.59%	(10,232.09)
Merchand & Jobbing	(\$1,367)	EE	48.41%	(\$662)	51.59%	(705.21)
6.9% of Water Prot Fee	(\$3,839)	EE	48.41%	(\$1,859)	51.59%	(1,980.53)
	=====			=====		=====
Total Revenue Requirement	\$1,914,229	EE	48.41%	\$926,756	51.59%	987,473.14

(1) See Sch. 5C

ALLOCATION OF CUSTOMER SERVICE LABOR EXPENSES

<u>EXPENSE ITEM</u>	<u>TOTAL</u>	<u>ALLOC.</u>	<u><-CUST. METER-></u>		<u><-CUST. BILL-></u>	
	<u>CUST. SERV.</u>	<u>SYMBOL (1)</u>	<u>%</u>	<u>AMOUNT</u>	<u>%</u>	<u>AMOUNT</u>
TRANS & DISTR. EXPENSE			-		-	
labor	0.00	AA	100.00%	\$0	0.00%	0.00
supplies	0.00	AA	100.00%	\$0	0.00%	0.00
labor-meter	51,207.23	AA	100.00%	\$51,207	0.00%	0.00
meter - supp & exp	0.00	AA	100.00%	\$0	0.00%	0.00
cust. install.	0.00	AA	100.00%	\$0	0.00%	0.00
misc.	0.00	AA	100.00%	\$0	0.00%	0.00
maint.- res & stdp	0.00	AA	100.00%	\$0	0.00%	0.00
maint. - mains	0.00	AA	100.00%	\$0	0.00%	0.00
maint. - service	113,447.63	AA	100.00%	\$113,448	0.00%	0.00
maint. - meters	48,962.86	AA	100.00%	\$48,963	0.00%	0.00
maint. - hydrants	0.00	AA	100.00%	\$0	0.00%	0.00
construction labor	0.00	AA	100.00%	\$0	0.00%	0.00
CUSTOMER ACCOUNT						
labor- meter read	108,840.28	BB	0.00%	\$0	100.00%	108,840.28
cust record labor	202,101.46	BB	0.00%	\$0	100.00%	202,101.46
cust records sup	0.00	BB	0.00%	\$0	100.00%	0.00
meter read supplies	0.00	BB	0.00%	\$0	100.00%	0.00
uncollectible	0.00	BB	0.00%	\$0	100.00%	0.00
ADMIN. & GENERAL						
salaries	86,737.42	CC	42.45%	\$36,820	57.55%	49,916.93
office supplies & expenses	0.00	CC	42.45%	\$0	57.55%	0.00
insurance (property/liability/w	0.00	CC	42.45%	\$0	57.55%	0.00
OPEB Trust Contrib.	0.00	DD	41.02%	\$0	58.98%	0.00
employee benefits	0.00	DD	41.02%	\$0	58.98%	0.00
maint. - plant	23,196.74	CC	42.45%	\$9,847	57.55%	13,349.60
maint. - vehicles	700.61	CC	42.45%	\$297	57.55%	403.20
miscellaneous	0.00	CC	42.45%	\$0	57.55%	0.00
vacation, holiday, sick	107,007.78	DD	41.02%	\$43,899	58.98%	63,108.79
regul. exp.	0.00	CC	42.45%	\$0	57.55%	0.00
outside service	<u>0.00</u>	CC	42.45%	<u>\$0</u>	57.55%	<u>0.00</u>
TOTAL LABOR	742,202.00	DD	41.02%	\$304,482	58.98%	437,720.27

(1) See Sch. 5C

ALLOCATION SYMBOLS - CUSTOMER SERVICE

<u>ALLOCATION SYMBOL</u>	<u>CUSTOM METER</u>	<u>CUSTOM BILL</u>	<u>TOTAL</u>
AA	100.00%	0.00%	100.00% Meters
BB	0.00%	100.00%	100.00% Billing
CC	42.45%	57.55%	100.00% O&M
DD	41.02%	58.98%	100.00% Labor
EE	48.41%	51.59%	100.00% All Expenses
JJ	100.00%	0.00%	100.00% Capital/Debt

DETERMINATION OF EQUIVALENT METERS

<u>METER SIZE (IN)</u>	<u>NUMBER</u>	<u>EQUIVALENCY FACTOR (1)</u>	<u>EQUIV. 5/8 IN. METERS</u>	<u>DEMAND FACTOR (2)</u>	<u>DEMAND EQUIVLNTS</u>
5/8 & 3/4	22,085	1.00	22,085	1.00	22,085
1	3,651	1.80	6,572	1.67	6,085
1 1/2	333	3.30	1,099	3.33	1,110
2	510	4.60	2,346	5.33	2,720
3	12	6.30	76	10.67	128
4	92	9.60	883	16.67	1,533
6	96	16.90	1,622	33.33	3,200
>8	<u>72</u>	29.60	<u>2,131</u>	53.33	<u>3,840</u>
TOTALS	26,851		36,814		40,701

(1) Based on prior KCWA dockets

(2) Based on rated capacity of meter sizes

DETERMINATION OF PROPOSED SERVICE & DEMAND CHARGES

SERVICE CHARGES

BILLING CHARGE

CUST. BILLING ALLOC. (1)	=	\$987,473	=	
NUMBER OF BILLINGS		108,752		\$9.08 PER BILLING

METER CHARGE

CUST. METER ALLOC. (1,3)	=	\$913,979	=	
NO. EQUIV. METERS (2)		36,814		\$24.83 / EQ. METER/YR

TOTAL SERVICE CHARGES

<u>QUARTERLY ACCOUNTS</u>				<u>MONTHLY ACCOUNTS</u>		
<u>METER SIZE (IN)</u>	<u>METER CHARGE</u>	<u>BILLING CHARGE</u>	<u>TOTAL CHARGE</u>	<u>METER CHARGE</u>	<u>BILLING CHARGE</u>	<u>TOTAL CHARGE</u>
5/8 & 3/4	\$6.21	\$9.08	\$15.29	\$2.07	\$9.08	\$11.15
1	\$11.17	\$9.08	\$20.25	\$3.72	\$9.08	\$12.80
1 1/2	\$20.48	\$9.08	\$29.56	\$6.83	\$9.08	\$15.91
2	\$28.55	\$9.08	\$37.63	\$9.52	\$9.08	\$18.60
3	\$39.10	\$9.08	\$48.18	\$13.03	\$9.08	\$22.11
4	\$59.58	\$9.08	\$68.66	\$19.86	\$9.08	\$28.94
6	\$104.89	\$9.08	\$113.97	\$34.96	\$9.08	\$44.04
>8	\$183.72	\$9.08	\$192.80	\$61.24	\$9.08	\$70.32

(1) See Sch. 5A

(2) See Sch. 5D

(3) Less allocation of Service Maintenance Costs to Private Fire Service - see Sch. 4B and less

DEMAND SURCHARGE

DEMAND COSTS (4)	=	\$500,000	=	
NO. DEMAND EQUIVS (2)		40,701		\$12.28 / DEMAND EQ./YR

TOTAL DEMAND SURCHARGES

<u>METER SIZE (IN)</u>	<u>QUARTERLY CHARGE</u>	<u>MONTHLY CHARGE</u>
5/8 & 3/4	\$3.06	\$1.02
1	\$5.13	\$1.71
1 1/2	\$10.23	\$3.41
2	\$16.38	\$5.46
3	\$32.76	\$10.92
4	\$51.18	\$17.06
6	\$102.36	\$34.12
>8	\$163.80	\$54.60

(4) Share of fixed costs allocated based on meter capacity ratios

Costs to be recovered \$500,000

**ALLOCATION OF GENERAL WATER EXPENSES TO
BASE AND EXTRA CAPACITY**

EXPENSE ITEM	TOTAL	ALLOC.	BASE	EXTRA CAP.-MAX DAY		EXTRA CAP.-PEAK HR		
	GEN'L WATER	SYMBOL (1)	%	AMOUNT	%	AMOUNT	%	AMOUNT
SOURCE OF SUPPLY								
maint of wells/supply study	\$39,800	aa	100.00%	\$39,800	0.00%	\$0	0.00%	\$0
purchased water	\$4,287,884	aa	100.00%	\$4,287,884	0.00%	\$0	0.00%	\$0
PUMPING OPERATIONS								
fuel for pumping	\$23,959	aa	100.00%	\$23,959	0.00%	\$0	0.00%	\$0
power	\$765,834	aa	100.00%	\$765,834	0.00%	\$0	0.00%	\$0
labor-pumping	\$68,513	pp	62.64%	\$42,917	37.36%	\$25,597	0.00%	\$0
pumping expense	\$0	pp	62.64%	\$0	37.36%	\$0	0.00%	\$0
maint. - structures & improv	\$69,021	pp	62.64%	\$43,235	37.36%	\$25,786	0.00%	\$0
diesel oil	\$0	pp	62.64%	\$0	37.36%	\$0	0.00%	\$0
maint. - equip	\$46,967	pp	62.64%	\$29,420	37.36%	\$17,547	0.00%	\$0
WATER TREATMENT								
chemicals	\$162,097	aa	100.00%	\$162,097	0.00%	\$0	0.00%	\$0
labor	\$193,175	aa	100.00%	\$193,175	0.00%	\$0	0.00%	\$0
operating / Mishnock	\$69,165	aa	100.00%	\$69,165	0.00%	\$0	0.00%	\$0
maint. - water treat equip	\$18,561	aa	100.00%	\$18,561	0.00%	\$0	0.00%	\$0
maint. - structure	\$688	aa	100.00%	\$688	0.00%	\$0	0.00%	\$0
TRANS & DISTR. EXPENSE								
storage facilities exp.	\$0	dd	0.00%	\$0	0.00%	\$0	100.00%	\$0
labor	\$18,872	bb	53.30%	\$10,059	46.70%	\$8,813	0.00%	\$0
supplies	\$84,944	bb	53.30%	\$45,275	46.70%	\$39,669	0.00%	\$0
labor-meter	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
meter - supp & exp	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
cust. install.	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
misc.	\$6,799	ff	51.90%	\$3,529	45.41%	\$3,087	2.70%	\$183
maint - struct. & improv.	\$29,232	ff	51.90%	\$15,170	45.41%	\$13,274	2.70%	\$788
maint. - res & stdp	\$16,014	dd	0.00%	\$0	0.00%	\$0	100.00%	\$16,014
maint. - mains	\$473,448	bb	53.30%	\$252,348	46.70%	\$221,100	0.00%	\$0
maint. - service	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
maint. - meters	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
maint. - hydrants	\$419	aa	100.00%	\$419	0.00%	\$0	0.00%	\$0
construction labor	(\$33)	ff	51.90%	(\$17)	45.41%	(\$15)	2.70%	(\$1)
CUSTOMER ACCOUNT								
labor- meter read	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
cust record labor	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
cust records sup	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
meter read supplies	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
W/P Reimbursement	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
ADMIN. & GENERAL								
salaries	\$345,580	gg	88.70%	\$306,534	10.73%	\$37,067	0.57%	\$1,979
office supplies & expenses	\$200,247	gg	88.70%	\$177,621	10.73%	\$21,479	0.57%	\$1,147
insurance (property/liability/wc)	\$201,930	gg	88.70%	\$179,115	10.73%	\$21,659	0.57%	\$1,157
OPEB Trust Contrib.	\$44,597	hh	75.53%	\$33,684	22.98%	\$10,250	1.49%	\$664
employee benefits	\$577,699	hh	75.53%	\$436,325	22.98%	\$132,775	1.49%	\$8,598
maint. - plant	\$112,176	gg	88.70%	\$99,501	10.73%	\$12,032	0.57%	\$642
maint. - vehicles	\$46,814	gg	88.70%	\$41,525	10.73%	\$5,021	0.57%	\$268
miscellaneous	\$12,312	gg	88.70%	\$10,921	10.73%	\$1,321	0.57%	\$71
vacation, holiday, sick	\$174,260	hh	75.53%	\$131,615	22.98%	\$40,051	1.49%	\$2,593
regul. exp.	\$111,698	gg	88.70%	\$99,077	10.73%	\$11,981	0.57%	\$640
outside service	<u>\$69,858</u>	gg	88.70%	<u>\$61,965</u>	10.73%	<u>\$7,493</u>	0.57%	<u>\$400</u>
SUBTOTAL O&M	\$8,272,531		91.65%	\$7,581,400	7.93%	\$655,988	0.42%	\$35,143

**ALLOCATION OF GENERAL WATER EXPENSES TO
BASE AND EXTRA CAPACITY**

EXPENSE ITEM	TOTAL	ALLOC. SYMBOL (1)	BASE		EXTRA CAP.-MAX DAY		EXTRA CAP.-PEAK HR	
	GEN'L WATER		%	AMOUNT	%	AMOUNT	%	AMOUNT
FIXED CHARGES								
Debt Service	\$1,703,232	jj	60.52%	\$1,030,815	32.93%	\$560,804	6.55%	\$111,613
O&M Reserve	\$36,118	gg	88.70%	\$32,037	10.73%	\$3,874	0.57%	\$207
R&R Reserve	\$86,002	jj	60.52%	\$52,049	32.93%	\$28,317	6.55%	\$5,636
Renewal & Replacement - Equip	\$78,184	jj	60.52%	\$47,318	32.93%	\$25,743	6.55%	\$5,123
Infrastructure Replacement	\$4,221,920	ii	60.52%	\$2,555,152	32.93%	\$1,390,103	6.55%	\$276,664
Meter Replacement	\$2,000,000	mm	100.00%	\$2,000,000	0.00%	\$0	0.00%	\$0
CIP	\$1,371,200	ii	60.52%	\$829,866	32.93%	\$451,479	6.55%	\$89,855
Payroll Taxes	\$97,903	hh	75.53%	\$73,944	22.98%	\$22,502	1.49%	\$1,457
PILOT	\$18,008	ll	44.60%	\$8,032	25.01%	\$4,504	30.39%	\$5,472
SUBTOTAL FIXED	\$9,612,566			\$6,629,212	25.88%	\$2,487,326	5.16%	\$496,028
OPERATING REVENUE	\$545,148	kk	79.46%	\$433,147	17.58%	\$95,810	2.97%	\$16,190
TOTAL EXPENSES	\$18,430,244	kk	79.46%	\$14,643,759	17.58%	\$3,239,124	2.97%	\$547,361
Less:								
Miscellaneous Income	(\$188,506)	kk	79.46%	(\$149,778)	17.58%	(\$33,130)	2.97%	(\$5,598)
Interest Income	(\$20,674)	kk	79.46%	(\$16,426)	17.58%	(\$3,633)	2.97%	(\$614)
Merchand & Jobbing	(\$12,992)	kk	79.46%	(\$10,323)	17.58%	(\$2,283)	2.97%	(\$386)
6.9% of Water Prot Fee	(\$36,487)	kk	79.46%	(\$28,991)	17.58%	(\$6,413)	2.97%	(\$1,084)
	=====			=====		=====		=====
Total Revenue Requirement	\$18,171,585	kk	79.46%	\$14,438,241	17.58%	\$3,193,664	2.97%	\$539,679
Less: Demand Surcharge Rev	(\$500,000)	jj	60.52%	(\$302,606)	32.93%	(\$164,629)	6.55%	(\$32,765)
Required From Metered Rates	\$17,671,585			\$14,135,636		\$3,029,035		\$506,914
Less: Meter replace. costs	(\$2,000,000)	mm	100.00%	(\$2,000,000)	0.00%	\$0	0.00%	\$0
Net After Meter Replacement	\$15,671,585			\$12,135,636		\$3,029,035		\$506,914
(1) See Sch. 6B				77.44%		19.33%		3.23%

**ALLOCATION OF GENERAL WATER LABOR EXPENSE TO
BASE AND EXTRA CAPACITY**

<u>EXPENSE ITEM</u>	<u>TOTAL</u>		<u>BASE</u>		<u>EXTRA CAP.-MAX DAY</u>		<u>EXTRA CAP.-PEAK HR</u>	
	<u>GEN'L WATER</u>	<u>ALLOC. SYMBOL (1)</u>	<u>%</u>	<u>AMOUNT</u>	<u>%</u>	<u>AMOUNT</u>	<u>%</u>	<u>AMOUNT</u>
PUMPING OPERATIONS								
labor-pumping	\$64,881	pp	62.64%	\$40,641	37.36%	\$24,239	0.00%	\$0
maint. - structures & improv	\$61,710	pp	62.64%	\$38,655	37.36%	\$23,055	0.00%	\$0
maint. - equip	\$30,903	pp	62.64%	\$19,358	37.36%	\$11,545	0.00%	\$0
WATER TREATMENT								
labor	\$184,200	aa	100.00%	\$184,200	0.00%	\$0	0.00%	\$0
TRANS & DISTR. EXPENSE								
labor	\$0	bb	53.30%	\$0	46.70%	\$0	0.00%	\$0
maint.- res & stdp	\$13,851	dd	0.00%	\$0	0.00%	\$0	100.00%	\$13,851
maint. - mains	\$315,016	bb	53.30%	\$167,903	46.70%	\$147,112	0.00%	\$0
maint. - hydrants	\$184	aa	100.00%	\$184	0.00%	\$0	0.00%	\$0
CUSTOMER ACCOUNT								
labor- meter read	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
cust record labor	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
cust records sup	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
meter read supplies	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
uncollectible	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
ADMIN. & GENERAL								
salaries	\$331,265	gg	88.70%	\$293,836	10.73%	\$35,532	0.57%	\$1,897
maint. - plant	\$88,592	gg	88.70%	\$78,582	10.73%	\$9,503	0.57%	\$507
maint. - vehicles	\$2,676	gg	88.70%	\$2,373	10.73%	\$287	0.57%	\$15
miscellaneous	\$0	gg	88.70%	\$0	10.73%	\$0	0.57%	\$0
vacation, holiday, sick	\$184,179	hh	75.53%	\$139,107	22.98%	\$42,331	1.49%	\$2,741
regul. exp.	\$0	gg	88.70%	\$0	10.73%	\$0	0.57%	\$0
outside service	\$0	gg	88.70%	\$0	10.73%	\$0	0.57%	\$0
TOTAL LABOR	\$1,277,456	hh	75.53%	\$964,840	22.98%	\$293,604	1.49%	\$19,012

(1) See Sch. 6B

ALLOCATION SYMBOLS - GENERAL WATER

ALLOCATION SYMBOL	BASE %	EXTRA CAPACITY		TOTAL	
		MAX DAY %	PEAK HOUR %		
aa	100.00%	0.00%	0.00%	100.00%	Supply & Treatment
bb	53.30%	46.70%	0.00%	100.00%	T&D Mains
cc	0.00%	0.00%	0.00%	0.00%	Meters
dd	0.00%	0.00%	100.00%	100.00%	Storage
ee	0.00%	0.00%	0.00%	0.00%	Not Used
ff	51.90%	45.41%	2.70%	100.00%	Misc. T&D
gg	88.70%	10.73%	0.57%	100.00%	Direct O&M plus 50% Purch Water
hh	75.53%	22.98%	1.49%	100.00%	Labor
ii	60.52%	32.93%	6.55%	100.00%	IFR - same as capital
jj	60.52%	32.93%	6.55%	100.00%	Debt/Capital
kk	79.46%	17.58%	2.97%	100.00%	All Expenses
ll	44.60%	25.01%	30.39%	100.00%	PILOT
pp	62.64%	37.36%	0.00%	100.00%	Pumping Facilities
mm	100.00%	0.00%	0.00%	100.00%	Meter costs just to small meter class base

Symbol bb

	Gal/Min	%
Average Day	5,552	53.33%
Max Day Increment	4,858	46.67%
Maximum Day	10,410	100.00%

Symbol jj

Item	Amount (1)	Symbol	BASE	EXTRA CAPACITY	
				MAX DAY	PEAK HOUR
Source of Supply	\$1,832,333	aa	\$1,832,333	\$0	\$0
Pumping Plant	\$8,370,946	pp	\$5,243,561	\$3,127,386	\$0
Water Treat. Plant	\$21,947,129	aa	\$21,947,129	\$0	\$0
T&D Storage	\$7,272,426	dd	\$0	\$0	\$7,272,426
T&D Mains	\$71,548,289	bb	\$38,135,238	\$33,413,051	\$0
T&D Hydrants	\$6,812	aa	\$6,812	\$0	\$0
T&D Meters	\$0	cc	\$0	\$0	\$0
General Plant	\$2,426,232	jj	\$1,468,382	\$798,858	\$158,992
General Structures	\$568,990	jj	\$344,359	\$187,345	\$37,286
Total	\$113,973,156		\$68,977,813	\$37,526,639	\$7,468,704
Percent			60.52%	32.93%	6.55%

(1) See Sch. 3B

Symbol ll

Item	Amount (1)	Symbol	BASE	EXTRA CAPACITY	
				MAX DAY	PEAK HOUR
Storage	\$5,443	dd	\$0	\$0	\$5,443
Office	\$959	kk	\$762	\$169	\$28
PS/Wells	\$11,605	pp	\$7,270	\$4,336	\$0
Total	\$18,008		\$8,032	\$4,504	\$5,472
Percent			44.60%	25.01%	30.39%

(1) See Sch. 3B

Symbol pp

Item	%	Symbol	BASE	EXTRA CAPACITY	
				MAX DAY	PEAK HOUR
Supply Wells	20.00%	aa	20.00%	0.00%	0.00%
Distribution	80.00%	bb	42.64%	37.36%	0.00%
Total	1	pp	62.64%	37.36%	0.00%

**ALLOCATION OF GENERAL WATER EXPENSES
TO CUSTOMER CLASSES**

Class Demands

CUSTOMER CLASS	AVERAGE DEMANDS		MAX DAY EXTRA CAPACITY			
	(GALS/DAY)	PERCENT	FACTOR [1]	OTAL GAL/DAY	XTRA GAL/DAY	PERCENT
Small	6,024,134	90.49%	2.7	16,265,161	10,241,027	96.83%
Medium	136,733	2.05%	2	273,466	136,733	1.29%
Large	<u>496,732</u>	<u>7.46%</u>	1.4	<u>695,425</u>	<u>198,693</u>	<u>1.88%</u>
Total	6,657,599	100.00%		17,234,052	10,576,453	100.00%

CUSTOMER CLASS	AVERAGE DEMANDS		PEAK HOUR EXTRA CAPACITY			
	(GALS/DAY)	PERCENT	FACTOR	OTAL GAL/DAY	XTRA GAL/DAY	PERCENT
Small	6,024,134	90.49%	3.4	20,482,055	4,216,894	96.48%
Medium	136,733	2.05%	2.4	328,159	54,693	1.25%
Large	<u>496,732</u>	<u>7.46%</u>	1.6	<u>794,771</u>	<u>99,346</u>	<u>2.27%</u>
Total	6,657,599	100.00%		21,604,985	4,370,933	100.00%

[1] - Described in the April, 1992 Cost of Service Study and as used in the Dockets # 2098 through 4067

Allocation of Costs to Classes

CUSTOMER CLASS	BASE COSTS		MAX. DAY EXTRA CAPACITY		PEAK HR. EXTRA CAPACITY		TOTAL AMOUNT
	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	
Small *	90.49%	\$12,980,940	96.83%	\$2,932,971	96.48%	\$489,050	\$16,402,961
Medium	2.05%	\$249,240	1.29%	\$39,159	1.25%	\$6,343	\$294,743
Large	<u>7.46%</u>	<u>\$905,455</u>	<u>1.88%</u>	<u>\$56,904</u>	<u>2.27%</u>	<u>\$11,522</u>	<u>\$973,881</u>
Total	100.00%	\$14,135,636	100.00%	\$3,029,035	100.00%	\$506,914	\$17,671,585

* Adjusted to include all meter replacement costs in small class rate.

METERED WATER RATES

Small (5/8-2" meters)

Total Expense (2)	\$16,402,961	=	
<hr/>			
Metered Sales (HCF) (1)	2,939,584	=	\$5.5800

Medium (3&4" meters)

Total Expense (2)	\$294,743	=	
<hr/>			
Metered Sales (HCF) (1)	66,721	=	\$4.4180

Large (6" & up meters)

Total Expense (2)	\$973,881	=	
<hr/>			
Metered Sales (HCF) (1)	242,389	=	\$4.0180

- (1) See Sch 2
(2) See Sch 7

COMPARISON TO CURRENT RATES

		<u>Current</u>	<u>Proposed</u>	<u>\$ Change</u>	<u>% Change</u>
<u>METERED RATES</u>					
	Small (5/8-2" meters)	\$5.254	\$5.580	\$0.326	6.20%
	Medium (3&4" meters)	\$4.476	\$4.418	(\$0.058)	-1.30%
	Large (6" & up meters)	\$3.816	\$4.018	\$0.202	5.29%
<u>SERVICE CHARGES</u>					
Quarterly	5/8 & 3/4	\$10.26	\$15.29	\$5.030	49.03%
	1	\$13.57	\$20.25	\$6.680	49.23%
	1 1/2	\$19.78	\$29.56	\$9.780	49.44%
	2	\$25.17	\$37.63	\$12.460	49.50%
	3	\$32.20	\$48.18	\$15.980	49.63%
	4	\$45.86	\$68.66	\$22.800	49.72%
	6	\$76.08	\$113.97	\$37.890	49.80%
	8 & up	\$126.66	\$192.80	\$66.140	52.22%
	Monthly	5/8 & 3/4	\$7.51	\$11.15	\$3.640
1		\$8.61	\$12.80	\$4.190	48.66%
1 1/2		\$10.67	\$15.91	\$5.240	49.11%
2		\$12.47	\$18.60	\$6.130	49.16%
3		\$14.82	\$22.11	\$7.290	49.19%
4		\$19.37	\$28.94	\$9.570	49.41%
6		\$29.44	\$44.04	\$14.600	49.59%
8 & up		\$46.97	\$70.32	\$23.350	49.71%
<u>DEMAND SURCHARGE</u>					
Quarterly	5/8 & 3/4	\$0.00	\$3.06		
	1	\$0.00	\$5.13		
	1 1/2	\$0.00	\$10.23		
	2	\$0.00	\$16.38		
	3	\$0.00	\$32.76		
	4	\$0.00	\$51.18		
	6	\$0.00	\$102.36		
	8 & up	\$0.00	\$163.80		
Monthly	5/8 & 3/4	\$0.00	\$1.02		
	1	\$0.00	\$1.71		
	1 1/2	\$0.00	\$3.41		
	2	\$0.00	\$5.46		
	3	\$0.00	\$10.92		
	4	\$0.00	\$17.06		
	6	\$0.00	\$34.12		
	8 & up	\$0.00	\$54.60		

COMPARISON TO CURRENT RATES

<u>FIRE CHARGES</u>		<u>Current</u>	<u>Proposed</u>	<u>\$ Change</u>	<u>% Change</u>
<u>Fire Service (per quarter)</u>					
Public	/hydrant	\$139.33	\$251.22	\$111.890	80.31%
	/bill	\$6.12	\$9.08	\$2.960	48.37%
Private (per quarter)					
	4 in	\$55.69	\$95.89	\$40.200	72.19%
	6 in	\$150.09	\$261.25	\$111.160	74.06%
	8 in	\$312.94	\$546.47	\$233.530	74.62%
	10 in	\$557.88	\$975.49	\$417.610	74.86%
	12 in	\$897.35	\$1,570.10	\$672.750	74.97%
	hydrant	\$150.09	\$261.25	\$111.160	74.06%

IMPACT OF PROPOSED RATES

METER SIZE	QUARTERLY USE - CU FT	CURRENT RATES	----- PROPOSED ----->		
			NEW BILL	\$ INCREASE	% INCREASE
Small					
5/8	1,500	\$89.07	\$102.05	\$12.98	14.6%
5/8	2,000	\$115.34	\$129.95	\$14.61	12.7%
5/8	2,500	\$141.61	\$157.85	\$16.24	11.5%
5/8	3,500	\$194.15	\$213.65	\$19.50	10.0%
5/8	4,000	\$220.42	\$241.55	\$21.13	9.6%
5/8	5,000	\$272.96	\$297.35	\$24.39	8.9%
5/8	6,000	\$325.50	\$353.15	\$27.65	8.5%
5/8	6,666	\$360.49	\$390.31	\$29.82	8.3%
5/8	8,000	\$430.58	\$464.75	\$34.17	7.9%
5/8	10,000	\$535.66	\$576.35	\$40.69	7.6%
5/8	12,000	\$640.74	\$687.95	\$47.21	7.4%
5/8	14,000	\$745.82	\$799.55	\$53.73	7.2%
5/8	15,000	\$798.36	\$855.35	\$56.99	7.1%
5/8	20,000	\$1,061.06	\$1,134.35	\$73.29	6.9%
5/8	25,000	\$1,323.76	\$1,413.35	\$89.59	6.8%
1	30,000	\$1,589.77	\$1,699.38	\$109.61	6.9%
1	40,000	\$2,115.17	\$2,257.38	\$142.21	6.7%
1	46,666	\$2,465.40	\$2,629.34	\$163.94	6.6%
1	75,000	\$3,954.07	\$4,210.38	\$256.31	6.5%
2	100,000	\$5,279.17	\$5,634.01	\$354.84	6.7%
2	200,000	\$10,533.17	\$11,214.01	\$680.84	6.5%
2	300,000	\$15,787.17	\$16,794.01	\$1,006.84	6.4%
2	400,000	\$21,041.17	\$22,374.01	\$1,332.84	6.3%
2	600,000	\$31,549.17	\$33,534.01	\$1,984.84	6.3%
Medium					
3	200,000	\$8,984.20	\$8,916.94	(\$67.26)	-0.7%
3	400,000	\$17,936.20	\$17,752.94	(\$183.26)	-1.0%
3	600,000	\$26,888.20	\$26,588.94	(\$299.26)	-1.1%
4	800,000	\$35,853.86	\$35,463.84	(\$390.02)	-1.1%
4	1,000,000	\$44,805.86	\$44,299.84	(\$506.02)	-1.1%
4	1,200,000	\$53,757.86	\$53,135.84	(\$622.02)	-1.2%
Large					
6	400,000	\$15,340.08	\$16,288.33	\$948.25	6.2%
6	600,000	\$22,972.08	\$24,324.33	\$1,352.25	5.9%
6	800,000	\$30,604.08	\$32,360.33	\$1,756.25	5.7%
6	1,200,000	\$45,868.08	\$48,432.33	\$2,564.25	5.6%
6	1,333,333	\$50,956.07	\$53,789.65	\$2,833.58	5.6%
8	2,000,000	\$76,446.66	\$80,716.60	\$4,269.94	5.6%
8	5,000,000	\$190,926.66	\$201,256.60	\$10,329.94	5.4%
8	10,000,000	\$381,726.66	\$402,156.60	\$20,429.94	5.4%
Municipal Fire Service	400 hydrants	\$55,738.12	\$100,497.08	\$44,758.96	80.3%
Private Fire Service	3 Inch Service	\$150.09	\$261.25	\$111.16	74.1%

REVENUE RECONCILIATION

Service Charge:		<----- Current ----->		<----- Proposed ----->	
<u>Quarterly</u>	<u>Number</u>	<u>Rate</u>	<u>Revenue</u>	<u>Rate</u>	<u>Revenue</u>
5/8 & 3/4	88,320	\$10.26	\$906,163	\$15.29	\$1,350,413
1	14,600	\$13.57	\$198,122	\$20.25	\$295,650
1 1/2	1,296	\$19.78	\$25,635	\$29.56	\$38,310
2	2,008	\$25.17	\$50,541	\$37.63	\$75,561
3	44	\$32.20	\$1,417	\$48.18	\$2,120
4	356	\$45.86	\$16,326	\$68.66	\$24,443
6	356	\$76.08	\$27,084	\$113.97	\$40,573
8 & up	268	\$126.66	\$33,945	\$192.80	\$51,670
<u>Monthly</u>					
5/8 & 3/4	60	\$7.51	\$451	\$11.15	\$669
1	12	\$8.61	\$103	\$12.80	\$154
1 1/2	108	\$10.67	\$1,152	\$15.91	\$1,718
2	96	\$12.47	\$1,197	\$18.60	\$1,786
3	12	\$14.82	\$178	\$22.11	\$265
4	36	\$19.37	\$697	\$28.94	\$1,042
6	84	\$29.44	\$2,473	\$44.04	\$3,699
8 & up	60	\$46.97	\$2,818	\$70.32	\$4,219
<u>Demand Surcharge:</u>					
<u>Quarterly</u>	<u>Number</u>	<u>Rate</u>	<u>Revenue</u>	<u>Rate</u>	<u>Revenue</u>
5/8 & 3/4	88,320	\$0.00	\$0	\$3.06	\$270,259
1	14,600	\$0.00	\$0	\$5.13	\$74,898
1 1/2	1,296	\$0.00	\$0	\$10.23	\$13,258
2	2,008	\$0.00	\$0	\$16.38	\$32,891
3	44	\$0.00	\$0	\$32.76	\$1,441
4	356	\$0.00	\$0	\$51.18	\$18,220
6	356	\$0.00	\$0	\$102.36	\$36,440
8 & up	268	\$0.00	\$0	\$163.80	\$43,898
<u>Monthly</u>					
5/8 & 3/4	60	\$0.00	\$0	\$1.02	\$61
1	12	\$0.00	\$0	\$1.71	\$21
1 1/2	108	\$0.00	\$0	\$3.41	\$368
2	96	\$0.00	\$0	\$5.46	\$524
3	12	\$0.00	\$0	\$10.92	\$131
4	36	\$0.00	\$0	\$17.06	\$614
6	84	\$0.00	\$0	\$34.12	\$2,866
8 & up	60	\$0.00	\$0	\$54.60	\$3,276

REVENUE RECONCILIATION

		<----- Current ----->		<----- Proposed ----->	
	<u>Number</u>	<u>Rate</u>	<u>Revenue</u>	<u>Rate</u>	<u>Revenue</u>
Consumption Charge:	100/cu.ft.				
Proposed					
Small (5/8-2" meters)	2,939,584	\$5.25	\$15,444,574	\$5.58	\$16,402,879
Medium (3&4" meters)	66,721	\$4.48	\$298,644	\$4.42	\$294,774
Large (6" & up meters)	242,389	\$3.82	\$924,957	\$4.02	\$973,920
Fire Protection:					
Public Hydrants	2,349	\$557.32	\$1,309,145	\$1,004.88	\$2,360,463
# bills	32	\$6.12	\$196	\$9.08	\$291
Private Fire Protection					
4 in	16	\$222.76	\$3,564	\$383.56	\$6,137
6 in	95	\$600.36	\$57,034	\$1,045.00	\$99,275
8 in	16	\$1,251.76	\$20,028	\$2,185.88	\$34,974
10 in	1	\$2,231.52	\$2,232	\$3,901.96	\$3,902
12 in	1	\$3,589.40	\$3,589	\$6,280.40	\$6,280
hydrant	122	\$600.36	\$73,244	\$1,045.00	\$127,490
			=====		=====
Total			\$19,405,511		\$22,701,845
Plus: Misc Revenues			\$323,122		\$323,122
			=====		=====
Pro Forma Revenue			\$19,728,633		\$23,024,967
Required Revenue			\$23,023,351		\$23,023,351
Difference			-3,294,718		\$1,616
					0.01%
Increase in Revenues					\$3,296,334
Increase in Rate Revenues					\$3,296,334
Percent Increase in Total Revenues					16.71%
Percent increase in Rate Revenues					16.99%

SUMMARY OF COST OF SERVICE

	<u>Test Year</u>	<u>Adjustments</u>	<u>Rate Year</u>
Revenues			
Service Charges	\$1,268,303	\$623,989	\$1,892,292
Demand Surcharge:	\$0	\$499,168	\$499,168
Metered Rates	\$16,668,176	\$1,003,397	\$17,671,573
Fire Protection	\$1,469,032	\$1,169,780	\$2,638,812
Miscellaneous	<u>\$323,122</u>	<u>\$0</u>	<u>\$323,122</u>
<i>Total Revenue</i>	\$19,728,633	\$3,296,334	\$23,024,967
Expenses			
<u>O&M</u>			
Supply	\$4,999,638	(\$650,207)	\$4,349,431
Pumping	\$812,335	\$212,805	\$1,025,140
Treatment	\$310,572	\$135,344	\$445,916
T&D	\$1,164,782	\$139,882	\$1,304,664
Customer	\$470,456	\$22,809	\$493,265
Admin	<u>\$2,612,530</u>	<u>\$320,960</u>	<u>\$2,933,490</u>
Total O&M	\$10,370,313	\$181,594	\$10,551,907
<u>Fixed Charges</u>			
Debt Service	\$2,179,500	(\$1,000)	\$2,178,500
Reserves and Coverage	\$77,607	\$81,768	\$159,375
Renewal & Replacement	\$100,000	\$0	\$100,000
Infrastructure Replacement	\$5,400,000	\$0	\$5,400,000
Meter Replacement	\$0	\$2,000,000	\$2,000,000
CIP	\$0	\$1,753,819	\$1,753,819
Payroll Taxes	\$154,417	\$21,204	\$175,621
PILOT	<u>\$23,123</u>	<u>\$0</u>	<u>\$23,123</u>
Total Fixed	\$7,934,647	\$3,855,791	\$11,790,438
<u>Operating Revenue</u>	<u>\$583,313</u>	<u>\$97,694</u>	<u>\$681,007</u>
<i>Total Expenses</i>	\$18,888,273	\$4,135,079	\$23,023,351

ALTERNATIVE SEASONAL RATE

Allocation of Costs to Classes (Sch. 7)

CUSTOMER CLASS	BASE COSTS		MAX. DAY EXTRA CAPACITY		PEAK HR. EXTRA CAPACITY		TOTAL AMOUNT
	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	
Small	90.49%	\$12,980,940	96.83%	\$2,932,971	96.48%	\$489,050	\$16,402,961
Medium	2.05%	\$249,240	1.29%	\$39,159	1.25%	\$6,343	\$294,743
Large	7.46%	\$905,455	1.88%	\$56,904	2.27%	\$11,522	\$973,881
Total	100.00%	\$14,135,636	100.00%	\$3,029,035	100.00%	\$506,914	\$17,671,585

Billing By Quarter (100 cubic feet)

	<u>Jul - Sep</u>	<u>Oct - Dec</u>	<u>Jan - Mar</u>	<u>Apr - June</u>	<u>Total</u>
Small (5/8-2" meters)	971,193	737,084	614,424	616,883	2,939,584
Medium (3&4" meters)	22,046	18,484	11,854	14,337	66,721
Large (6" & up meters)	72,117	62,491	51,025	56,756	242,389
Total	1,065,356	818,059	677,303	687,976	3,248,694
% of Total	32.8%	25.2%	20.8%	21.2%	

ALTERNATIVE SEASONAL RATE

<u>Seasonal Surcharge</u>	<u><--- Variable Alternative ---></u>			<u>Uniform Alt.</u>
	<u>Small</u>	<u>Medium</u>	<u>Large</u>	<u>Total</u>
<u>Maximum Day Costs</u>				
Percent	5.00%	8.50%	12.50%	
Amount	\$146,649	\$3,329	\$7,113	\$157,090
<u>Peak Hour Costs</u>				
Percent	50.00%	50.00%	50.00%	
Amount	\$244,525	\$3,171	\$5,761	\$253,457
Surcharge set to equal percentage of Peak Hour Costs =				
Plus Percentage of Maximum Day Costs =				
Amount of Surcharge =	\$391,173	\$6,500	\$12,874	\$410,547
Summer Period Billings July-Sep (100 cu ft) =	971,193	22,046	72,117	1,065,356
Surcharge (\$/100 cu ft)	\$0.403	\$0.295	\$0.179	\$0.385

A. Adjustment to Non-seasonal Rates - Variable

CUSTOMER CLASS	ORIGINAL ALLOCATION	LESS SURCH. REVENUES *	REVISED ALLOCATION	SALES (100 CU FT)	BASE RATE (\$/100 CU FT)
Small	\$16,402,961	\$391,391	\$16,011,570	2,939,584	\$5.447
Medium	\$294,743	\$6,504	\$288,239	66,721	\$4.321
Large	\$973,881	\$12,909	\$960,972	242,389	\$3.965
Total	\$17,671,585	\$410,803	\$17,260,781		

* Based on rate rounded to nearest \$0.001

Alternative Seasonal Metered Rates - Variable

	<u>Current</u>	<u>Cost of Service</u>	<u>Seasonal Alternative</u>			
			<u>Jul - Sep</u>	<u>Base</u>	<u>\$ Diff.</u>	<u>% Diff</u>
<u>Metered Rates</u>						
Small (5/8-2" meters)	\$5.254	\$5.580	\$5.850	\$5.447	\$0.403	7.40%
Medium (3&4" meters)	\$4.476	\$4.418	\$4.616	\$4.321	\$0.295	6.83%
Large (6" & up meters)	\$3.816	\$4.018	\$4.144	\$3.965	\$0.179	4.51%

B. Adjustment to Non-seasonal Rates - Uniform - *NOT RECOMMENDED*

CUSTOMER CLASS	ORIGINAL ALLOCATION	LESS SURCH. REVENUES *	REVISED ALLOCATION	SALES (100 CU FT)	BASE RATE (\$/100 CU FT)
Small	\$16,402,961	\$373,909	\$16,029,052	2,939,584	\$5.453
Medium	\$294,743	\$8,488	\$286,255	66,721	\$4.291
Large	\$973,881	\$27,765	\$946,116	242,389	\$3.904
Total	\$17,671,585	\$410,162	\$17,261,423		

* Based on rate rounded to nearest \$0.001

Alternative Seasonal Metered Rates - Uniform

	<u>Current</u>	<u>Cost of Service</u>	<u>Seasonal Alternative</u>			
			<u>Jul - Sep</u>	<u>Base</u>	<u>\$ Diff.</u>	<u>% Diff</u>
<u>Metered Rates</u>						
Small (5/8-2" meters)	\$5.254	\$5.580	\$5.838	\$5.453	\$0.385	7.06%
Medium (3&4" meters)	\$4.476	\$4.418	\$4.676	\$4.291	\$0.385	8.97%
Large (6" & up meters)	\$3.816	\$4.018	\$4.289	\$3.904	\$0.385	9.86%

ALTERNATIVE PUBLIC FIRE CHARGES

Because of collection issues, The Authority is asking the Commission to consider allowing KCWA to charge all its customers a direct public fire charge similar to what is being done in Providence and Pawtucket where the municipalities have opted for this.

Total Public Fire Allocation (Sch. 4B) =	\$2,360,423
Meter Demand Equivalents (Sch. 5D) =	40,701
Cost/Equivalent	\$57.99 /yr \$14.50 /qurt \$4.83 /month

TOTAL PUBLIC FIRE CHARGES (to be added to service charges)

<u>METER SIZE (IN)</u>	<u>DEMAND EQUIVS (1)</u>	<u>QUARTRLY CHARGE</u>	<u>MONTHLY CHARGE</u>	<u>ANNUAL REVENUE</u>
5/8 & 3/4	1.00	\$14.50	\$4.84	\$1,280,930
1	1.67	\$24.17	\$8.06	\$352,979
1 1/2	3.33	\$48.33	\$16.11	\$64,376
2	5.33	\$77.33	\$25.78	\$157,754
3	10.67	\$154.66	\$51.56	\$7,424
4	16.67	\$241.65	\$80.55	\$88,927
6	33.33	\$483.29	\$161.10	\$185,584
>8	53.33	\$773.26	\$257.76	<u>\$222,699</u>
				\$2,360,672

(1) See Sch. 5D

COMPARISON OF ALTERNATIVE FIRE CHARGES TO CURRENT RATES

		<u>Current</u>	<u>Proposed</u>	<u>\$ Change</u>	<u>% Change</u>
<u>METERED RATES</u>					
	Small (5/8-2" meters)	\$5.254	\$5.580	\$0.326	6.20%
	Medium (3&4" meters)	\$4.476	\$4.418	(\$0.058)	-1.30%
	Large (6" & up meters)	\$3.816	\$4.018	\$0.202	5.29%
<u>SERVICE CHARGES PLUS NEW FIRE CHARGES</u>					
Quarterly	5/8 & 3/4	\$10.26	\$29.79	\$19.530	190.35%
	1	\$13.57	\$44.42	\$30.850	227.34%
	1 1/2	\$19.78	\$77.89	\$58.110	293.78%
	2	\$25.17	\$114.96	\$89.790	356.73%
	3	\$32.20	\$202.84	\$170.640	529.94%
	4	\$45.86	\$310.31	\$264.450	576.65%
	6	\$76.08	\$597.26	\$521.180	685.04%
	8 & up	\$126.66	\$966.06	\$839.400	662.72%
Monthly	5/8 & 3/4	\$7.51	\$15.99	\$8.480	112.92%
	1	\$8.61	\$20.86	\$12.250	142.28%
	1 1/2	\$10.67	\$32.02	\$21.350	200.09%
	2	\$12.47	\$44.38	\$31.910	255.89%
	3	\$14.82	\$73.67	\$58.850	397.10%
	4	\$19.37	\$109.49	\$90.120	465.26%
	6	\$29.44	\$205.14	\$175.700	596.81%
	8 & up	\$46.97	\$328.08	\$281.110	598.49%
<u>DEMAND SURCHARGE</u>					
Quarterly	5/8 & 3/4	\$0.00	\$3.06		
	1	\$0.00	\$5.13		
	1 1/2	\$0.00	\$10.23		
	2	\$0.00	\$16.38		
	3	\$0.00	\$32.76		
	4	\$0.00	\$51.18		
	6	\$0.00	\$102.36		
	8 & up	\$0.00	\$163.80		
Monthly	5/8 & 3/4	\$0.00	\$1.02		
	1	\$0.00	\$1.71		
	1 1/2	\$0.00	\$3.41		
	2	\$0.00	\$5.46		
	3	\$0.00	\$10.92		
	4	\$0.00	\$17.06		
	6	\$0.00	\$34.12		
	8 & up	\$0.00	\$54.60		

COMPARISON TO CURRENT RATES

FIRE CHARGES

Fire Service (per quarter)

	<u>Current</u>	<u>Proposed</u>	<u>\$ Change</u>	<u>% Change</u>
Public				
/hydrant	\$139.33	\$0.00	(\$139.330)	-100.00%
/bill	\$6.12	\$0.00	(\$6.120)	-100.00%

Private (per quarter)

4 in	\$55.69	\$95.89	\$40.200	72.19%
6 in	\$150.09	\$261.25	\$111.160	74.06%
8 in	\$312.94	\$546.47	\$233.530	74.62%
10 in	\$557.88	\$975.49	\$417.610	74.86%
12 in	\$897.35	\$1,570.10	\$672.750	74.97%
hydrant	\$150.09	\$261.25	\$111.160	74.06%

IMPACT OF PROPOSED RATES

METER SIZE	QUARTERLY USE - CU FT	CURRENT RATES	PROPOSED		
			NEW BILL	\$ INCREASE	% INCREASE
Small					
5/8	1,500	\$89.07	\$116.55	\$27.48	30.9%
5/8	2,000	\$115.34	\$144.45	\$29.11	25.2%
5/8	2,500	\$141.61	\$172.35	\$30.74	21.7%
5/8	3,500	\$194.15	\$228.15	\$34.00	17.5%
5/8	4,000	\$220.42	\$256.05	\$35.63	16.2%
5/8	5,000	\$272.96	\$311.85	\$38.89	14.2%
5/8	6,000	\$325.50	\$367.65	\$42.15	12.9%
5/8	6,666	\$360.49	\$404.81	\$44.32	12.3%
5/8	8,000	\$430.58	\$479.25	\$48.67	11.3%
5/8	10,000	\$535.66	\$590.85	\$55.19	10.3%
5/8	12,000	\$640.74	\$702.45	\$61.71	9.6%
5/8	14,000	\$745.82	\$814.05	\$68.23	9.1%
5/8	15,000	\$798.36	\$869.85	\$71.49	9.0%
5/8	20,000	\$1,061.06	\$1,148.85	\$87.79	8.3%
5/8	25,000	\$1,323.76	\$1,427.85	\$104.09	7.9%
1	30,000	\$1,589.77	\$1,723.55	\$133.78	8.4%
1	40,000	\$2,115.17	\$2,281.55	\$166.38	7.9%
1	46,666	\$2,465.40	\$2,653.51	\$188.11	7.6%
1	75,000	\$3,954.07	\$4,234.55	\$280.48	7.1%
2	100,000	\$5,279.17	\$5,711.34	\$432.17	8.2%
2	200,000	\$10,533.17	\$11,291.34	\$758.17	7.2%
2	300,000	\$15,787.17	\$16,871.34	\$1,084.17	6.9%
2	400,000	\$21,041.17	\$22,451.34	\$1,410.17	6.7%
2	600,000	\$31,549.17	\$33,611.34	\$2,062.17	6.5%
Medium					
3	200,000	\$8,984.20	\$9,071.60	\$87.40	1.0%
3	400,000	\$17,936.20	\$17,907.60	(\$28.60)	-0.2%
3	600,000	\$26,888.20	\$26,743.60	(\$144.60)	-0.5%
4	800,000	\$35,853.86	\$35,705.49	(\$148.37)	-0.4%
4	1,000,000	\$44,805.86	\$44,541.49	(\$264.37)	-0.6%
4	1,200,000	\$53,757.86	\$53,377.49	(\$380.37)	-0.7%
Large					
6	400,000	\$15,340.08	\$16,771.62	\$1,431.54	9.3%
6	600,000	\$22,972.08	\$24,807.62	\$1,835.54	8.0%
6	800,000	\$30,604.08	\$32,843.62	\$2,239.54	7.3%
6	1,200,000	\$45,868.08	\$48,915.62	\$3,047.54	6.6%
6	1,333,333	\$50,956.07	\$54,272.94	\$3,316.87	6.5%
8	2,000,000	\$76,446.66	\$81,489.86	\$5,043.20	6.6%
8	5,000,000	\$190,926.66	\$202,029.86	\$11,103.20	5.8%
8	10,000,000	\$381,726.66	\$402,929.86	\$21,203.20	5.6%
Municipal Fire Service	400 hydrants	\$55,738.12	\$0.00	(\$55,738.12)	-100.0%
Private Fire Service	6 Inch Service	\$150.09	\$261.25	\$111.16	74.1%

REVENUE RECONCILIATION

Service Charge Plus Fire Charge:		<----- Current ----->		<----- Proposed ----->	
<u>Quarterly</u>	<u>Number</u>	<u>Rate</u>	<u>Revenue</u>	<u>Rate</u>	<u>Revenue</u>
5/8 & 3/4	88,320	\$10.26	\$906,163	\$29.79	\$2,631,053
1	14,600	\$13.57	\$198,122	\$44.42	\$648,532
1 1/2	1,296	\$19.78	\$25,635	\$77.89	\$100,945
2	2,008	\$25.17	\$50,541	\$114.96	\$230,840
3	44	\$32.20	\$1,417	\$202.84	\$8,925
4	356	\$45.86	\$16,326	\$310.31	\$110,470
6	356	\$76.08	\$27,084	\$597.26	\$212,625
8 & up	268	\$126.66	\$33,945	\$966.06	\$258,904
<u>Monthly</u>					
5/8 & 3/4	60	\$7.51	\$451	\$15.99	\$959
1	12	\$8.61	\$103	\$20.86	\$250
1 1/2	108	\$10.67	\$1,152	\$32.02	\$3,458
2	96	\$12.47	\$1,197	\$44.38	\$4,260
3	12	\$14.82	\$178	\$73.67	\$884
4	36	\$19.37	\$697	\$109.49	\$3,942
6	84	\$29.44	\$2,473	\$205.14	\$17,232
8 & up	60	\$46.97	\$2,818	\$328.08	\$19,685
Demand Surcharge:					
<u>Quarterly</u>	<u>Number</u>	<u>Rate</u>	<u>Revenue</u>	<u>Rate</u>	<u>Revenue</u>
5/8 & 3/4	88,320	\$0.00	\$0	\$3.06	\$270,259
1	14,600	\$0.00	\$0	\$5.13	\$74,898
1 1/2	1,296	\$0.00	\$0	\$10.23	\$13,258
2	2,008	\$0.00	\$0	\$16.38	\$32,891
3	44	\$0.00	\$0	\$32.76	\$1,441
4	356	\$0.00	\$0	\$51.18	\$18,220
6	356	\$0.00	\$0	\$102.36	\$36,440
8 & up	268	\$0.00	\$0	\$163.80	\$43,898
<u>Monthly</u>					
5/8 & 3/4	60	\$0.00	\$0	\$1.02	\$61
1	12	\$0.00	\$0	\$1.71	\$21
1 1/2	108	\$0.00	\$0	\$3.41	\$368
2	96	\$0.00	\$0	\$5.46	\$524
3	12	\$0.00	\$0	\$10.92	\$131
4	36	\$0.00	\$0	\$17.06	\$614
6	84	\$0.00	\$0	\$34.12	\$2,866
8 & up	60	\$0.00	\$0	\$54.60	\$3,276

REVENUE RECONCILIATION

	<u>Number</u>	<u><----- Current -----></u>		<u><----- Proposed -----></u>	
		<u>Rate</u>	<u>Revenue</u>	<u>Rate</u>	<u>Revenue</u>
Consumption Charge:	100/cu.ft.				
Proposed					
Small (5/8-2" meters)	2,939,584	\$5.25	\$15,444,574	\$5.58	\$16,402,879
Medium (3&4" meters)	66,721	\$4.48	\$298,644	\$4.42	\$294,774
Large (6" & up meters)	242,389	\$3.82	\$924,957	\$4.02	\$973,920
Fire Protection:					
Public Hydrants	2,349	\$557.32	\$1,309,145	\$0.00	\$0
# bills	32	\$6.12	\$196	\$0.00	\$0
Private Fire Protection					
4 in	16	\$222.76	\$3,564	\$383.56	\$6,137
6 in	95	\$600.36	\$57,034	\$1,045.00	\$99,275
8 in	16	\$1,251.76	\$20,028	\$2,185.88	\$34,974
10 in	1	\$2,231.52	\$2,232	\$3,901.96	\$3,902
12 in	1	\$3,589.40	\$3,589	\$6,280.40	\$6,280
hydrant	122	\$600.36	\$73,244	\$1,045.00	\$127,490
			=====		=====
Total			\$19,405,511		\$22,701,764
Plus: Misc Revenues			\$323,122		\$323,122
			=====		=====
Pro Forma Revenue			\$19,728,633		\$23,024,885
Required Revenue			\$23,023,351		\$23,023,351
Difference			-3,294,718		\$1,534
					0.01%
Increase in Revenues					\$3,296,253
Increase in Rate Revenues					\$3,296,253
Percent Increase in Total Revenues					16.71%
Percent increase in Rate Revenues					16.99%

PROPOSED STEP INCREASES

<u>YEAR 1 - FY 2018</u>		
Rate Year (FY 2017) Revenue Requirements =		\$22,700,230
Step Increases for 2018		
New Debt (see Sch. 1D)	\$	4,750
Salaries (full yr) (See Sch. 1D)	\$	45,914
Inflation (non-labor O&M)	\$	254,471
Additional Benefits	\$	22,805
Additional Meter Program Costs	\$	-
Additional CIP Costs	\$	-
IFR Increase	\$	533,333
Rev. Stabiliz @ 1.5%	\$	12,919
	\$	874,192
FY 2018 Revenue Requirement =		\$23,574,422
Proposed Step Increase for FY 2018		3.85%

<u>YEAR 2 - FY 2019</u>		
FY 2018 Revenue Requirement (above) =		\$23,574,422
Step Increases for 2019		
New Debt (see Sch. 1D)	\$	500
Salaries (2.0% Increase from FY 2018)	\$	46,832
Inflation (non-labor O&M)	\$	254,471
Additional Benefits	\$	23,289
Additional Meter Program Costs	\$	600,000
Additional CIP Costs	\$	-
IFR Increase	\$	533,333
Rev. Stabiliz @ 1.5%	\$	21,876
	\$	1,480,302
FY 2019 Revenue Requirement =		\$25,054,724
Proposed Step Increase for FY 2019		6.28%

PROPOSED STEP RATES

	Current	Proposed (FY2017)	Step Increase (FY 2018)	Step Increase (FY 19)
<u>Metered Rates</u>				
Small (5/8-2" meters)	\$5.254	\$5.580	\$5.795	\$6.159
Medium (3&4" meters)	\$4.476	\$4.418	\$4.588	\$4.876
Large (6" & up meters)	\$3.816	\$4.018	\$4.173	\$4.435
<u>Service Charges</u>				
<u>Quarterly</u>				
5/8 & 3/4	\$10.26	\$15.29	\$15.88	\$16.88
1	\$13.57	\$20.25	\$21.03	\$22.35
1 1/2	\$19.78	\$29.56	\$30.70	\$32.63
2	\$25.17	\$37.63	\$39.08	\$41.53
3	\$32.20	\$48.18	\$50.04	\$53.18
4	\$45.86	\$68.66	\$71.30	\$75.78
6	\$76.08	\$113.97	\$118.36	\$125.79
8 & up	\$126.66	\$192.80	\$200.22	\$212.80
<u>Monthly</u>				
5/8 & 3/4	\$7.51	\$11.15	\$11.58	\$12.31
1	\$8.61	\$12.80	\$13.29	\$14.13
1 1/2	\$10.67	\$15.91	\$16.52	\$17.56
2	\$12.47	\$18.60	\$19.32	\$20.53
3	\$14.82	\$22.11	\$22.96	\$24.40
4	\$19.37	\$28.94	\$30.05	\$31.94
6	\$29.44	\$44.04	\$45.74	\$48.61
8 & up	\$46.97	\$70.32	\$73.03	\$77.61
<u>Demand Charges</u>				
<u>Quarterly</u>				
5/8 & 3/4	\$0.00	\$3.06	\$3.18	\$3.38
1	\$0.00	\$5.13	\$5.33	\$5.66
1 1/2	\$0.00	\$10.23	\$10.62	\$11.29
2	\$0.00	\$16.38	\$17.01	\$18.08
3	\$0.00	\$32.76	\$34.02	\$36.16
4	\$0.00	\$51.18	\$53.15	\$56.49
6	\$0.00	\$102.36	\$106.30	\$112.98
8 & up	\$0.00	\$163.80	\$170.11	\$180.79
<u>Monthly</u>				
5/8 & 3/4	\$0.00	\$1.02	\$1.06	\$1.13
1	\$0.00	\$1.71	\$1.78	\$1.89
1 1/2	\$0.00	\$3.41	\$3.54	\$3.76
2	\$0.00	\$5.46	\$5.67	\$6.03
3	\$0.00	\$10.92	\$11.34	\$12.05
4	\$0.00	\$17.06	\$17.72	\$18.83
6	\$0.00	\$34.12	\$35.43	\$37.66
8 & up	\$0.00	\$54.60	\$56.70	\$60.26
<u>Fire Service</u>				
Public \$/hydrant/quarter	\$139.33	\$251.22	\$260.89	\$277.28
\$/bill	\$6.12	\$9.08	\$9.43	\$10.02
<u>Private (\$/quarter)</u>				
4 in	\$55.69	\$95.89	\$99.58	\$105.84
6 in	\$150.09	\$261.25	\$271.31	\$288.35
8 in	\$312.94	\$546.47	\$567.51	\$603.15
10 in	\$557.88	\$975.49	\$1,013.06	\$1,076.67
12 in	\$897.35	\$1,570.10	\$1,630.56	\$1,732.95
hydrant	\$150.09	\$261.25	\$271.31	\$288.35

PROPOSED STEP RATES - ALT. FIRE CHARGES

	<u>Current</u>	<u>Proposed</u> <u>(FY2017)</u>	<u>Step Increase (FY</u> <u>2018)</u>	<u>Step Increase (FY</u> <u>19</u>
<u>Metered Rates</u>				
Small (5/8-2" meters)	\$5.254	\$5.580	\$5.79	\$6.16
Medium (3&4" meters)	\$4.476	\$4.418	\$4.59	\$4.88
Large (6" & up meters)	\$3.816	\$4.018	\$4.17	\$4.43
<u>Service Charges (including Public Fire Charges)</u>				
<u>Quarterly</u>				
5/8 & 3/4	\$10.260	\$29.79	\$30.94	\$32.88
1	\$13.570	\$44.42	\$46.13	\$49.03
1 1/2	\$19.780	\$77.89	\$80.89	\$85.97
2	\$25.170	\$114.96	\$119.39	\$126.88
3	\$32.200	\$202.84	\$210.65	\$223.88
4	\$45.860	\$310.31	\$322.26	\$342.50
6	\$76.080	\$597.26	\$620.26	\$659.21
8 & up	\$126.660	\$966.06	\$1,003.26	\$1,066.26
<u>Monthly</u>				
5/8 & 3/4	\$7.510	\$15.99	\$16.61	\$17.65
1	\$8.610	\$20.86	\$21.66	\$23.02
1 1/2	\$10.670	\$32.02	\$33.25	\$35.34
2	\$12.470	\$44.38	\$46.09	\$48.98
3	\$14.820	\$73.67	\$76.51	\$81.31
4	\$19.370	\$109.49	\$113.71	\$120.85
6	\$29.440	\$205.14	\$213.04	\$226.42
8 & up	\$46.970	\$328.08	\$340.71	\$362.11
<u>Demand Charges</u>				
<u>Quarterly</u>				
5/8 & 3/4	\$0.000	\$3.06	\$3.18	\$3.38
1	\$0.000	\$5.13	\$5.33	\$5.66
1 1/2	\$0.000	\$10.23	\$10.62	\$11.29
2	\$0.000	\$16.38	\$17.01	\$18.08
3	\$0.000	\$32.76	\$34.02	\$36.16
4	\$0.000	\$51.18	\$53.15	\$56.49
6	\$0.000	\$102.36	\$106.30	\$112.98
8 & up	\$0.000	\$163.80	\$170.11	\$180.79
<u>Monthly</u>				
5/8 & 3/4	\$0.000	\$1.02	\$1.06	\$1.13
1	\$0.000	\$1.71	\$1.78	\$1.89
1 1/2	\$0.000	\$3.41	\$3.54	\$3.76
2	\$0.000	\$5.46	\$5.67	\$6.03
3	\$0.000	\$10.92	\$11.34	\$12.05
4	\$0.000	\$17.06	\$17.72	\$18.83
6	\$0.000	\$34.12	\$35.43	\$37.66
8 & up	\$0.000	\$54.60	\$56.70	\$60.26
<u>Private (\$/quarter)</u>				
4 in	\$55.690	\$95.89	\$99.58	\$105.84
6 in	\$150.090	\$261.25	\$271.31	\$288.35
8 in	\$312.940	\$546.47	\$567.51	\$603.15
10 in	\$557.880	\$975.49	\$1,013.06	\$1,076.67
12 in	\$897.350	\$1,570.10	\$1,630.56	\$1,732.95
hydrant	\$150.090	\$261.25	\$271.31	\$288.35

**PRE-FILED TESTIMONY
OF
JO-ANN GERSHKOFF**

1 PRE-FILED TESTIMONY

2 JO-ANN M. GERSHKOFF

3
4 **Q. Please state your name and business address.**

5 A. My name is Jo-Ann Gershkoff. My current business address is 1072 Main Street, West
6 Warwick, Rhode Island 02893.

7
8 **Q. By whom are you employed and in what capacity? What is your previous
9 employment history?**

10 A. I am currently employed by Kent County Water Authority as the director of
11 administration and finance. Prior to joining Kent County Water Authority in 2008, I was
12 employed by the law firm of Tillinghast Licht LLP and its predecessor firms for 23 years.
13 I was the controller for Tillinghast Licht LLP.

14
15 **Q. Have you previously testified before State Regulatory Commissions concerning the
16 operations of Kent County Water Authority?**

17 A. No

18
19 **Q. What is your role in these proceedings?**

20 A. My testimony will provide an overview the Authority's financial performance for fiscal
21 year ended June 30, 2015 as well as a description of the operating and restricted bank
22 accounts maintained by the Authority.

23
24 **Q. Are the financial records of Kent County Water Authority maintained under your
25 supervision and control?**

26 A. Yes, as the director of administration and finance I am responsible for the Authority's
27 cash management, internal controls, budget preparation, accounting system integrity,
28 financial statement preparation based upon accrual basis of accounting, payroll
29 management, and employee benefits administration. I interface with trustees, vendors,
30 auditors, labor and municipal authorities. I oversee the customer service staff and front
31 office operation which includes customer billing, collections and reporting.

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Q. Are the records of Kent County Water authority audited on an annual basis?

A. Yes they are.

Q. By whom?

A. Fiscal year ended June 30, 2015 audit was performed by Hague, Sahady & Co., P.C., 126 President Avenue Fall River, MA 02720. Mary Sahady was the partner in charge.
Fiscal year ended June 30, 2014 audit was performed by Marcum, LLP, 155 South Main Street, Suite 100. Providence, RI 02903. James Wilkinson was the partner in charge.
Fiscal year ended June 30, 2013, 2012, 2011, 2010 and 2009 audits were performed by Braver Group, 155 South Main Street, Suite 100, Providence, RI 02903, James Wilkinson was the partner in charge. Braver Group is the predecessor to Marcum, LLP.

Q. Have you participated in the preparation of this rate filing?

A. I have provided financial and statistical data to our rate consultant.

Q. What are the results of the Authority’s financial activity for fiscal year ended June 30, 2015?

A. Highlights from fiscal year ended June 30, 2015 audit report presented as follows:
1. The Authority implemented the following pronouncements issued by the GASB:
i. **GASB Statement No. 68**, Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27
ii. **GASB Statement No. 69**, Government Combinations and Disposals of Government Operations
iii. **GASB Statement No. 71**, Pension Transition for Contributions Made Subsequent to the Measurement Date – an amendment of GASB Statement No. 68
iv. The implementation GASB Statement No. 68 and 71 made a very significant change to reporting of pension expense and the related liability. For the first time, the Authority recognized its long-term obligation for pension benefits as a liability. The implementation of this Statement

1 expanded pension related note disclosures and required supplementary
 2 information. Implementation of GASB Statement No. 69 had no impact
 3 for the Authority.

- 4 2. Net position totaled \$141.3 million, an increase of \$6.7 million or 5.00% from the
 5 previous year. Total assets were \$163.6 million, an increase of \$3.5 million or 2.19%
 6 from the previous year. Total liabilities decreased by \$2.9 million or 12.38% mainly
 7 as a result of debt service payments.
- 8 3. Total operating expenses in FY 2015 increased \$1,092,795 over the prior year. The
 9 increase was most notably due to an increase in purchased water of nearly \$750
 10 thousand due to one of well fields being refurbished and is not operational. It is
 11 expected to be fully refurbished in 2016. An increase in depreciation expense also
 12 contributed to the increase over the last year.
- 13 4. FYE 2015 long term debt obligation was in the amount of \$14,495,000 for 2012
 14 Series "A" General Revenue Bond. Approximately 1.4 million was paid on principal
 15 and \$723,000 was paid on interest. The Authority maintains a S&P rating of A+ and
 16 Moody's rating of Aa3.
- 17 5. Non-operating expenses decreased \$377,046 as a result of increased capitalized
 18 interest expense.
- 19 6. FYE 2015 ended with an increase in net position of \$6,728,295. The following
 20 summarizes revenue, expenses and change in net position with comparison to FYE
 21 2014:

	<u>2015</u>	<u>2014</u>	<u>Difference</u>
Operating Revenue	\$19,690,167	\$19,436,006	\$254,161
Operating Expenses	13,177,797	12,085,002	1,092,795
Net Operating Income	6,512,370	7,351,004	-838,634
Net Non-op. Income (Exp.)	215,925	592,971	-377,046
Increase in Net Position	6,728,295	7,943,975	-1,215,680
Net Position at Beginning of Yr.	134,550,701	126,606,726	7,943,975
Net Position at End of Year	\$141,278,996	\$134,550,701	\$6,728,295

- 22 7. The Authority is required to establish and maintain rates and expenses at levels so
 23 that net revenues will equal 125% of the general revenue bond debt service
 24 requirement. The Authority has met the 125% debt service coverage requirement in
 25 each year since 2001.

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Q. How many bank accounts are maintained by the Authority?

- A. Bank of New York Mellon: 12 accounts
- Washington Trust Bank: 2 accounts
- Citizens Bank: 1 account

Q. Briefly describe the purpose and function of the accounts maintained at Washington Trust Bank and Citizens Bank.

A. All payments received are deposited into the Authority’s deposit account at Washington Trust Bank. Bi-weekly the collected available balance in the deposit account is transferred to the revenue account at Bank of New York Mellon in accordance with the bond resolution. The second account maintained at Washington Trust Bank is the checking account for operation and maintenance of the Authority. Funds are transferred from the revenue account to the checking account at the beginning of each month for operating expenses. The account maintained at Citizens Bank is a payroll conduit account funded by the checking account weekly. Payroll liability is deducted automatically each week. Employee 457 contributions are also remitted from this account.

Q. Briefly describe the funding sources, function and purpose of each account maintained at Bank of New York Mellon.

A. Bank of New York Mellon is the appointed trustee under the general bond resolution. The majority of the accounts with Bank of New York Mellon were established in accordance with the general bond resolution of Kent County Water Authority adopted July 6, 1994. The general resolution is the controlling document for the Authority’s outstanding bond debt. Below is a brief description of the accounts held by Bank of New York Mellon:

- 1) Project Fund 2012 – this account was established in accordance with the general bond resolution for bonds proceeds to pay the cost of financed capital improvement projects. Account balance as of 3/31/2016: \$1,008,735.
- 2) Revenue Fund – this account was established in accordance with the general bond resolution section 504. Funds collected by the Authority are deposited daily in the

1 deposit account held by Washington Trust Bank and on a biweekly basis the collected
 2 available are transferred to the revenue account at Bank of New York Mellon. Funds
 3 are disbursed from the revenue account monthly to all required restricted accounts
 4 held by the trustee. Funds are transferred monthly to the checking account held by
 5 Washington Trust Bank for current month operating expenses. Water protection
 6 payments are disbursed from revenue account. The resolution states the remaining
 7 balance (after all monthly obligations are met) may be used for the succeeding
 8 month's debt service or transferred to a general fund held by the Authority. The
 9 Authority leaves any remaining funds in the revenue account. Account balance as of
 10 3/31/16: \$1,708,546.

- 11 3) Infrastructure Replacement Fund – this account was established in conformity with
 12 federal and state laws as well as Commission regulations. The source of funding is
 13 rate revenue and costs paid are associated with replacing deteriorating infrastructure.
 14 Funds are transferred to this account from the revenue account on a monthly basis
 15 providing collections are sufficient to do so. Annual required funding of \$5,400,000
 16 became effective November 1, 2008 per docket 3942. Actual annual funding is as
 17 follows:

18	November 2008:	440,448	(9,552 deficit)
19	December 2008:	200,000	(250,000 deficit)
20	CY 2009:	4,700,000	(700,000 deficit)
21	CY 2010:	4,950,000	(450,000 deficit)
22	CY 2011:	5,850,000	(450,000 overage to make up for 2010 deficit)
23	CY 2012:	5,400,000	required funding met
24	CY 2013:	5,400,000	“ “ “
25	CY 2014:	5,400,000	“ “ “
26	CY 2015:	5,400,000	“ “ “
27	CY 2016:	1,350,000	“ “ “

28 Account balance as of 3/31/2016: \$5,238,224.

- 29 4) Renewal and Replacement Fund - this account is funded \$100,000 per year for capital
 30 purchases such as computers, equipment and vehicles. Account balance as of 3/31/16:
 31 \$45,661.

1 5) Operating Revenue Allowance - this account was established by order of the Rhode
2 Island Public Utilities Commission (PUC) Docket No. 3942 and 4142 wherein the
3 Authority is required to deposit 1.5% of allowed annual rate revenue to be used in the
4 event allowed annual rate revenue, adjusted annually based on the annual change in
5 CPI for the Northeast and any changes in Providence Water pass through rates, falls
6 short a half a percent. In this event the Authority would seek full recovery of the
7 shortfall. The Authority has been depositing \$24,305 per month since May, 2010. The
8 Authority sought and was granted relief of \$607,077 in 2013. If the O.R.A account
9 balance exceeds 6% of allowed annual rate revenue the PUC will open a proceeding
10 to review rates. Account balance as of 3/31/16: \$1,119,438.

11 The remaining 1.5% of the O.R.A. is unrestricted therefore a separate bank account is
12 not necessary for these funds. These funds have been allocated specifically for payroll
13 increases and any balance remaining is used for general operating expenses. The
14 Commission ordered increases to be paid from unrestricted O.R.A. in 2008 and the
15 Supreme Court affirmed in June 2010. Payroll increases since 2008 have been
16 allocated annually to unrestricted O.R.A. accordingly. Restricted and unrestricted
17 O.R.A. activity is as follows:

18
19
20 6) 2004 Series A Debt Service Savings Account - this account was established to set
21 aside funds no longer required to pay principal and interest on 2004 general revenue
22 refunding bonds. The last debt service payment was made July 2014 for 2004 and the
23 Authority has been setting aside \$93,000 per month since October, 2014. \$93,000 is
24 the amount the Authority was transferring to the debt service fund at the end of the
25 loan amortization. In addition, \$133,000 was transferred to this account from 2004
26 debt service reserve after final payment was made. Account balance as of 3/31/16:
27 \$2,087,375.

28 7) Debt Service Savings Account 2012 Refunding - this account was established to set
29 aside the difference between 2012 debt service requirements and the amount we
30 would have paid if there were no refunding. The total savings from refunding is
31 \$5,443,495. We began depositing \$45,362 per month into this account in January of

1 2013 and the last deposit is scheduled to be made 7/15/2023. Account balance as of
2 3/31/16: \$1,769,919.

3 8) Renewal and Replacement Reserve – this account was established in accordance with
4 the general bond resolution section 512. The general purpose is if, at any time, the
5 amount on deposit in the debt service fund and debt service reserve and operation and
6 maintenance reserve is not sufficient to pay principal interest payment on the bonds
7 due, the trustee shall withdraw from renewal and replacement reserve fund and
8 deposit in debt service account to meet the deficiency. This fund may also be used
9 solely for a capital improvement payment if funds are unavailable in the project
10 account. The amount required in this account per section 609 is calculated as follows:
11 as of the last day of each fiscal year an amount equal to 1% of the depreciated value
12 of the system as shown on the annual audited financial statements of the authority for
13 the prior fiscal year. Account balance as of 3/31/16: \$1,376,525.

14 9) Operation and Maintenance Reserve Fund – this account was established in
15 accordance with the general bond resolution section 512. The general purpose is if, at
16 any time, the amounts on deposit in the debt service fund and debt service reserve and
17 renewal replacement reserve fund are not sufficient to pay principal interest payment
18 on the bonds due, the trustee shall withdraw from operation and maintenance reserve
19 fund and deposit in debt service account to meet the deficiency. This fund may be
20 used if there are insufficient funds to pay operation and maintenance expenses as
21 well. The amount required in this account per section 609 is calculated as follows: as
22 of the last business day of the fiscal year an amount equal to 25% of the amount
23 designed for operation and maintenance in the annual budget. Account balance as of
24 3/31/16: 2,639,337.

25 10) 2012 Debt Service Reserve – this account was established in accordance with the
26 general bond resolution. Account balance as of 3/31/16: \$1,799,909.

27 11) 2012 Debt Service Fund – this account was established in accordance with the
28 general bond resolution. Account balance as of 3/31/16: \$1,314,393

29 12) Renewal and Replacement (PUC) – this account was established to set aside funds
30 that were held in the revenue account. The amount transferred to the renewal and

1 replacement (PUC) represents the difference between revenue for rates established
2 and what was actually needed. Account balance as of 3/31/16: \$1,200,549.

3
4 **Q. What are the 10 Largest Water Users as of 6/30/15?**

5 A.

6 KENT COUNTY WATER AUTHORITY
7 10 LARGEST WATER USERS
8 AS OF JUNE 30, 2015

9

10	NAME	SERVICE LOCATION	TOWN OR CITY	WATER CONS.	BILL AMOUNT
11	1 AMGEN	40 TECHNOLOGY WAY	WG	12,431,586	\$496,198.29
12	2 KENT COUNTY MEMORIAL HOSPITAL	455 TOLLGATE ROAD	WAR	4,048,345	\$191,362.28
13	3 BRIARWOOD MEADOWS	940 QUAKER LANE	WAR	3,534,558	\$177,471.84
14	4 COMMERCE PARK	CENTRE OF NEW ENGLAND BLVD	COV	4,107,161	\$177,249.26
15	5 AMTROL INC.	1400 DIVISION ROAD	EG	2,550,063	\$134,181.68
16	6 WESTWOOD TRAILER PARK	RESERVOIR ROAD	COV	2,422,460	\$121,111.76
17	7 AIMCO WARWICK LLC	1 CEDAR POND DRIVE	WAR	2,351,000	\$90,228.80
18	8 COWESETT HILLS	3595 POST ROAD	WAR	1,566,000	\$75,757.34
19	9 EDENS & AVENT	1000 DIVISION STREET	EG	1,232,815	\$65,336.91
20	10 EQUITY RESIDENTIAL PROP TRUST	47 TANGLEWOOD DRIVE	WW	1,162,000	\$54,453.40

21
22
23
24

25 **Q. Does this conclude your testimony?**

26 A. Yes.

**PRE-FILED TESTIMONY
OF
THOMAS B. NICHOLSON**

1 Q. **Please State Your Name and Business Address.**

2 A. Thomas B. Nicholson, P.E.

3 President/Chief Engineer

4 C&E Engineering Partners, Inc.

5 342 Park Avenue

6 Woonsocket, RI 02895

7

8 Q. **By whom are you employed and what is the relevance to this hearing?**

9 A. I have been employed by C&E Engineering Partners, Inc. for 15 years and in that time
10 my firm has been responsible for numerous engineering projects for the Kent County
11 Water Authority (KCWA) including the development and updating of the KCWA
12 system-wide hydraulic model and preparation of the KCWA's Capital Improvement
13 Plans.

14

15 Q. **Mr. Nicholson you are being questioned as an expert witness by the Hearing
16 Officer. What qualifications do you possess that make you an expert witness in
17 this field?**

18 A. I have been a practicing water works engineer for over 30 years. Currently I am
19 employed as Chief Engineer/President of C&E Engineering Partners, Inc. (C&E). My
20 responsibilities at C&E include the management of major water supply, treatment,
21 transmission and distribution systems, the development of computerized hydraulic
22 models, as well as water supply management, water system infrastructure planning and
23 capital improvement programs for systems serving more than 100,000 customers.

24

25 After receiving my Bachelors of Science degree from Northeastern University in
26 Civil/Environmental Engineering and my Masters of Science degree from Worcester
27 Polytechnic Institute in Environmental Engineering, I began working in the civil and
28 environmental engineering consulting field. I have over 30 years of professional
29 engineering experience with private industry and with consulting firms serving
30 municipal and private clients in Rhode Island, Connecticut and Massachusetts. I am
31 also a licensed professional engineer in these States as well. I have worked as
32 KCWA's consultant for over 15 years and have become very familiar with the
33 KCWA's water system.

34

35 **Q. Have you testified previously before the RI Public Utilities Commission**
36 **concerning potable water related issues?**

37 A. Yes, I have prepared testimony for and testified before the RI Public Utilities
38 Commission on numerous occasions. Clients include Portsmouth Water and Fire
39 District, Prudence Island Utility Corporation, Pascoag Utility District and the
40 Pawtucket Water Supply Board.

41

42 **Q. You prepared a 5 year Capital Improvement Program (CIP) update for KCWA**
43 **in 2012. Could you please explain what a Capital Improvement Program is and**
44 **its purpose related to a water system?**

45 A. The KCWA's original CIP was prepared in 2001 and was completed to identify and
46 prioritize water system needs and improvements through 2005 and was updated in
47 2016 to identify needs through 2022. The CIP provides a program of capital
48 improvement projects for replacement of existing and installation of new infrastructure

49 that are necessary to improve the water system's function, operation and maintenance.

50

51 With the guidance of previous CIPs, the KCWA was able to schedule and complete
52 projects that would solve deficiencies in their water system. The previous projects
53 were necessary to improve and maintain an adequate level of customer service. The
54 2016 update remains consistent with the principles and goals of the KCWA and its
55 commitment to: providing a consistent source of high quality, potable water for public
56 consumption and fire protection; reducing overall short and long-term maintenance
57 costs; and coordinating improvements to comply with local and federal guidelines for
58 consistent management and operation of a public water supply system.

59

60 The CIP update consists of a system evaluation to produce a plan for installation of
61 new infrastructure necessary to improve the water system's operation and
62 maintenance. The update provides a systematic approach to implementing projected
63 short-term and long-term needs and requirements, such as improvements that are
64 required to enhance water supply, storage, pumping, treatment, transmission and
65 distribution systems that are necessary to meet regulators and service needs of the
66 water system.

67

68 The CIP includes estimated costs for the purpose of developing funding strategies and
69 their implementation. This includes estimated budget costs in consideration of
70 planning, design and construction. These cost estimates are necessary for the KCWA
71 to justify finance initiatives to fulfill the rate filing process required to provide ongoing
72 financing for both ongoing and planned capital projects. This process is intended to

73 ensure that sufficient funding can be made available throughout the ongoing life cycle
74 of the Capital Improvement Program.

75

76 **Q. What were the goals of the 5 Year Capital Improvement Update?**

77 A. A primary goal of the KCWA is to ensure that all water service customers are
78 provided with a safe, reliable and adequate supply of water. The CIP provides the
79 KCWA with a planning strategy to improve water supply efficiency, optimizing
80 withdrawal from existing and identified future sources, infrastructure redundancy and
81 identification of water system improvements necessary to meet existing and
82 anticipated future system needs.

83

84 The CIP was highlighted by the KCWA's continued efforts to improve water supply
85 capacity, treatment, pumping, storage, transmission, and distribution facilities. It is
86 necessary that capital-funded new facilities be planned and implemented in an orderly
87 manner to ensure that all current and future customers benefit from the proposed
88 improvements while assuring compliance with all State and Federal Safe Drinking
89 Water Standards.

90

91 The implementation of the CIP for the KCWA was premised upon the need to
92 eliminate or reduce existing deficiencies, the ability to fund projects, and the priority
93 of the projected requirements for facilities in order to ensure that the service customers
94 are supplied with an adequate quantity of high quality water.

95

96 The evaluation process considered locations within the distribution system which have

97 substandard flows and pressures. The KCWA acknowledges that this may be from
98 undersized or “aged” water mains, distances from supply sources or storage facilities,
99 customers previously serviced above limiting service elevations or operational
100 considerations with regard to capacity and limitations of pumping facilities. The
101 evaluation considered the viability and effectiveness of existing facilities and provided
102 recommendations (where applicable) for either upgrade or new facilities that are
103 necessary to meet current standards of service, maintain a high level of water quality
104 and supply reliability.

105
106 **Q. What were the 5 Year Capital Improvement Program’s Assessment and**
107 **Prioritization Criteria?**

108 A. The measure by which the water supply, transmission and distribution system was
109 assessed recognizes the standard practices for water works design, publications and
110 regulations including the following: Ten State Design Standards – Recommended
111 Guide for the Design of Water Works Facilities, American Water Works Association
112 Standards, Rhode Island Department of Health Regulations, regulations of the Rhode
113 Island Division of Public Utilities and Carriers (RIDPUC), prudent engineering
114 judgment and Regulations of the KCWA, as amended.

115
116 Areas of system deficiencies were identified and recommendations for system
117 improvements for both the short and five year planning horizons were developed.
118 Improvement projects that were deemed key to increasing the reliability and operation
119 of the water system were evaluated.

120

121 Prioritization Criteria were created to rate the relative importance of the recommended
122 projects. The rating criteria was based on a number of variables such as protection of
123 public health and safety, improving service conditions to consumers, regulatory
124 requirements and the ability to provide and maintain adequate levels of service to
125 existing and future customers. The prioritization criteria was used to rank the projects
126 in terms of relative importance for completion. This provided a way to determine
127 which projects should be done in any given year and aided in creating a general
128 schedule of projects over the five year span. Each recommended project was
129 classified as an Essential Project, a Necessary Project, or a Discretionary Project.

130

131 **Q. What is meant by the terms “Essential Projects”, “Necessary Projects”, and**
132 **“Discretionary Projects”?**

133 A. Essential Projects are projects that represent the highest priority of all capital projects.
134 Essential projects meet the following criteria: are deemed essential for providing
135 reliable water supply to meet current and/or projected consumer demands. These
136 typically include: projects involving supply, storage, transmission and distribution;
137 projects that are required by legislation, regulation, and/or for protecting the public
138 health and safety; or projects that are already under design or construction.

139

140 Necessary Projects are projects that must be completed, however the KCWA has some
141 control over when these should be completed. These generally include: projects which
142 increase water supply reliability and improve delivered water quality; or projects
143 which maintain or improve level of service goals and/or operating efficiencies within
144 the next five years.

145

146 Discretionary Projects are projects that should be implemented to improve the level of
147 service goals. The KCWA has a significant level of control as to when these projects
148 may be done. For example, these could include projects related to installation of
149 transmission or distribution mains required for redundancy, demolition of
150 infrastructure as part of an improvement project, etc.

151

152 **Q. What was the 5 Year Capital Improvement Program’s Evaluation Process?**

153 A. The evaluation of capital infrastructure projects looked at water system demands for
154 the current maximum day plus fire flow scenario and projected demands for the
155 planning period (through the year 2025). It was necessary to consider potential future
156 water demands in order to evaluate recommended CIP projects and their ability to
157 maintain customer service level goals throughout the planning period.

158

159 The water demands were based on population projections from Rhode Island
160 Statewide Planning in conjunction with information derived from the Comprehensive
161 Community Plans and Planners of the Towns and Cities that make up the KCWA
162 water system. The population projections included a 10 percent “allowance” for
163 additional “unplanned” growth within the service territory. The allowance accounted
164 for water demands that could occur from unanticipated growth, in-fill development,
165 weather conditions, or changes in water usage trends.

166

167 The evaluation included updating the KCWA computer hydraulic model to incorporate
168 all infrastructure and capital improvement projects which were completed by the

169 KCWA within the last five years. The projected water demands were input into the
170 hydraulic model and the model was used in the evaluation of the water supply and
171 distribution system to assess the potential need for each CIP project based on current and
172 future water demands. The hydraulic model simulations evaluated the effectiveness of
173 the water system with and without the recommended CIP projects to meet anticipated
174 consumer demands.

175

176 **Q. What are the projected costs for the 5 Year Capital Improvement Program's**
177 **recommended projects and how were they developed?**

178 A. Table 1 in the CIP report details the project costs and the breakdown of each
179 component. The cumulative total project costs for all recommended projects (except
180 the Infrastructure Replacement Projects) is \$45,620,000, which represents five years of
181 water system improvements. The Mishnock Water Treatment Plant High Service
182 Mains project is designated to be completed in fiscal year 2017. The fiscal year 2017
183 project has a total project cost of \$3,140,000. The Mishnock Water Treatment Plant
184 High Service Mains project is deemed an Essential Project.

185

186 The costs estimated for the CIP were based on current dollar value with an annual
187 escalation for inflation and were generated based upon the extent and size of the
188 particular capital improvement project. The construction cost estimate for each project
189 is presented as a distinct component which includes construction (does not include
190 design or contingency).

191

192 For purposes of updating budgeting costs in the future and in the fiscal year in which a

193 project is anticipated to take place, the Engineering News Record published
194 Construction Cost Index was used. The costs that were used were based on actual
195 construction costs for similar type projects that the KCWA recently publicly bid.

196

197 These cost estimates are intended to be used for planning and financing purposes and
198 should not be considered actual construction cost estimates. An engineer's opinion of
199 probable construction cost would be required after final construction designs have
200 been completed to account for current market and construction costs.

201

202 For purposes of developing design and related construction services costs, 15 percent
203 of the cost of the estimated construction cost was added to the project cost. Design
204 and related construction services costs include those costs associated with planning,
205 preliminary and final design; geotechnical investigations, surveying and permitting;
206 construction oversight related services and representation. This percentage is an
207 industry standard for water works projects of this type. A 20 percent contingency
208 for unanticipated and unforeseen costs was added to the project cost. An annual
209 inflation value of 4 percent compounded escalation factor was also incorporated into
210 the project cost.

211

212 **Q. Does this prefiled testimony constitute your opinions regarding the Rate Filing as**
213 **an expert duly qualified by the Hearing Officer?**

214 **A. Yes.**

215

216

217 **Q. Does this complete your Prefiled Testimony?**

218 A. Aside from new matters that may be raised during the proceedings, yes this completes
219 my testimony.

EXHIBITS

EXHIBIT 1

CHECK LIST OF REQUIRED INFORMATION OF WATER UTILITIES

Index and responses to Compliance

Item 2.4	Notice of Filing Proposed General Rate Changes
Response	Will be published in the Providence Journal upon Commission approval and provided to all customers by separate mailing, within the time frame required.
Item 2.5(a)	Current and Proposed Rate Schedules; Terms and Conditions
Response	Included in filing
Item 2.5(b)	Complete Direct Case with Testimony and Exhibits
Response	Original and nine copies filed
Item 2.5(c)(1)	Annual Reports to Commission
Response	FY 2014 & FY 2015 Filed previously with Commission
Item 2.5(c)(2)	FERC or FCC annual reports
Response	Not applicable
Item 2.5(c)(3)	FERC or FCC audit reports
Response	Not applicable
Item 2.5(c)(4)	SEC Annual 10K reports
Response	Not applicable
Item 2.5(c)(5)	Prospectuses issued during last two (2) years.
Response	Not applicable
Item 2.5(c)(6)	Annual Reports to Stockholders
Response	Not applicable
Item 2.5(c)(7)	Statement reconciling any significant differences between items shown in filing and in any of above reports.
Response	Not applicable

Index and responses to Compliance

Item 2.5(d)	Complete set of documents filed with the Attorney General at time of filing.
Response	Filed
Item 2.5(e)	Index of responses filed Section 2.4 through 2.10
Response	Attached
Item 2.6(a) & 2.9(a)	Cost of service schedules for the test year and the proposed rate year.
Response	For cost of service schedules, see testimony. We request the Commission to consider the test year Fiscal Year 2016, Ending June 30, 2016 even though it has been exceeded by 8 days past the nine (9) month requirement.
Item 2.6(b)	Rate Year
Response	Fiscal Year 2017, July 1, 2016 to June 30, 2017. We request the Commission to consider the rate year to begin with the Fiscal Year even though it will exceed the six (6) month requirement.
Item 2.6(c)	Adjustments to Test year
Response	Included in Testimony and Exhibits
Item 2.7	Attestation of Financial Data
Response	Included
Item 2.9(a)	Cost of Service Schedules
Response	Included in Testimony
Item 2.9(b)	Work papers supporting working capital allowance.
Response	Not applicable
Item 2.9(c)	Work papers supporting allocations of cost of service amounts among entities.
Response	Not applicable
Item 2.9(d)	Work papers detailing the test year and rate year revenues.
Response	Included in testimony
Item 2.9(e)	For each rate class, proposed rate change effects. Copy of actual bill.
Response	Actual bill sample is attached.

Index and responses to Compliance

Item 2.9(f)	Principal and Interest paid on Debt Service
Response	Included in filing.
Item 2.9(g)	Schedule of Lease payments
Response	Not applicable
Item 2.9(h)	Adjustment Clause revenue analysis
Response	Not applicable
Item 2.9(i)	Rate year Municipal Tax Expense, and prior three years.
Response	Not applicable in this filing. Payments in lieu of taxes are included in testimony.
Item 2.9(j)	Number of Employees and Overtime
Response	Included.
Item 2.9(k)	Summary of transactions with affiliated entities/funds
Response	Not applicable
Item 2.9(l)	(1) balance sheet (2) income statement (3) statement of changes in retained earnings
Response	Please see attached Audited Financial Statements for Fiscal Year ending 6/30/2015.
Item 2.9(m)	Summary of rate case expense incurred and projected.
Response	Included in testimony.
Item 2.9(n)	Information for preceding five years (1) unaccounted for water (2) loss on transmission of electricity or gas (3) utility's own use of water
Response	(1) Please see attached (2) Not applicable (3) Please see attached
Item 2.9(o)	Summary of the status of compliance and reporting required by prior Commission orders.
Response	KCWA is in compliance with all prior Commission orders and reporting.

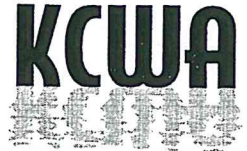
Index and responses to Compliance

39-3-12.1

Information required of water utility response attached as Exhibit 2.

KENT COUNTY WATER AUTHORITY
 1072 MAIN STREET
 P O BOX 192
 WEST WARWICK, RI 02893-0192

WATER BILL



Kent County Water Authority

OFFICE HOURS
 MONDAY - FRIDAY
 8:00 A.M. - 4:00 P.M.

PHONE NUMBER: (401) 821-9300
 E-MAIL: customerservice@kentcountywater.org



Billing Period: 12/01/2015 - 02/29/2016

Payment Due Date: 03/31/2016

Account Number: 201195

1335 EAST AVE
 WARWICK RI 02886-0741

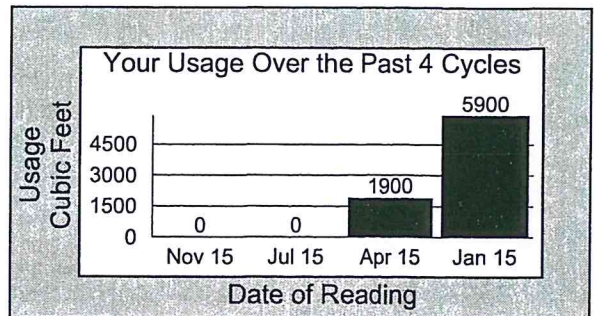


Service Location: EAST AVE

CODE	BILLING DATE	PRESENT READING	PREVIOUS READING	CONSUMPTION	BILL AMOUNT
BA	11/30/15				8.02
LC	01/08/16				0.12
LC	02/09/16				0.12
RS	01/28/16	456300	456300	A	0.00
WP	01/28/16	456300	456300	A	0.00
SC	02/29/16				10.26
TOTAL DUE					\$18.52

CODE LEGEND

- BA BALANCE FORWARD
- AD ADJUSTMENT
- TX TAX
- PY PAYMENT
- CR CREDIT
- IC IND/COMM
- RS RESIDENTIAL
- XC SURCHARGE
- GT GOVERNMENT
- SC SERVICE CHARGE
- BC BILL CHARGE
- WP WATER PROTECTION
- A ACTUAL READING
- E ESTIMATED READING
(SEE EXPLANATION ON BACK OF BILL)
- LC LATE CHARGE



PLEASE MAKE CHECKS PAYABLE TO: KENT COUNTY WATER AUTHORITY
 INCLUDE ACCOUNT NUMBER ON CHECK OR MONEY ORDER
 TO PAY BY ACH OR CREDIT CARD GO TO kentcountywater.org

Detach and Return Stub with Payment

WATER BILL

Service Location: 718EAST AVE

Account Number: 201195



Amount Billed and Due: \$18.52

New Remittance Address:

Kent County Water Authority
 P O Box 9901
 Providence, RI 02940-4001

Amount Enclosed: \$ _____



0000001852 000000201195 0

**RATES IN EFFECT DECEMBER 7, 2013
METERED SALES**

SMALL (5/8" TO 2" METER)	\$5.254
MEDIUM (3" TO 4" METER)	\$4.476
LARGE (6" METERS AND UP)	\$3.816

**STATE WATER PROTECTION CHARGE
FOR CONSUMPTION \$0.219 PER 100 CU. FT.**

BILL CONVERSION:

YOUR BILLED CONSUMPTION IS IN CUBIC FEET.
TO CONVERT YOUR USAGE FROM CUBIC FEET TO
GALLONS, MULTIPLY THE CONSUMPTION BY 7.5

SERVICE CHARGE		
METER SIZE	QUARTERLY ACCOUNTS	MONTHLY ACCOUNTS
5/8" & 3/4"	\$10.26	\$7.51
1"	\$13.57	\$8.61
1 1/2"	\$19.78	\$10.67
2"	\$25.17	\$12.47
3"	\$32.20	\$14.82
4"	\$45.86	\$19.37
6"	\$76.08	\$29.44
8" & >	\$128.66	\$46.97

WATER PROTECTION (WP):

IS A STATE CHARGE THAT IS BILLED AND COLLECTED BY KCWA. IF YOU ARE A CUSTOMER 65 YEARS OR OLDER AND OWN A SINGLE FAMILY HOME, YOU ARE ELIGIBLE FOR AN EXEMPTION FROM THIS CHARGE. IN ORDER TO PROCESS THE EXEMPTION, YOU MUST COME TO OUR OFFICE WITH IDENTIFICATION SUCH AS A LICENSE OR BIRTH CERTIFICATE AND FILL OUT AN EXEMPTION FORM. FUTURE WATER BILLS WILL THEN BECOME EXEMPT FROM THIS CHARGE. IF YOU ARE ALREADY EXEMPT YOU DO NOT HAVE TO APPLY AGAIN.

BILLING INQUIRES:

CONTACT OUR CUSTOMER SERVICE OFFICE AT (401) 821-9300. IF YOU STILL BELIEVE YOUR BILL IS INCORRECT AFTER TALKING TO OUR SERVICE REPRESENTATIVE, YOU MAY SUBMIT THE MATTER FOR RESOLUTION TO THE DIVISION OF PUBLIC UTILITIES & CARRIERS LOCATED AT 89 JEFFERSON BLVD., WARWICK, RI, TELEPHONE NO. (401) 780-9700.

PAYMENT:

THIS IS DUE AND PAYABLE WITHIN 30 DAYS OF BILLING DATE. ANY BILL OR PORTION THEREOF UNPAID AFTER 30 DAYS IS SUBJECT TO INTEREST AT A RATE OF 1 1/2% PER MONTH OF THE UNPAID BALANCE. IF WE TERMINATE SERVICE, THERE WILL BE A \$55.00 SHUT OFF CHARGE AND A \$45.00 REACTIVATION CHARGE ADDED TO THE BILL TO RESTORE SERVICE.

PAYMENT PLAN:

PAYMENT PLANS ARE AVAILABLE TO OUR RESIDENTIAL CUSTOMERS IF NEEDED. PLEASE CALL OUR CUSTOMER SERVICE DEPARTMENT TO INQUIRE ABOUT AVAILABILITY.

ESTIMATED READING:

KENT COUNTY WATER AUTHORITY HAS BEEN UNABLE TO GET A READING FROM YOUR WATER METER. THERE MAY BE SEVERAL REASONS WHY THIS HAS OCCURRED. PLEASE CONTACT OUR OFFICE AT (401) 821-9300 AND SPEAK WITH A SERVICE REPRESENTATIVE SO THAT WE MAY SCHEDULE AN APPOINTMENT TO REPAIR OR REPLACE YOUR WATER METER OR REGISTER IN ORDER TO AVOID FUTURE ESTIMATED READINGS.

IMPORTANT MESSAGE:

Cold weather is upon us, and due to the recent cold temperatures, we strongly urge our customers to please ensure that your water pipes are well insulated to avoid possible freezing and eliminate broken water lines.

DID YOU KNOW?

Frozen pipes: Each year we respond to hundreds of calls regarding frozen pipes and meters. Most often drafts, improperly insulated pipes or failed heaters are found to be the cause. To prevent damage from occurring, the best time to inspect and correct these situations is before the cold weather sets in. Inspect the area where your meter and plumbing is located. Look for open cracks in the foundation, poorly fitted windows and doors, missing gaskets, insulation or light entering where wood meets the concrete. Replace gaskets, seal and insulate all suspect areas. Preventive measures are very often less costly than repairs associated with flooding and burst plumbing resultant from frozen pipes.

WORKSHEET #26: Current and Projected (5 and 20 Year) Non-Account Water Use Estimates (MG) (Sections 8.02 (f) 4 & 8.05 (e))

Supplier: Kent County Water Authority

LAST COMPLETED FISCAL YEAR 2013 - 2015

	2013 (MG)	2013 (MCU.FT.)	2014 (MG)	2014 (MCU.FT.)	2015 (MG)	2015 (MCU.FT.)
Total Water Produced/Purchased (MG)	2891.03	386.50	2760.34	369.03	2979.31	398.30
Billed Metered Consumption	2458.14	328.63	2373.70	317.34	2414.75	322.83
Difference	432.89	57.87	386.64	51.69	564.56	75.48
Billing Adjustments						
(-) Increase (+) Decrease	-9.65	-1.29	-2.54	-0.34	-15.77	-2.11
Difference after Adjustments	442.53	59.16	389.18	52.03	580.32	77.58
Water exported	91.49	12.23	92.08	12.31	102.35	13.68
Unbilled Metered Consumption	-7.55	-1.01	2.27	0.30	1.44	0.19
Total Metered Water Use (1)	343.49	45.92	294.84	39.42	476.53	63.71
% Metered	11.9%	11.9%	10.7%	10.7%	16.0%	16.0%

Billed Unmetered Consumption	0.10	0.01	0.00	0.00	1.28	0.17
Unbilled Unmetered Consumption	2.00	0.27	12.00	1.60	12.00	1.60
Main Flushing	14.50	1.94	8.05	1.08	20.99	2.81
System Maintenance	1.54	0.21	0.73	0.10	0.11	0.02
Construction Sites	3.99	0.53	2.76	0.37	1.81	0.24
Water Quality and Other Testing	0.83	0.11	0.64	0.09	0.81	0.11
Process Water at Treatment Plants	0.00	0.00	1.47	0.20	1.73	0.23
Private fire hydrant flushing/testing	0.00	0.00	0.52	0.07	0.52	0.07
Blow-offs for freeze prevention	8.02	1.07	3.74	0.50	0.57	0.08
Hydrant Flow Tests	0.02	0.00	0.13	0.02	0.29	0.04
Illegal water withdrawn from hydrants	0.00	0.00	0.24	0.03	0.24	0.03
Illegal connections	0.00	0.00	0.00	0.00	0.00	0.00
Includes leakage on mains, overflows at storage tanks, and service connections	1.20	0.16	4.85	0.65	5.25	0.70
Total Non-Metered Water (2)	32.20	4.30	35.13	4.70	45.59	6.09

Total Non-Account Water	(1) minus (2)	41.62	259.70	34.72	430.94	57.61
Total Non-Account Water as a % of Total Produced/Purchased		10.8%	9.4%	9.4%	14.5%	14.5%

**KENT COUNTY WATER AUTHORITY
WARWICK, RHODE ISLAND**

ANNUAL FINANCIAL STATEMENTS

YEAR ENDED JUNE 30, 2015

**KENT COUNTY WATER DEPARTMENT
WARWICK, RHODE ISLAND**

June 30, 2015

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HAGUE, SAHADY & CO., P.C.

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Independent Auditor's Report

Board of Directors
Kent County Water Authority
West Warwick, Rhode Island

Report on the Financial Statements

We have audited the accompanying financial statements of the Kent County Water Authority ("the Authority"), as of and for the year ended June 30, 2015, and the related notes to the financial statements, which collectively comprises the Authority's basic financial statements as listed in the table of contents. The financial statements of the Authority as of June 30, 2014 were audited by other auditors whose report dated December 2, 2014, expressed an unqualified opinion on those statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with the financial reporting provisions of the Rhode Island Public Utilities Commission (RIPUC). Management is also responsible for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the June 30, 2015 financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities of the Authority, as of June 30, 2015, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with the RIPUC.

Continued

Basis of Accounting

The financial statements are prepared on the basis of the financial reporting provisions of RIPUC, which is a basis of accounting other than accounting principles generally accepted in the United States of America, to comply with the requirements of RIPUC. Our opinion is not modified with respect to this matter.

Emphasis of Matter

As discussed in Note 2 to the financial statements, in 2015, the Authority adopted new accounting guidance, *GASB No. 67, Financial Reporting for Pension Plans and GASB No. 68, Accounting and Financial Reporting for Pensions*. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and Pension Plan information, as listed on the table of contents be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated September 3, 2015 on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.

Restriction on Use

This report is intended solely for the information and use of management, Board of Directors, others within the Kent County Water Authority and the RIPUC and is not intended to be and should not be used by anyone other than these specified parties.

Hague, Sabady & Co. PC

Fall River, Massachusetts
September 3, 2015

KENT COUNTY WATER AUTHORITY

Management's Discussion and Analysis (MD&A)

Year Ended June 30, 2015

Our discussion and analysis of the Kent County Water Authority's financial performance provides an overview of the Authority's financial activities for the fiscal year ended June 30, 2015. It should be read in conjunction with basic financial statements.

The Kent County Water Authority (the Authority) is a public benefit corporation created pursuant to an existing under Chapter 1740 of the Public Laws of 1946, at Chapter 16 of Title 39 of the Rhode Island General Laws (1956), as amended, and is subject to the supervisory and regulatory powers of the State Public Utilities Commission (PUC).

The Authority provides water supply services through metered sales in the communities of Coventry, Warwick, West Warwick, East Greenwich, West Greenwich, and in smaller sections of Cranston, Scituate, and North Kingstown. The Authority is responsible for operating and maintaining the water supply system.

FINANCIAL STATEMENTS

Our discussion and analysis is intended to serve as an introduction to the Authority's basic financial statements, which consist of the financial statements and notes to the financial statements. This report also contains other supplementary information in addition to the basic financial statements.

The financial statements report information about the Authority based upon an accrual accounting method similar to those used by private sector companies. The financial statements include a Statement of Net Position; Statement of Revenues, Expenses, and Changes in Net Position; Statement of Cash Flows; and Notes to the Financial Statements.

The Statement of Net Position presents the financial position of the Authority on the accrual basis of accounting, with the exception of fine assessments and monitoring fees that are recorded on a cash basis. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Authority is improving or deteriorating.

All the current year's revenues and expenses are accounted for in the Statement of Revenues, Expenses, and Changes in Net Position. This statement measures the success of the Authority's operations over the past year and can be used to determine whether the Authority has successfully recovered all its costs through its user fees and other charges.

The final required financial statement is the Statement of Cash Flows. The purpose of this statement is to provide information about the changes in cash and cash equivalents, resulting from operating, capital and related financing, noncapital financing, and investing activities. This statement presents cash receipts and cash disbursement information, without consideration of the earnings event, when an obligation arises, or depreciation of assets.

The notes to the financial statements provide additional information that is essential for a full understanding of the data provided in the statements. The notes to the financial statements can be found on pages 14-30 of this report.

Continued

KENT COUNTY WATER AUTHORITY

Management's Discussion and Analysis (MD&A)

Year Ended June 30, 2015

FINANCIAL HIGHLIGHTS

The Authority's financial condition is strong and the Authority's performance for the current year exceeded the budget. The following are the key financial highlights:

- User fees were under budget by roughly \$415 thousand although they were \$355 thousand higher than the prior year.
- The Authority spent nearly \$1 million more on purchase of water than budgeted.
- The Authority spent roughly \$160 thousand less than budgeted on chemicals in the current year.

FINANCIAL ANALYSIS

NET POSITION

Net position over time may serve as a useful indicator of a government's financial position. In the case of the Authority, assets plus deferred outflows of resources exceeded liabilities plus deferred inflows of resources by \$141,278,996 as of June 30, 2015. This represents an increase in total net position of \$6,728,295 or 5.00% from FY 2014 and demonstrates that the financial position of the Authority is improving.

The operations of the Authority are accounted for on a Proprietary Fund Type (Enterprise Fund) basis. The Authority operates in a manner similar to private business enterprises where the costs of providing goods or services to the general public, support of a Capital Improvement Program, and funding of an Infrastructure Replacement Program are financed or recovered through user charges approved by the PUC.

Condensed financial information from the statements of net position and operations is presented below. The statement of net position provides information on the assets and liabilities of the Authority, with net position reported as the difference between assets and liabilities. The statement of operations of the Authority reflects all revenues earned and all expenses incurred for each fiscal year:

KENT COUNTY WATER AUTHORITY
Management's Discussion and Analysis (MD&A)
Year Ended June 30, 2015

Condensed Statement of Net Position

	<u>2015</u>	<u>2014</u>
Current assets	\$ 6,824,247	\$ 7,830,899
Other noncurrent assets	19,205,696	17,991,046
Capital assets, net	<u>137,597,235</u>	<u>134,302,565</u>
Total assets	<u>163,627,178</u>	<u>160,124,510</u>
Deferred inflows of resources		
NPL - assumption changes*	68,485	-
NPL - investment experience*	<u>178,102</u>	<u>-</u>
Total deferred inflows of resources	<u>246,587</u>	<u>-</u>
Current liabilities	3,661,201	6,543,925
Noncurrent liabilities	<u>17,076,073</u>	<u>17,123,646</u>
Total liabilities	<u>20,737,274</u>	<u>23,667,571</u>
Deferred inflows of resources		
Gain (loss) on refunding	1,670,415	1,906,238
NPL - liability experience*	<u>187,080</u>	<u>-</u>
Total deferred inflows of resources	<u>1,857,495</u>	<u>1,906,238</u>
Net position:		
Net investment in capital assets	124,615,042	123,258,736
Restricted for debt service	1,954,000	4,194,000
Restricted for infrastructure replacement	7,287,048	6,277,494
Unrestricted net position	<u>7,422,906</u>	<u>820,471</u>
Total net position	<u>\$ 141,278,996</u>	<u>\$ 134,550,701</u>

* As this is the first year for GASB68 disclosure, net pension liability deferred outflows and inflows could only be provided for 2015.

There is also a significant increase in capital assets (net) of \$3,294,670 from FY 2014 to FY 2015. This increase is the result of substantial progress that the Authority made in FY 2015 on the initiatives identified in the Capital Improvement Program (CIP).

In 2015, the current liabilities decreased by \$1,934,045. This is the result of an increase in the current portion of the long-term loans payable as well as accrued liabilities.

The largest portion of the Authority's net position, 88%, reflects its net investment in capital assets. The Authority uses these capital assets to provide water treatment and collection services to its customers. Consequently, only the unrestricted net assets are available for future spending. Although the Authority's investment in its capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities.

KENT COUNTY WATER AUTHORITY

Management's Discussion and Analysis (MD&A)

Year Ended June 30, 2015

CHANGES IN NET POSITION

The Authority's ended the FY 2015 with an increase in net position of \$6,728,295. The Authority has included a Condensed Statement of Revenues, Expenses and Changes in Net Position as follows.

Condensed Statement of Revenues, Expenses and Changes in Net Position

	<u>2015</u>	<u>2014</u>
Operating revenues:		
Water	\$ 18,125,293	\$ 17,743,307
Hydrant fees	1,309,184	1,306,816
Other	<u>255,690</u>	<u>385,883</u>
Total operating revenue	<u>19,690,167</u>	<u>19,436,006</u>
Operating expenses:		
Source of supply	4,999,638	4,254,854
Pumping	812,335	686,839
Transmission and distribution	1,164,782	1,096,973
Water treatment	310,572	448,504
Customer accounting	413,059	368,239
Administrative and general	3,140,852	3,126,241
Depreciation	2,159,019	1,935,848
Taxes other than income	<u>177,540</u>	<u>167,504</u>
Total operating expenses	<u>13,177,797</u>	<u>12,085,002</u>
Operating income	<u>6,512,370</u>	<u>7,351,004</u>
Nonoperating income (expense):		
Capital contributions	215,505	846,405
Interest income (expense)	420	(253,434)
Arbitrage rebate provision	-	-
Other	<u>-</u>	<u>-</u>
Net non-operating income (expense)	<u>215,925</u>	<u>592,971</u>
Increase in net position	6,728,295	7,943,975
Net position at beginning of year	<u>134,550,701</u>	<u>126,606,726</u>
Net position at end of year	<u>\$ 141,278,996</u>	<u>\$ 134,550,701</u>

Continued

KENT COUNTY WATER AUTHORITY

Management's Discussion and Analysis (MD&A)

Year Ended June 30, 2015

The table above reflects an decrease in current assets of \$1,006,652 from FY 2014 to FY 2015. This decrease reflects an decrease in cash and cash equivalents as well as a decrease in cash restricted for current portion of long-term debt.

In FY15, the Authority's net position totaled \$141.3 million, an increase of \$6.7 million or 5.00% from the previous year. Total assets in FY15 were \$163.6 million, an increase of \$3.5 million or 2.19% from the previous year. Total liabilities decreased by \$2.9 million or 12.38% as a result of debt service payments.

The Authority's major capital expenditures included Capital Improvement Projects (funded by revenue bonds) and Infrastructure Projects (funded by water rates).

REVENUES

User fees are the Authority's primary source of revenue, representing approximately 92.05% of total operating revenues. Fiscal Year 2015 user fee revenue was \$18,125,293 which is \$381,986 more than the prior year. The increase in user fees is the combined effect of a 2.00% pass through rate increase effective July 1, 2013. These PUC approved rate increases applied to both consumption and flat fees. FY 2015 other operating revenue decreased by \$130,193.

The operating income for FY14 totaled \$6.5 million, representing a decrease of 12.22% from the previous year. This decrease is a result of the changes discussed above.

EXPENSES

Total operating expenses in FY 2015 increased \$1,092,795 over the prior year. The increase in operating expenses was driven most notably by an increase in water supply costs of nearly \$750 thousand, as well as, an increase in depreciation expenses of almost \$225 thousand.

Non-operating expenses decreased \$377,046 as a result of increased capitalized interest expense.

CAPITAL ASSETS AND DEBT ADMINISTRATION

CAPITAL ASSETS

At the end of FY 2015, the Authority had \$137.6 million invested in net capital assets. This amount represents an increase of \$3.3 million, or 2.7% over last year. The following table summarizes the Authority's capital assets and changes therein, for the years ended June 30, 2015 and June 30, 2014.

Continued

KENT COUNTY WATER AUTHORITY

Management's Discussion and Analysis (MD&A)

Year Ended June 30, 2015

CAPITAL ASSETS AND DEBT ADMINISTRATION (CONTINUED)

CAPITAL ASSETS (CONTINUED)

	<u>Balance at June 30, 2014</u>	<u>Increases</u>	<u>Decreases</u>	<u>Balance at June 30, 2015</u>
Capital assets, not being depreciated:				
Construction in progress	\$ 25,337,411	\$ 5,587,533	\$ 15,119,766	\$ 15,805,178
Land	<u>1,836,045</u>	<u>-</u>	<u>-</u>	<u>1,836,045</u>
Total capital assets, not being depreciated	<u>27,173,456</u>	<u>5,587,533</u>	<u>15,119,766</u>	<u>17,641,223</u>
Capital assets, being depreciated:				
Buildings and improvements	2,969,167	14,548,273	-	17,517,440
Machinery and equipment	16,103,626	261,621	-	16,365,247
Infrastructure	<u>109,983,734</u>	<u>176,028</u>	<u>107,872</u>	<u>110,051,890</u>
Total capital assets, being depreciated	129,056,527	14,985,922	107,872	143,934,577
Less accumulated depreciation	<u>21,927,418</u>	<u>2,159,019</u>	<u>107,872</u>	<u>23,978,565</u>
Total capital assets, being depreciated, net	<u>107,129,109</u>	<u>12,826,903</u>	<u>-</u>	<u>119,956,012</u>
Capital assets, net	<u>\$ 134,302,565</u>	<u>\$ 18,414,436</u>	<u>\$ 15,119,766</u>	<u>\$ 137,597,235</u>

LONG-TERM DEBT

Currently the Authority has one General Revenue Bonds outstanding at the end of FY154, totaling \$14.5 million at par value.

2012 Series "A"

\$14,495,000

Currently the Authority has a Moody's rating of Aa3 and a S&P rating of A+.

During FY15, the Authority paid approximately \$1.4 million in principal on outstanding issuances and \$723 thousand of interest on outstanding issuances.

The Authority is required to establish and maintain rates and charges at levels sufficient so that total net revenues in each year during which bonds are outstanding will equal at least 125% of the bond debt service requirement during such year less the amount, if any, of bond proceeds available to pay interest becoming due in such year on bonds outstanding as of the first day of such year. The Authority has exceeded the 125% debt service coverage requirement of the Resolution in each year since the 2001 issue.

Continued

KENT COUNTY WATER AUTHORITY

Management's Discussion and Analysis (MD&A)

Year Ended June 30, 2015

BUDGET AND RATES

For FY16, the budget for operating revenues will increase by 1.5%. A 2% increase is projected for operation and maintenance expenses.

ECONOMIC FACTORS AND NEXT YEAR'S BUDGET AND RATES

The Authority is governed by a 5-member appointed Board (Board) and is also regulated by the Rhode Island Public Utilities Commission (PUC). Both Authority's Board and the PUC must authorize all adjustments to user charges.

The Authority filed a pass through Rate Filing with the PUC on June 4, 2013 December 23, 2013 for a 0.54% rate increase effective December 7, 2013.

REQUEST FOR INFORMATION

This financial report is intended to provide an overview of the financial picture of the Kent County Water Authority. Any further questions regarding any of the information contained within this report may be directed to the General Manager or Treasurer at P.O. Box 192, West Warwick, RI 02893.

KENT COUNTY WATER AUTHORITY

Statement of Net Position

June 30, 2015

ASSETS

	2015	2014
<i>Current assets:</i>		
Cash and cash equivalents	\$ 177,985	\$ 735,581
Accounts receivable, less allowance of \$182,721 in 2015 and \$166,797 in 2014	2,926,229	2,809,738
Unbilled water revenue	1,139,996	1,074,248
Materials and supplies inventory	382,278	483,762
Other assets	243,759	232,570
Restricted cash and cash equivalents held by trustee for current portion of long-term debt	1,954,000	2,495,000
<i>Total current assets</i>	6,824,247	7,830,899
<i>Noncurrent assets:</i>		
Restricted cash and cash equivalents held by trustee	11,918,648	11,713,552
Restricted cash and cash equivalents held by trust-Infrastructure replacement	7,287,048	6,277,494
<i>Total noncurrent assets</i>	19,205,696	17,991,046
<i>Capital assets:</i>		
Depreciable, net	119,956,012	107,129,109
Nondepreciable	17,641,223	27,173,456
<i>Total assets</i>	\$ 163,627,178	\$ 160,124,510

DEFERRED OUTFLOWS OF RESOURCES

<i>Deferred outflows of resources:</i>		
NPL - assumption changes	68,485	-
NPL - investment experience	178,102	-
<i>Total deferred outflows of resources</i>	\$ 246,587	\$ -

KENT COUNTY WATER AUTHORITY

Statement of Net Position (Continued)

June 30, 2015

LIABILITIES

	<u>2015</u>	<u>2014</u>
<i>Current liabilities:</i>		
Accounts payable	\$ 1,509,359	\$ 1,528,728
Accrued interest expense	318,312	339,651
Accrued liabilities	222,418	1,104,690
Water quality protection charges payable	126,112	127,177
Long-term debt due within one year	<u>1,485,000</u>	<u>2,495,000</u>
<i>Total current liabilities</i>	<u>3,661,201</u>	<u>5,595,246</u>
<i>Noncurrent liabilities:</i>		
Accrued arbitrage rebate liability	-	-
Long-term debt, net	12,955,133	14,432,386
Net pension liability	958,755	948,679
OPEB obligation, net	<u>3,162,185</u>	<u>2,691,260</u>
<i>Total noncurrent liabilities</i>	<u>17,076,073</u>	<u>18,072,325</u>
<i>Total liabilities</i>	<u>20,737,274</u>	<u>23,667,571</u>

DEFERRED INFLOWS OF RESOURCES

<i>Deferred inflows of resources:</i>		
Gain on refunding	1,670,415	1,906,238
NPL - liability experience	<u>187,080</u>	<u>-</u>
<i>Total deferred inflows of resources</i>	<u>1,857,495</u>	<u>1,906,238</u>

NET POSITION

<i>Net position:</i>		
Net investment in capital assets	124,615,042	123,258,736
Restricted for debt service	1,954,000	4,194,000
Restricted for infrastructure replacement	7,287,048	6,277,494
Unrestricted net position	<u>7,422,906</u>	<u>820,471</u>
<i>Total net position</i>	<u>\$ 141,278,996</u>	<u>\$ 134,550,701</u>

The accompany notes are an integral part of the financial statements

KENT COUNTY WATER AUTHORITY

Statement of Revenues, Expenses and Changes in Net Position

Year Ended June 30, 2015

	<u>2015</u>	<u>2014</u>
<i>Operating revenues:</i>		
Water	\$ 18,125,293	\$ 17,743,307
Hydrant fees	1,309,184	1,306,816
Other	<u>255,690</u>	<u>385,883</u>
<i>Total operating revenue</i>	<u>19,690,167</u>	<u>19,436,006</u>
<i>Operating expenses:</i>		
Source of supply	4,999,638	4,254,854
Pumping	812,335	686,839
Transmission and distribution	1,164,782	1,096,973
Water treatment	310,572	448,504
Customer accounts	413,059	368,239
Administrative and general	3,140,852	3,126,241
Depreciation	2,159,019	1,935,848
Taxes other than income	<u>177,540</u>	<u>167,504</u>
<i>Total operating expenses</i>	<u>13,177,797</u>	<u>12,085,002</u>
<i>Operating income</i>	<u>6,512,370</u>	<u>7,351,004</u>
<i>Nonoperating income (expense):</i>		
Capital contributions	215,505	846,405
Interest income (expense)	<u>420</u>	<u>(253,434)</u>
<i>Net non-operating income (expense)</i>	<u>215,925</u>	<u>592,971</u>
<i>Increase in net position</i>	6,728,295	7,943,975
<i>Net position at beginning of year</i>	<u>134,550,701</u>	<u>127,555,405</u>
<i>Restatement of net position</i>	<u>-</u>	<u>(948,679)</u>
<i>Net position at end of year</i>	<u>\$ 141,278,996</u>	<u>\$ 134,550,701</u>

The accompany notes are an integral part of the financial statements

KENT COUNTY WATER AUTHORITY

Statement of Cash Flows

Year Ended June 30, 2015

	2015	2014
Cash flows from operating activities:		
Cash received from customers	\$ 19,506,863	\$ 19,525,375
Cash paid to employees for services	(1,579,651)	(1,228,073)
Cash paid to suppliers for goods and services	(9,828,979)	(9,838,821)
Net cash provided by operating activities	8,098,233	8,458,481
Cash flows from investing activities:		
Interest income received	194,166	18,934
Net cash provided by investing activities	194,166	18,934
Cash flows from capital and related financial activities:		
Payments on debt	(2,723,076)	(2,550,000)
Capital additions	(5,453,689)	(8,298,419)
Interest expense	420	(409,400)
Net cash used/or capital and related financing activities	(8,176,345)	(11,257,819)
Net decrease in cash and cash equivalents	116,054	(2,780,404)
Cash and cash equivalents, beginning of year	21,221,627	24,002,031
Cash and cash equivalents, end of year	21,337,681	21,221,627
Cash and cash equivalents, per the statement of net position		
Cash and cash equivalents	177,985	735,581
Restricted cash and cash equivalents held by trustee for current portion of long term debt	1,954,000	2,495,000
Restricted cash and cash equivalents held by trustee (Note 3)	11,918,648	11,713,552
Restricted cash and cash equivalents held by trustee-Infrastructure replacement (Note 3)	7,287,048	6,277,494
Total cash and cash equivalents, per the statement of net position	\$ 21,337,681	\$ 21,221,627
Reconciliation of operating income to net cash provided by operating activities:		
Operating income	\$ 6,512,370	\$ 7,351,004
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation of bond issuance costs	2,159,019	1,935,848
Changes in operating assets and liabilities:		
(Increase) decrease in accounts receivable, net	(116,491)	34,168
(Increase) decrease in unbilled water revenue	(65,748)	55,201
(Increase) decrease in material, supplies and inventory	101,484	(10,093)
(Increase) decrease in other assets	(11,189)	(171,911)
(Increase) decrease in NPL deferred outflows	(59,507)	-
Increase (decrease) in accounts payable	(19,369)	(975,831)
Increase (decrease) in accrued liabilities	(882,272)	(74,317)
Increase (decrease) in water quality protection charges payable	(1,065)	84,914
Increase (decrease) in other liabilities	481,001	229,498
Net cash provided by operating activities	\$ 8,098,233	\$ 8,458,481

The accompany notes are an integral part of the financial statements

KENT COUNTY WATER AUTHORITY

Notes to the Financial Statements

June 30, 2015

The financial statements of the Kent County Water Authority (the Authority) have been prepared in conformity with the Rhode Island Public Utilities Commission (RIPUC) regulatory basis of accounting. The Governmental Accounting Standards Board (GASB) is the accepted standard setting body for establishing governmental accounting and financial reporting principles. The following notes to the financial statements are an integral part of the Authority's financial statements.

NOTE 1. Reporting Entity

Primary Government

The Kent County Water Authority (the Authority) was created by General Assembly of the State of Rhode Island on April 24, 1946, and was organized on July 8, 1946. The Authority serves as the governing body of the Kent County Water District, a political subdivision of the State of Rhode Island. The Authority is subject to the regulations of the Public Utility Commission (PUC) of the State of Rhode Island.

The Authority provides water supply services through metered sales in the communities of Warwick, West Warwick, Coventry, East Greenwich, North Kingstown, Cranston, Scituate and West Greenwich. The Authority is also responsible for acquiring, constructing, improving, operating, and maintaining the water supply system. The Authority's source of water supply is principally through purchases of water from the Providence Water Supply Board and Warwick Water Department with the remaining amount produced from its own wells.

Component Units

Component Units are included in the Authority's reporting entity if their operational and financial relationships with the Authority are significant. Pursuant to the criteria established by the Governmental Accounting Standards Board (GASB), no component units were identified for inclusion in the accompanying financial statements.

The Authority is considered a related organization of the State of Rhode Island for financial reporting purposes. The Authority is reported as a related organization of the State of Rhode Island, and not as a component unit, based on the criteria of GASB Statement No. 14 "The Financial Reporting Entity", as amended by GASB Statement No. 39 "Determining Whether Certain Organizations are Component Units" and as amended by GASB Statement No. 61 "Financial Reporting Entity - Omnibus".

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accounting policies of the Authority conform to the RIPUC regulatory basis of accounting. The GASB is the accepted standard-setting body for establishing governmental accounting and financial reporting principles. The following is a summary of the more significant accounting policies followed by the Authority:

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KENT COUNTY WATER AUTHORITY

Notes to the Financial Statements

June 30, 2015

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Basis of Presentation

The operations of the Authority are accounted for on a Proprietary Fund Type (Enterprise Fund) basis.

Enterprise funds are used to account for operations (a) that are financed and operated in a manner similar to private business enterprises where the intent of the governing body is that the costs (including depreciation) of providing goods and services to the general public on a continuing basis be financed or recovered primarily through user charges; or (b) where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability, or other purposes.

Proprietary fund revenues and expenses are recognized on the accrual basis. Revenues are recognized in the accounting period in which they are earned and become measurable; expenses are recognized in the period incurred, if measurable.

When restricted and unrestricted resources are available for use, it is the Authority's practice to use restricted resources first.

Cash and Cash Equivalents - Cash and cash equivalents and restricted cash (held by trustee) include highly liquid investments with a maturity of three months or less when purchased. Restricted cash has been classified as noncurrent as it primarily represents unspent bond proceeds restricted for future capital spending.

Receivables - Fixed fees for water usage are billed to all customers in advance on a monthly basis. Consumption based fees are billed in arrears on a monthly basis, based on estimated and actual water consumption meter readings.

The allowance for doubtful accounts for June 30, 2015 was \$182,721.

Materials and Supplies Inventory - Materials and supplies inventory is stated at the lower of cost (average cost method) or market.

Capital Assets - Property, plant, and equipment is stated at cost. The Authority provides for depreciation of capital assets based on a composite rate of 1.5% of depreciable capital assets as required by the Rhode Island Public Utility Commission (RIPUC). Depreciation expense is not reflected for construction in progress until it is placed in service. The Authority capitalizes interest costs as part of the cost of constructing transmission and distribution facilities.

Construction in progress - Construction in progress consists of the capital projects' design, planning and construction costs. Upon completing the project and finalizing the financial transaction, the construction in progress is transferred into the completed project capital asset account. Once transferred, the Authority will start to depreciate the completed capital project.

Capital Contributions - Capital contributions consist of property, plant, and equipment paid for by customers for water installations. Once the installation is complete, the property, plant, and equipment transfer to the Authority.

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KENT COUNTY WATER AUTHORITY

Notes to the Financial Statements

June 30, 2015

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Unearned Revenue - Unearned revenue represents amounts billed in the current fiscal year for pretreatment fees relating to the subsequent fiscal year.

Deferred Outflows/inflows Of Resources - In addition to assets, the statement of financial position can report a separate section for deferred outflows of resources. This separate section represents a consumption of net position that applies to a future period and so will not be recognized as an outflow of resources (expense) until that later date. On June 30, 2014 and 2013, there were no deferred outflows of resources.

In addition to liabilities, the statement of financial position can report a separate section for deferred inflows of resources. This separate section represents the acquisition of net position that applies to a future period and therefore will not be recognized as an inflow of resources (revenue) until a later date. At June 30, 2015 and 2014, there were \$1,670,415 and \$1,906,238 in deferred inflows relating to gain on refunding, respectively.

Income Taxes - The Authority is exempt from Federal and State income taxes.

Regulatory - The Authority is a regulated utility, and its rates are set by the PUC. For rate-making purposes, depreciation expense is excluded while principal payments and capital outlays are included in the total expenses to arrive at a regulatory net income (loss). For this reason, the net income (loss) on a regulatory basis differs from the change in net position in the audited financial statements, which are prepared in conformance with generally accepted accounting principles.

Use of Estimates - The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities, at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Summarized Financial Information - The financial information for the year June 30, 2014, presented for comparative purposes is not intended to be a complete financial statement presentation. Certain amounts in the prior year financial statements may have been reclassified for comparative purposes to conform with the presentation in the current year financial statements.

Recently Issued Accounting Standards - The Authority has implemented the following new accounting pronouncements:

For the year ending June 30, 2015, the Authority implemented the following pronouncements issued by the GASB:

- GASB Statement No. 68, *Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27*
- GASB Statement No. 69, *Government Combinations and Disposals of Government Operations*
- GASB Statement No. 71, *Pension Transition for Contributions Made Subsequent to the Measurement Date—an amendment of GASB Statement No. 68*

The implementation GASB Statements No. 68 and 71 represented a significant change in the accounting and reporting of pension expense and the related liability. For the first time, the Authority recognized its long-term obligation for pension benefits as a liability to more comprehensively measure the annual costs of pension benefits. The implementation of this Statement also expanded pension related note disclosures and required supplementary information. As a result of this change in accounting principle, the Authority has restated its beginning net position within the business-type activities. See “Note 13 Restatement” on page 30 for more information.

The implementation of GASB Statement No. 69 had no material reporting impact for the Authority.

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KENT COUNTY WATER AUTHORITY

Notes to the Financial Statements

June 30, 2015

NOTE 3. CASH AND CASH EQUIVALENTS

Cash deposits: The Authority's cash deposits are in one financial institution. The carrying amount of deposits is separately displayed on the Statement of Net Position as "cash and cash equivalents".

The carrying value of deposits, investments and petty cash funds reported on the Statement of Net Position as "cash and cash equivalents" are as follows:

Cash deposits	\$ 177,685
Cash equivalents	21,159,696
Petty cash	<u>300</u>
	<u>\$ 21,337,681</u>

Essential risk information regarding the Authority's deposits and investments is presented below.

In accordance with Rhode Island General Laws, Chapter 35-10.1, depository institutions holding deposits of the State, its agencies or governmental subdivisions of the State, shall at a minimum, insure or pledge eligible collateral equal to one hundred percent of time deposits with maturities greater than sixty days. Any of these institutions, which do not meet minimum capital standards prescribed by federal regulators, shall insure or pledge eligible collateral equal to one hundred percent of deposits, regardless of maturity.

The carrying amount of the Authority's deposits at June 30, 2015 was \$21,337,681 and the bank balance was \$21,748,421.

Custodial Credit Risk - Custodial credit risk for deposits is the risk that in the event of the failure of a depository financial institution, the Authority will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. As of June 30, 2015, \$21,184,789 of the Authority's bank balance of \$21,748,421 was exposed to custodial credit risk as follows:

	<u>Bank Balance</u>
Insured (Federal depository insurance funds)	\$ 563,632
Collateralized with securities held by pledging financial institution's or its agent, in the Authority's name	<u>21,184,789</u>
	<u>\$ 21,748,421</u>

Interest Rate Risk - Funds held by the Authority are invested in accordance with the Authority's investment policy. This investment policy does not limit investment maturities as a means of limiting its exposure to fair value losses arising from interest rates.

In connection with the issuances of \$10 million of general revenue bonds in July 2001, \$24.4 million of general revenue bonds in December 2002, \$10.4 million of general revenue in April 2004, and \$17.3 million of general revenue in July 2012, the proceeds from the bonds along with subsequent debt payments by the Authority and unspent operating income are maintained in cash accounts held in trust by the trustee.

Continued

KENT COUNTY WATER AUTHORITY

Notes to the Financial Statements

June 30, 2015

NOTE 3. CASH AND CASH EQUIVALENTS

Interest Rate Risk (Continued)

The Authority's investment policy is governed by the general bond resolution and the series resolution for all transactions covered by bond funding of the Authority. All investments are managed through the trustee of the Authority and invested as allowed.

Cash equivalents are valued at fair value. All of the Authority's debt cash equivalents have maturities of three months or less. The components and fair values of the Authority's cash equivalents are presented below:

Cash equivalent type	Fair value	
	2015	2014
Money Market Treasury		
Obligation Fund	\$ 21,159,696	\$ 19,183,047
U.S. Treasuries	-	1,302,999
Total cash equivalents	\$ 21,159,696	\$ 20,486,046

The Authority established an "Infrastructure Replacement Fund" in conformity with all applicable provisions of state laws; Chapter 46-13 of the General Laws of Rhode Island, Public Drinking Water Supply. The dedicated fund for infrastructure replacement was \$7,287,494 and \$6,277,494 as of June 30, 2015 and 2014, respectively.

Credit Risk - The Authority's investment policy objective states that all financial assets held by the Authority shall be invested in a manner that will preserve the value and safety of capital. The Authority shall invest funds in order to maximize earnings and minimize risk during the period of availability of the funds. The Authority's investment policy limits investments to U.S. Treasury securities, securities of the U.S. government agencies and instrumentalities that are backed by the full faith and credit or guarantee of the U.S. government, which have a liquid market with a readily determinable market value, investment-grade obligations of the State of Rhode Island, or any municipality or political subdivision of the State of Rhode Island, repurchase agreements backed by collateral, certificate of deposits, money market mutual funds whose portfolios consist of U.S. Treasury securities, U.S. agency obligations and repurchase agreements fully collateralized by such securities and governmental investment products backed by collateral consisting of U.S. Treasury and U.S. Agency securities.

The Authority follows the credit risk policy associated with the Authority's general bond resolutions. The Authority's credit ratings for cash equivalents are as follows:

	Credit Rating
Money Market Treasury	
Obligation Fund	AAA (Moody's)
U.S. Treasuries	AAA (Moody's)

KENT COUNTY WATER AUTHORITY

Notes to the Financial Statements

June 30, 2015

NOTE 3. CASH AND CASH EQUIVALENTS

Concentration of credit risk - The Authority's investment policy is not specific but states that investments shall be diversified to minimize the risk of loss that may occur due to concentration in a specific maturity, a specific issue or a specific class of securities.

NOTE 4. CAPITAL ASSETS

The cost and activity of water capital assets in service and related accumulated depreciation for the year ended June 30, 2015 is as follows:

	<u>Balance at June 30, 2014</u>	<u>Increases</u>	<u>Decreases</u>	<u>Balance at June 30, 2015</u>
Capital assets, not being depreciated:				
Construction in progress	\$ 25,337,411	\$ 5,587,533	\$ 15,119,766	\$ 15,805,178
Land	<u>1,836,045</u>	<u>-</u>	<u>-</u>	<u>1,836,045</u>
Total capital assets, not being depreciated	<u>27,173,456</u>	<u>5,587,533</u>	<u>15,119,766</u>	<u>17,641,223</u>
Capital assets, being depreciated:				
Buildings and improvements	2,969,167	14,548,273	-	17,517,440
Machinery and equipment	16,103,626	261,621	-	16,365,247
Infrastructure	<u>109,983,734</u>	<u>176,028</u>	<u>107,872</u>	<u>110,051,890</u>
Total capital assets, being depreciated	129,056,527	14,985,922	107,872	143,934,577
Less accumulated depreciation	<u>21,927,418</u>	<u>2,159,019</u>	<u>107,872</u>	<u>23,978,565</u>
Total capital assets, being depreciated, net	<u>107,129,109</u>	<u>12,826,903</u>	<u>-</u>	<u>119,956,012</u>
Capital assets, net	<u>\$ 134,302,565</u>	<u>\$ 18,414,436</u>	<u>\$ 15,119,766</u>	<u>\$ 137,597,235</u>

Interest costs of \$466,234 and \$612,503, offset by interest income of \$420 and \$7,218, were capitalized in 2015 and 2014, respectively.

KENT COUNTY WATER AUTHORITY

Notes to the Financial Statements

June 30, 2015

NOTE 5. LONG-TERM OBLIGATIONS

The Authority issues revenue bonds to support various projects. The following is a summary of the bond activity for the years ended June 30, 2015 and 2014:

Description	Balance June 30, 2014	Additions	Reductions	Balance June 30, 2015	Amounts due within one year
Revenue bonds:					
April 2004 Series A bearing interest at 2%-4% and maturing in 2014	\$ 1,070,000	\$ -	\$ (1,070,000)	\$ -	\$ -
July 2012 Series A bearing interest at 4%-5% and maturing in 2023	<u>15,920,000</u>	<u>-</u>	<u>(1,425,000)</u>	<u>14,495,000</u>	<u>1,485,000</u>
	<u>16,990,000</u>	<u>-</u>	<u>(2,495,000)</u>	<u>14,495,000</u>	<u>1,485,000</u>
Add (less):					
Unamortized discount	<u>(62,614)</u>	<u>-</u>	<u>7,746</u>	<u>(54,868)</u>	<u>-</u>
	<u>(62,614)</u>	<u>-</u>	<u>7,746</u>	<u>(54,868)</u>	<u>-</u>
	<u>\$ 16,927,386</u>	<u>\$ -</u>	<u>\$ (2,487,254)</u>	<u>\$ 14,440,132</u>	<u>\$ 1,485,000</u>

During the year ended June 30, 2013, \$21,255,000 of general revenue bonds, along with approximately \$122,000 of accrued interest on such bonds, was refunded to the Authority. As a result, the refunded bonds were removed from the Authority's long-term obligations as of June 30, 2013.

KENT COUNTY WATER AUTHORITY

Notes to the Financial Statements

June 30, 2015

NOTE 5. LONG-TERM OBLIGATIONS (CONTINUED)

The annual debt service requirements of the general long-term bonds payable as of June 30, 2015 are as follows:

Fiscal year ended June 30:	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2016	\$ 1,485,000	\$ 664,800	\$ 2,149,800
2017	1,540,000	604,300	2,144,300
2018	1,605,000	533,375	2,138,375
2019	1,690,000	451,000	2,141,000
2020	1,775,000	364,375	2,139,375
2021-2024	<u>6,400,000</u>	<u>581,250</u>	<u>6,981,250</u>
	<u>\$ 14,495,000</u>	<u>\$ 3,199,100</u>	<u>\$ 17,694,100</u>

Borrowings are secured by the Authority's pledge of all revenues, monies, securities, receivables, and other funds of the Authority as well as the proceeds of the sale of the Authority's real property pursuant to a mortgage on its water supply, treatment and distribution facilities, exclusive of monies collected as water quality protection charges.

The Authority must meet certain financial covenants. The Authority was in compliance with all such covenants at June 30, 2015 and 2014.

NOTE 6 - COMPENSATED ABSENCES

The Authority's employees are granted vacation and sick leave in varying amounts based on years of service with the Authority. At the termination of service, an employee is paid for accumulated unused vacation leave. The Authority has determined that the dollar value of accumulated accrued vacation leave, valued at the current rate of pay, at June 30, 2015 to be \$154,899. The accrued vacation is reported on the Statement of Net Position as other accrued expenses.

The changes in compensated absences for the year ended June 30, 2015 were as follows:

	<u>June 30, 2014</u>	<u>Additions</u>	<u>Payments</u>	<u>June 30, 2015</u>	<u>Amounts Due Within One Year</u>
Compensated absences	<u>\$ 142,788</u>	<u>\$ 21,918</u>	<u>\$ 9,807</u>	<u>\$ 154,899</u>	<u>\$ 154,899</u>

Continued

KENT COUNTY WATER AUTHORITY

Notes to the Financial Statements

June 30, 2015

NOTE 7. PENSION PLAN

Summary of Significant Accounting Policies

Method used to value investments

Investments are reported at fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Real estate assets are reported at fair value utilizing an income approach to valuation. By contract, an independent appraisal is obtained once every year to determine the fair market value of the real estate assets.

Plan Description

Plan administration

The Kent County Water Authority administers the pension plan (plan)—a single-employer defined benefit pension plan that provides pensions for all permanent full-time general employees of the Authority.

Plan membership

At June 30, 2015, pension plan membership consisted of the following:

Retirees and beneficiaries receiving benefits from the plan	21
Terminated members entitled to future benefits	15
Active plan members	<u>28</u>
Subtotal	<u>64</u>

Benefits provided

To participate in the Plan, employees must be at least twenty-one years of age and be employed by the Authority for a minimum of 12 months. The plan provides retirement, and death benefits to plan members based upon the average of the highest consecutive five years of compensation of the last 10 years of participation. The Authority is responsible for making all contributions to the Plan. The benefits provisions and all other requirements under the Plan are established by the Authority's board of directors. A copy of the Plan statements may be obtained by contacting the Authority.

Contributions

In the January 1, 2015 actuarial valuation, the Authority utilized the aggregate actuarial method to determine the annual required employer contributions. This method does not identify or separately amortize unfunded actuarial liabilities. Therefore, the entry age method was used to prepare the funded status of the Plan. The actuarial value of assets was determined using the fair value of investments.

The schedule of funding progress presented as required supplementary information presents multiyear trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

Continued

KENT COUNTY WATER AUTHORITY

Notes to the Financial Statements

June 30, 2015

NOTE 7. PENSION PLAN (CONTINUED)

Contributions (Continued)

The Authority's funding policy provides for employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are adequate to accumulate sufficient assets to pay benefits when due. The contribution requirements of the Authority are established and may be amended by the Authority's board of director's.

Investments

Investment policy

The pension plan's policy in regard to the allocation of invested assets is established and may be amended by the board of directors by a majority vote of its members. It is the policy of the board to pursue an investment strategy that reduces risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes. The pension plan's investment policy discourages the use of cash equivalents, except for liquidity purposes, and aims to refrain from dramatically shifting asset class allocations over short time spans. The following was the Board's adopted asset allocation policy as of June 30, 2015:

<u>Asset Class</u>	<u>Target Allocation</u>
Fixed income	25%
Domestic equity	44%
International equity	12%
Real estate	4%
Cash	15%
Total	100%

Concentrations

As of June 30, 2015, 5% or more of Plan assets were held in the following individual funds:

<u>Fund</u>	<u>Concentration</u>
Nationwide Fixed Fund	15.10%
Vanguard Mid-Cap Index	8.90%
Vanguard Growth Index	8.00%
Vanguard High Yield Corporate	8.00%
American Fund AMCAP	7.00%
Vanguard Value Index	6.90%
American Fund American Mutual	6.90%
LeggMason Core Bond Fund	6.00%
Prudential Core Bond Fund	6.00%
Franklin Templeton Global Bond Fund	5.00%

Continued

KENT COUNTY WATER AUTHORITY

Notes to the Financial Statements

June 30, 2015

NOTE 7. PENSION PLAN (CONTINUED)

Investments (Continued)

Rate of return

For the year ended June 30, 2015, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 7.25 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Deferred Retirement Option Program

As of June 30, 2015, the Plan has deferred pension liability as summarized below. These deferred items will be recognized in future pension expense. These deferred items are detailed as follows:

	<u>Deferred Outflows</u>	<u>Deferred Inflows</u>
Liability experience	\$ -	\$ (187,080)
Assumption changes	68,485	-
Investment experience	<u>178,102</u>	<u>-</u>
Total	<u>\$ 246,587</u>	<u>\$ (187,080)</u>

The amounts shown above will be recognized in pension expense as follows:

<u>Fiscal Year End</u>	<u>Expense Recognition</u>
2016	\$ 34,002
2017	34,002
2018	34,003
2019	34,003
2020	(10,523)
After 2020	(65,980)

Net Pension Liability of the Authority

The components of the net pension liability of the Authority at June 30, 2015, were as follows:

Total pension liability	\$ 6,128,791
Plan fiduciary net position	<u>(5,170,037)</u>
Authoritys' net pension liability	<u>\$ 958,754</u>
 Plan fiduciary net position as a percentage of the total pension liability	 84.36%

KENT COUNTY WATER AUTHORITY

Notes to the Financial Statements

June 30, 2015

NOTE 7. PENSION PLAN (CONTINUED)

Net Pension Liability of the Authority (Continued)

Actuarial assumptions. The total pension liability was determined by an actuarial valuation as of June 30, 2015, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.00 percent to 2.50 percent
Social security wage base	The taxable wage base is assumed to increase 2.5% annually.
Salary increases	Salary is assumed to increase 3.00% annually
Liability interest rate	7.25 percent

Assumed mortality was updated from the sex-distinct IRS 2008 Combined Static Table to the sex-distinct IRS 2015 Combined Static Table as of January 1, 2015.

The actuarial assumptions used in the June 30, 2015 valuation were based on the results of an actuarial experience study for the period July 1, 2014–June 30, 2015.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2015 (see the discussion of the pension plan's investment policy) are summarized in the following table:

<u>Asset Class</u>	<u>Long-Term Expected Real Rate of Return</u>
Fixed income	3.50%
Domestic equity	5.75%
International equity	5.85%
Real estate	5.50%
Cash	2.00%

Discount rate

The discount rate used to measure the total pension liability was 7.25 percent. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that the Authority's contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

KENT COUNTY WATER AUTHORITY

Notes to the Financial Statements

June 30, 2015

NOTE 7. PENSION PLAN (CONTINUED)

Net Pension Liability of the Authority (Continued)

Sensitivity of the net pension liability to changes in the discount rate

The following presents the net pension liability of the Authority, calculated using the discount rate of 7.25 percent, as well as what the Authority's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25 percent) or 1-percentage-point higher (8.25 percent) than the current rate:

	<u>1% Decrease (6.25%)</u>	<u>Current Discount Rate (7.25%)</u>	<u>1% Increase (8.25%)</u>
Authority's net pension liability	\$ 1,639,967	\$ 958,754	\$ 377,278

NOTE 8. OTHER POST EMPLOYMENT BENEFITS

Plan Description

The Authority's Post-Employment Medical Benefit Plan is a single-employer defined benefit postretirement health and life insurance program. All full-time employees are eligible to receive health and life insurance coverage after retirement. Retirement eligibility for continued health insurance coverage is age 62 with at least 20 years of service. Employees are eligible for life insurance coverage if they retire on or after age 62. Spousal and/or family health coverage is not provided for under the postretirement program. The Authority will provide eligible retirees continued individual health and dental insurance comparable to the active employee plans. Retirees age 65 and older are eligible for an individual Medicare Supplement Plan as well as continued dental coverage. The full cost of postretirement medical and dental coverage is provided by the Authority. Eligible retirees receive term life insurance in the amount of \$2,000. The Authority provides the full cost of this insurance. Prior to the adoption of GASB 45, the Authority funded these post retirement benefits on a pay as you go basis.

Funding Policy

The Authority's funding policy provides for actuarially determined periodic contributions to the Plans at rates that, increase gradually over time so that sufficient assets will be available to pay benefits when due.

The following is summary of the actuarial assumptions and cost methods used to determine Plan liabilities:

<u>Fiscal Year Beginning</u>	<u>July 1, 2014</u>	<u>July 1, 2012</u>
Discount rate	4.00%	4.00%
Census date	7/1/2014	7/1/2011
Mortality	IRS-2014	IRS-2008

Medical coverage costs are assumed to increase 7.5% in fiscal 2016 with trend rates decreasing 0.5% each year to an ultimate rate of 5.0% per year in fiscal 2019 and beyond. Dental coverage costs are assumed to increase 4.75% in fiscal 2016 with trend rates decreasing 0.25% each year to an ultimate rate of 3.5% per year in fiscal 2019 and beyond.

KENT COUNTY WATER AUTHORITY

Notes to the Financial Statements

June 30, 2015

NOTE 8. OTHER POST EMPLOYMENT BENEFITS (CONTINUED)

Funding Policy (Continued)

Three-Year Trend Information				
Fiscal Year Ending	Annual OPEB Cost	Actual Plan Contributions	Percentage of OPEB Cost Contributed	Net OPEB Obligation
June 30, 2015	\$ 550,128	\$ 79,203	14.40%	\$ 3,162,185
June 30, 2014	610,799	92,877	15.21%	2,691,260
June 30, 2013	591,301	103,866	17.57%	2,173,338
June 30, 2012	572,805	110,408	19.27%	1,685,903

The Authority's annual OPEB cost and net OPEB obligation for the year ended June 30, 2015 and 2014 was as follows:

	June 30, 2015	June 30, 2014
Annual required contribution	\$ 592,128	\$ 644,715
Interest on net OPEB obligation	107,650	86,934
Adjustment to annual required contribution	(149,650)	(120,850)
Annual OPEB cost (expense)	550,128	610,799
Contributions made	(79,203)	(92,877)
Increase in net OPEB obligation	470,925	517,922
Net OPEB obligation - beginning of year	2,691,260	2,173,338
Net OPEB obligation - end of year	<u>\$ 3,162,185</u>	<u>\$ 2,691,260</u>

Schedule of Funding Progress

The unfunded actuarial accrued liability was determined using the open thirty-year level dollar amortization basis.

Actuarial Valuation Date	Actuarial Value of Assets (AVA) (1)	Actuarial Accrued Liability (AAL) (2)	Unfunded AAL (UAAL) (2)-(1) (3)	AVA as a percent of AAL (1)/(2) (4)	Covered Payroll (d)	UAAL as a Percent of Covered Payroll (3)/(5) (6)
7/1/2014	N/A	\$4,278,597	\$ 4,278,597	N/A	\$ 1,993,673	214.61%
7/1/2011	N/A	\$5,077,569	\$ 5,077,569	N/A	\$ 1,671,141	303.84%

KENT COUNTY WATER AUTHORITY

Notes to the Financial Statements

June 30, 2015

NOTE 9. WATER QUALITY PROTECTION CHARGES PAYABLE

Pursuant to the rules and procedures of the Public Drinking Water Protection Program as promulgated by the Rhode Island Water Resources Board, the Authority has imposed a water quality protection charge on its customers. Prior to June 30, 1992, the Authority accounted for all water quality protection charges imposed as a liability due to the Authority's position that the rules and procedures regarding the imposition of the water quality protection charge did not adequately address the Authority's status as both a purchaser and supplier of water. The law governing the implementation of the water quality protection charge was amended on July 1, 1992. At June 30, 2015 and 2014, water quality protection charges payable of \$126,112 and \$127,177, respectively, represented funds collected from customers that are required to be paid to the Rhode Island Water Resources Board.

NOTE 10. COMMITMENTS AND CONTINGENCIES

During the ordinary course of its operations, the Authority is a party to various claims, legal actions and complaints, and adequately provides for losses and accrues liabilities for losses when they are both probable and can be reasonably estimated.

As of June 30, 2015, the Authority had no pending contingencies to report.

NOTE 11. REGULATORY MATTERS

The Authority periodically submits rate and compliance filings with the RIPUC to receive rate relief for amounts equal to rate increases awarded by the RIPUC to the Providence Water Supply Board, the Authority's main supplier.

NOTE 12. RISK MANAGEMENT

Insurance Held

The Authority is exposed to various risks of loss related to general liability, property and casualty, workers' compensation, unemployment and employee health and life insurance claims.

Buildings are fully insured against fire, theft, and natural disaster to the extent that losses exceed \$1,000 per incident. Directors, officers, and Board members are insured for a maximum of \$5,000,000 per occurrence and annual aggregate.

The Authority is a member of the Rhode Island Workers' Compensation Association public entity risk pool (the pool) currently operating as a common risk management and insurance program for workers' compensation benefits for all employees. The Pool assesses premiums which are paid by the Authority.

The Pool is self-sustaining through member premiums and reinsures through commercial companies for stop loss insurance.

Continued

KENT COUNTY WATER AUTHORITY

Notes to the Financial Statements

June 30, 2015

NOTE 12. RISK MANAGEMENT (CONTINUED)

The Authority has a third-party insured health care program for its employees for which the Authority pays 100% of the premium costs.

NOTE 13. PRIOR PERIOD ADJUSTMENT

Net position of the financial statements at June 30, 2014 has been restated to properly account for net pension liability to reflect the adoption of GASB Statement 68.

Net position, June 30, 2013 as originally stated	\$ 135,499,380
Less net pension liability	<u>(948,679)</u>
Net position, June 30, 2013 as restated	<u>\$ 134,550,701</u>

NOTE 14. SUBSEQUENT EVENTS

Management has evaluated subsequent events through September 3, 2015, the date the financial statements were available to be issued. No subsequent events were identified.

KENT COUNTY WATER AUTHORITY

Required Supplementary Information

Schedule of Changes in the Authority's
Net Pension Liability and Related Ratios (Unaudited)

Last Ten Fiscal Years
June 30, 2015

	<u>2015*</u>
Total pension liability	
Service cost	\$ 144,147
Interest	419,030
Experience (gain) or loss	(203,680)
Assumption changes	74,562
Benefit payments	<u>(260,720)</u>
Net change in total pension liability	173,339
Total pension liability - beginning	<u>5,955,452</u>
Total pension liability - ending (a)	<u><u>\$ 6,128,791</u></u>
Pension fiduciary net position	
Contributions - employer	\$ 277,560
Expected investment return	369,051
Additional investment return	(222,627)
Other	<u>(260,720)</u>
Net change in plan fiduciary net position	163,264
Plan fiduciary net position - beginning	<u>5,006,773</u>
Plan fiduciary net position - ending (b)	<u><u>\$ 5,170,037</u></u>
Authority's net pension liability (asset) - ending (a) - (b)	<u><u>\$ 958,754</u></u>

* Only one year out of the required ten was made available in the actuarial report.

See independent auditors' report

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KENT COUNTY WATER AUTHORITY

Required Supplementary Information

Schedule of Changes in the Authority's Net Pension Liability and Related Ratios (Unaudited)

Last Ten Fiscal Years
June 30, 2015

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Total pension liability	\$ 6,128,791	\$ 5,955,452	\$ 5,813,927	\$ 5,723,004	\$ 5,351,926	\$ 5,061,493	\$ 4,998,203	\$ 5,073,463	\$ 4,812,595	\$ 4,318,678
Plan fiduciary net position	<u>5,170,037</u>	<u>5,006,773</u>	<u>4,897,501</u>	<u>4,188,518</u>	<u>3,784,648</u>	<u>3,853,105</u>	<u>3,499,204</u>	<u>2,940,501</u>	<u>3,932,168</u>	<u>3,775,115</u>
Authority's net pension liability (asset)	<u>\$ 958,754</u>	<u>\$ 948,679</u>	<u>\$ 916,426</u>	<u>\$ 1,534,486</u>	<u>\$ 1,567,278</u>	<u>\$ 1,208,388</u>	<u>\$ 1,498,999</u>	<u>\$ 2,132,962</u>	<u>\$ 880,427</u>	<u>\$ 543,563</u>
Plan fiduciary net position as a percentage of the total pension liability	84.36%	84.07%	84.24%	73.19%	70.72%	76.13%	70.01%	57.96%	81.71%	87.41%
Covered-employee payroll	1,798,468	1,916,160	1,840,222	1,671,148	1,699,872	1,614,790	1,669,110	1,755,040	1,713,024	Not Avail.
Authority's net pension liability (asset) as a percentage of covered-employee payroll	53.31%	49.51%	49.80%	91.82%	92.20%	74.83%	89.81%	121.53%	51.40%	Not Avail.

See independent auditors' report

KENT COUNTY WATER AUTHORITY

Required Supplementary Information

Schedule of Authority's Contributions (Unaudited)

Last Ten Fiscal Years
June 30, 2015

	2015	2014	2013	2012	2011	2010	2009	2008	2007*
Actuarially determined contribution	\$ 246,738	\$ 277,560	\$ 311,745	\$ 256,566	\$ 222,723	\$ 214,026	\$ 258,392	\$ 193,619	\$ 154,574
Contributions in relation to the actuarially determined contribution	246,738	277,560	311,745	256,566	222,723	214,026	260,000	193,619	206,000
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,608)	\$ -	\$ (51,426)
Covered-employee payroll	1,798,468	1,916,160	1,840,222	1,671,148	1,699,872	1,614,790	1,669,110	1,755,040	1,713,024
Contributions as a percentage of covered-employee payroll	13.72%	14.49%	16.94%	15.35%	13.10%	13.25%	15.58%	11.03%	12.03%

* Only nine years out of the required ten were made available in the actuarial report.

See independent auditors' report

KENT COUNTY WATER AUTHORITY

Required Supplementary Information

Schedule of Investment Returns (Unaudited)

Last Ten Fiscal Years
June 30, 2015

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Annual money-weighted rate of return, net of investment expense	2.92%	Not Avail	15.41%	11.88%	0.45%	12.08%	19.93%	-24.08%	5.28%	9.81%

See independent auditors' report

HAGUE, SAHADY & CO., P.C.

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*INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS
BASED ON A N AUDIT OF FINANCIAL STATEMENTS PERFORMED IN
ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS*

To the Board of Directors
Kent County Water
Authority West Warwick,
Rhode Island

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Kent County Water Authority, as of and for the year ended June 30, 2015, and the related notes to the financial statements, and have issued our report thereon dated September 3, 2015.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered Kent County Water Authority's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Kent County Water Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of Kent County Water Authority's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses, however, material weaknesses may exist that have not been identified.

Continued

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Kent County Water Authority's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Hague, Sabady & Co. PC

Fall River, Massachusetts
September 3, 2015

39-3-12.1
Information Required of Water Utility

TABLE A

Status of Physical Plant

TABLE B

Maintenance Policy

TABLE C

Water Treatment Methods

TABLE D

Policy Related to Expansion and Renovations

TABLE E

Copies of Statements Filed with City and Town Councils of Service

Table A

Status of Physical Plant

The physical plant of the Kent County Water Authority consists of the following items as of June 30, 2015.

REAL ESTATE

IN THE CITY OF WARWICK:

- A. On the Easterly side of Rhode Island Highway Route 1 and Post Road, 8.2 acres with one gravel-packed well. Currently out of service and designing a replacement well.
- B. On the West side of Route 2, 8.0 million gallon per day low service booster station with generator.

IN THE TOWN OF COVENTRY:

- A. On the East side of Route 3 abutting the Coventry-West Greenwich town line, ninety acres of land, and three gravel-packed wells with an Ultra-filtration treatment plant. Plus approximately 300 acres of land purchased for wellhead protection and proposed well sites.
- B. On Route 3, at the top of Tiogue Hill, land with an out of service obsolete three-quarter million-gallon storage tank.
- C. On Read Schoolhouse Road, one out of service obsolete one and one half million gallon steel storage tank. To the north of the out of service tank a new one and one half million gallon concrete storage tank.
- D. On the East side of Route 3, in Coventry, 17 acres of land, one out of service gravel-packed well and obsolete lime facility
- E. On Knotty Oak Road, Rhode Island Highway Route 116, abandoned pumping station.
- F. Site on 7,500 sq. ft. leased land for 99 years. Location of 4.0 million gallons per day Johnsons Blvd. High Service Booster Station.
- G. North side Mishnock Road 9 acres of land for future use.

IN THE TOWN OF WEST WARWICK:

- A. At the intersection of Gough Avenue and West Street, land and out of service obsolete steel storage tank one million gallons.

- B. On the North side of East Greenwich Avenue, Setian Lane, land and a three million gallon steel storage tank plus 1.0 million gallon per day high service booster station.
- C. At 1072 Main Street, two buildings consisting of office building, storage facilities, workshop, garage, operation headquarters.
- D. On the North side of Wakefield Street a 2.0 million gallon out of service concrete storage tank.
- E. North side of Crompton Road (Nottingham Estates) 10,000 sq. ft. land for proposed tank site.
- F. West Warwick Industrial Park high service booster station capacity of 1.2 million gallons per day.
- G. West Warwick Industrial Park abandoned obsolete concrete storage tank.

IN THE TOWN OF SCITUATE:

- A. On Clinton Avenue, a 25 million gallon per day pumping station, high and low service.

IN THE CITY OF CRANSTON:

- A. Out of service and obsolete one and one half million gallon combined capacity underground concrete storage tanks; Seven Mile Road.
- B. Oaklawn Avenue leased site metering station for source supply.

IN THE TOWN OF WEST GREENWICH:

- A. 1.5 million gallon steel elevated storage tank on easement land Technology Park.
- B. On the north side of Mishnock Road, approximately 100 acres of wellhead protection land proposed new well sites.
- C. On west side of Carrs Pond Road leased site and 3.0 million gallon concrete storage tank.

IN THE TOWN OF EAST GREENWICH:

- A. 1.5 million gallon concrete storage tank on land off of Frenchtown Road.

Throughout the distribution system at the reduced gradient systems, 9 pressure reducing stations exist for pressure reduction on a system basis.

The above listed items constitute the physical plant of the Kent County Water Authority and cite the source of supply owned by the Kent County Water Authority. All property unless otherwise noted, is held in fee simple and not subject to any mortgage, liens, attachments or other encumbrances.

In addition to wells cited, the Kent County Water Authority has as a source of supply the Scituate Reservoir owned by the City of Providence and has two connections into the source of supply; one, on Oaklawn Avenue in the City of Cranston and one, at the cited-pumping station in the Town of Scituate. A connection is also available at Bald Hill Road in Warwick from the Warwick Water Department system obtained from Providence Water supply Board.

The volume of water that could potentially be being conveyed into the distribution system by KCWA well facilities is shown in the following table.

Well Flow from KCWA Facilities

FACILITY	Max GPM	Design GPM	Treated /Filtered flow* GPM
Mishnock WTP Well #3	600	575	546
Mishnock WTP Well #4	800	780	741
Mishnock WTP Well #5	600	450	428
TOTALS	2000	1805	1715
*Treatment Plant operating at 95% filtration efficiency			

FACILITY	Min GPM	Max GPM	Treated flow** GPM
Spring Lake Well (Out of Service)	300	300	300
**There is no filtration component . Treated flow is presented as 100% throughput			

FACILITY	Min GPM	Max GPM	Treated flow** GPM
Warwick/East Greenwich Well (Temporarily Out of Service)	1400	2000	1400-2000
**There is no filtration component . Treated flow is presented as 100% throughput			

Mishnock WTP

Flow rates from the Mishnock Water Treatment Plant are function of both production time and distribution demand. The production efficiency rate is 95%. Currently, the plant is only delivering water to the low service pressure gradient at an average flow of 900 GPM. The plant also has finished water pumps to deliver flow to the high service pressure gradient. The high service transmission main required to utilize this plant element is not yet completed.

Warwick/EG Well

The Warwick/EG Well is temporarily out of service for repairs. When the facility is operational, the groundwater is treated but does not utilize filtration at this time. As a result, the well throughput efficiency is at 100% of what is pumped out of the ground.

Spring Lake Well

The Spring Lake well is an approved active public drinking water well with flows up to 300 GPM. However, the well is not being pumped into the distribution system at this time due to aesthetic concerns related to elevated iron and manganese levels.

All well flows, except Spring Lake, are controlled by variable frequency drives (VFDs) which can be adjusted manually by an operator or automatically by a process variable, typically pressure. Pump impellor settings can also be adjusted to accommodate a desired flow regime. Fluctuations in gradient backpressure, or head, will also directly affect the flow on any given day. These flow variabilities from backpressure cancel each other out as demand is imparted by users within the distribution system.

The volume of water from Scituate Reservoir Providence Water Supply Board is variable depending on our demand. By state law, Kent County Water Authority has a daily draw from Providence of a maximum of 150 gpcd for all individuals of Kent County proper except Potowomut in Warwick and areas not subject to the north/south branch drainage basin of the Pawtuxet River.

Table B
Maintenance Policy

It is and has been the policy of the Kent County Water Authority to maintain its system in proper operating condition in accordance with accepted water works standards. All damaged items, valves, hydrants, pipe, etc. of our distribution system are repaired as expeditiously as possible. Replacement of deteriorated lines via the Infrastructure Program is replaced during the construction period each year. Any emergency items are repaired immediately. All physical plant is maintained and performed by staff of the Kent County Water Authority. With the addition of the IFR Program, a continual replacement program has been established for this system. This is outside and separate for our Capital Improvement Program. Distribution pipes were last installed this construction season by the Authority and its contractors. Total installed over the last 10 years is 34.5 miles.

Table C
Water Treatment Methods Chemicals Used
For Last Twelve Months

Please refer to Mr. Woodcock's testimony schedule 1E page 2 of 2.

Table D

Policy Relating to Expansion and Renovation

It is and has been the policy of the Kent County Water Authority to assure that the system will continue to provide service to all existing customers. It is the requirement and the established legislation of the Kent County Water Authority to service all customers within the borders of Kent County and has been our policy to extend our service to areas contiguous to ours where the Providence Water Supply Board or North Kingstown Water cannot be serviced by that public water system. Capital Improvement Programs have been developed and are in existence to provide existing customers and limited proposed future customers the same level of service throughout. All Capital Improvement Programs, Infrastructure Programs and restricted accounts are reported to the Commission semiannually and are up to date. These reports list funds expended and projects completed or under construction. A revised current Capital Improvement Program exists and is submitted with this filing for approval by the Commission. An Infrastructure Program is current and submitted with this filing with the Commission. We will continue our funding proposed under the currently approved IFR plan and PUC approved allocation.

Table E

All statements of service can be found in the first section of this filing.