

# City of Dover Electric Revenue Fund Five Year Financial Forecast 2010 - 2014

Utility Committee  
June 1, 2009

Prepared by Finance Department

# Key Assumptions

## kWh Growth

- No growth through 2012
- 2013 – 1.06%
- 2014 – 2.13%
- Sales growth = power supply growth provided by PACE

Interest rate for investments and cash – 3.0%

Sale of Emission Credits – 2011 thru 2014 \$400,000/year

Annual Department Expenses – Growth 3.5%

Retiree's Medical Insurance – Growth 6.0%

No new debt issuance

Estimate for OPEB included 2011 – 2014

Includes annual appropriation to I & E Fund for capital improvements

# Power Supply Estimates

- Projections by PACE as of March 11, 2009
    - Based on current hedges and open market position
  - 2010            \$73,473,322            +3.1% (to 2009 Budget)
    - Using \$3,000,000 of Rate Stabilization Reserve
  - 2011            \$67,482,774            -8.2%
  - 2012            \$64,585,722            -4.3%
  - 2013            \$64,560,838            0.0%
  - 2014            \$62,332,649            -3.5%
- 
- Subject to market prices and new regulations; i.e. carbon tax

# Capital Improvements & Maintenance

- In order to keep rate increases to a minimum, we reduced the transfer to the I & E Fund in the past two years to an amount less than the \$3 million annual estimate for system maintenance included in the financial model in 2007. We have instead used reserves or debt issuance for these improvements.
- This forecast includes the following transfers to the I & E Fund for Equipment Replacement, System Improvements & Maintenance; with no new debt requirement –
  - 2010            \$2,500,000
  - 2011            \$3,000,000
  - 2012            \$3,250,000
  - 2013            \$3,500,000
  - 2014            \$3.750,000

# Reserve Replenishment

- Depreciation Reserve – to bring back to policy level. Fiscal Year 2011 - \$1 million in addition to interest earned each year; Used \$4.7 million in Fy08 for projects;
- Rate Stabilization Reserve – to bring up to policy level and replenish the \$3 million transfer in FY2010, interest earnings plus the following:
  - 2011 - \$1.5 million
  - 2012 - \$1.0 million
  - 2013 - \$1.0 million
  - Subject to change based on outcome of FY09

# Debt Service Coverage Ratio

- Covenant 1.25 times
- Ten Year Trend 2.5 times – 3.5 times
  - Adjusted to include General Fund Transfer
- Financial Forecast
  - 2010      1.84
  - 2011      2.75
  - 2012      2.68
  - 2013      2.84
  - 2014      2.55

# Forecasted Revenue Adjustments

- FY 2012                    -4.0%
- FY 2014                    -4.0%

Based on financial forecast estimates as of 5/8/09 for  
FY10 – FY14

Positive/(negative) results from FY09 will impact forecast  
starting in FY11; This may create a potential for further  
revenue reductions;

Note – these are revenue adjustments, not rate  
adjustments; The rate model will have to be updated to  
determine actual rates;

# Net Margins

	Budget 2009	0.0% Year 1 2010	0.0% Year 2 2011	-4.0% Year 3 2012	0.0% Year 4 2013	-4.0% Year 5 2014	Yr 1 - Yr 5 Total
<b>Net Margins</b>							
Operating Revenue - Retail Rates	\$ 92,081,400	\$ 99,533,042	\$ 100,201,500	\$ 100,206,200	\$ 101,270,400	\$ 102,341,200	\$ 503,552,342
Operating Revenue - Revenue Adjustment	6,445,700	-	-	(4,008,200)	(4,050,800)	(8,023,500)	(16,082,500)
Operating Revenue - Miscellaneous Receipts	3,047,829	1,931,486	2,076,000	2,094,000	2,121,000	2,302,000	10,524,486
Operating Revenue - Utility Tax	1,763,500	1,781,500	1,793,500	1,721,800	1,740,100	1,688,200	8,725,100
Total Revenue	103,338,429	103,246,028	104,071,000	100,013,800	101,080,700	98,307,900	506,719,428
Purchased Power Expense	(71,265,247)	(73,473,322)	(67,482,774)	(64,585,722)	(64,560,838)	(62,332,649)	(332,435,305)
Rate Stabilization Credit	-	3,000,000	-	-	-	-	3,000,000
Operating Expenses (includes Power Plant)	(20,432,125)	(19,609,659)	(19,994,200)	(20,531,900)	(21,137,500)	(21,955,300)	(103,228,559)
Total Operating Expenses	(91,697,372)	(90,082,981)	(87,476,974)	(85,117,622)	(85,698,338)	(84,287,949)	(432,663,864)
Operating Margin	11,641,057	13,163,047	16,594,026	14,896,178	15,382,362	14,019,951	74,055,564
Non-Oper. Rev. - Interest on Operating	438,037	192,200	460,700	441,800	450,000	441,100	1,985,800
Non-Oper. Rev. - Interest on Reserves	561,600	665,800	601,400	694,200	745,200	797,600	3,504,200
Operating Transfers - Out (6.5%)	(6,758,100)	(6,758,100)	(6,764,600)	(6,500,900)	(6,570,200)	(6,390,000)	(32,983,800)
<b>Margins Available For Debt Service</b>	5,882,594	7,262,947	10,891,526	9,531,278	10,007,362	8,868,651	46,561,764
Interest for Long-Term Debt	(1,795,000)	(1,696,600)	(1,588,700)	(1,471,573)	(1,347,523)	(1,213,658)	(7,318,054)
Cash From Operations	4,087,594	5,566,347	9,302,826	8,059,705	8,659,839	7,654,993	39,243,710
Debt Issue Cost Amort.-Outstanding Debt	(104,300)	(104,300)	(104,300)	(104,300)	(104,300)	(104,300)	(521,500)
Depreciation Expense	(4,437,100)	(4,768,700)	(4,878,600)	(4,943,900)	(5,013,600)	(5,091,400)	(24,696,200)
Net Margins (\$)	\$ (453,806)	\$ 693,347	\$ 4,319,926	\$ 3,011,505	\$ 3,541,939	\$ 2,459,293	\$ 14,026,010
<b>Debt Service Coverage</b>							
Margins Avail. for Debt Service	5,882,594	7,262,947	10,891,526	9,531,278	10,007,362	8,868,651	46,561,764
Total Debt Service	3,635,000	3,956,600	3,958,700	3,551,573	3,527,523	3,483,658	18,478,054
Debt Service Coverage Ratio	1.62	1.84	2.75	2.68	2.84	2.55	

# Positive/(Negative) Cash

	Budget 2009	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014	Yr 1 - Yr 5 Total
Cash from Operations	\$ 4,087,594	\$ 5,566,347	\$ 9,302,826	\$ 8,059,705	\$ 8,659,839	\$ 7,654,993	\$ 39,243,710
<b>Other Cash Requirements</b>							
Transfers To Reserves	2,085,748	83,500	2,500,000	1,000,000	1,000,000	-	4,583,500
Transfers To I & E Fund	1,684,000	2,500,000	3,000,000	3,250,000	3,500,000	3,750,000	16,000,000
Principal on Debt	1,840,000	2,260,000	2,370,000	2,080,000	2,180,000	2,180,000	11,070,000
Purchase of Investments - Reserve Funds	674,637	699,500	644,100	718,000	777,200	820,700	3,659,500
State Reimbs. & Grants Transferred to I & E Fund	921,558	-	-	-	-	-	-
<b>Total Cash Requirements</b>	\$ 7,205,943	\$ 5,543,000	\$ 8,514,100	\$ 7,048,000	\$ 7,457,200	\$ 6,750,700	\$ 35,313,000
<b>Positive/(Negative) Cash</b>	\$ (3,118,349)	\$ 23,347	\$ 788,726	\$ 1,011,705	\$ 1,202,639	\$ 904,293	

# Reserve Balances

Reserve	2010 estimate	2014 estimate	Policy
Depreciation	\$7,991,763	\$10,087,563	Min. \$10 million
Future Capacity	\$8,900,651	\$10,017,751	Min. \$10 million
Insurance	\$395,002	\$444,702	Min. \$350,000
Rate Stabilization	\$1,718,613	\$5,664,313	Min. 3% of power supply cost, not to exceed 10%
Contingency	\$1,036,069	\$1,166,169	Min. 1% of Operating Revenues

City of Dover  
Water and Wastewater Fund  
Five Year Financial Forecast  
2010 - 2014

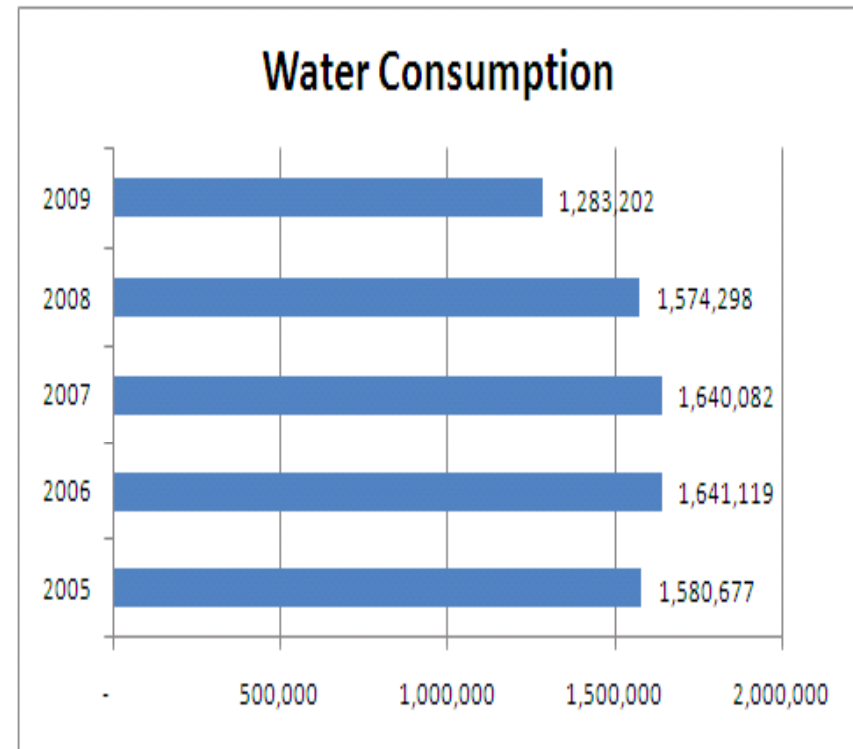
Utility Committee

June 1, 2009

Prepared by Finance Department

# Water and Wastewater Usage

- Fitch Ratings – Sales for top ten < 10%
  - City of Dover
    - 2008 = 24.3%
    - 2009 = 23.8%
- Apr 2007 – Mar 2008 as compared to Apr 2008 – Mar 2009 Water Usage
  - Total Usage -39,060 T/gals
  - Fy09 Monthly Avg. -5,000 T/gals
  - Less water usage = less wastewater usage
- Fitch considers reserves and cash on hand policies when analyzing credit to determine if utility can make it through loss of major customers
- Fitch reviews major customer by type; i.e. industrial, residential, governmental, private utility, colleges
- Fitch reviews growth, demographics, and local/regional comparisons



Source: Fitch Ratings Public Finance Report January 2009 – 2009  
Median Ratios for Water and Sewer Revenue Bonds – Retail Systems

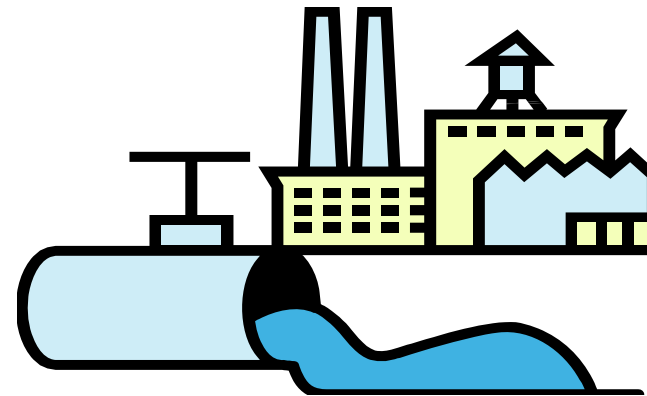
# Key Assumptions

- T/Gallons Growth
  - 2006 +3.8%
  - 2007 no growth
  - 2008 -4.0%
  - 2009 projection -1.5%
  - 2010 thru 2014 no growth
- Interest rate for investing and cash – 3.0%
- No growth in impact fees 2011 - 2014
- Annual Department Expenses – Growth 3.5%
- Retiree’s Medical Insurance – Growth 6.0%
- Estimate for OPEB included 2011 – 2014; Approximately \$350,000 annually
- Sewer Adjustment Revenues equal County Treatment Fees; no allowance for inflow and infiltration or treatment fee increases from the County;
- General Fund transfer remains at 4.5% across all years

Note - Zero growth estimates require all forecasted cost increases to be covered by rate increases

# Reserve Replenishment

- Water Capital Asset Reserve – to bring back to policy level. Fiscal Year 2011 through 2013 \$100,000 annual plus interest;
- Wastewater Capital Asset Reserve – to bring back to policy level. Fiscal Year 2011 through 2014 \$125,000 annual plus interest;



## Capital Improvements Financing Plan

- Fiscal Year 2010 Capital Improvement Plan has several major projects financed by State Revolving Loan Funds and a total of \$700,000 transfer from operations
- The five year plan includes projects for water quality and inflow/infiltration improvements; new water tower and plans for several wastewater pump station replacements;
- Forecast does include \$500,000 annual appropriation from Operations for each utility in order to provide some pay go funding in 2011 – 2014 (i.e. vehicles, equipment)
  
- Water Revolving Loan Fund 2% interest rate
- Wastewater Revolving Loan Fund 3% interest rate
- Using the revolving loan funds saves the City approximately \$2.3 million in interest cost
  
- Fiscal Year 2011 through 2014 Capital Improvement Plan is dependent on heavy use of bond proceeds in order to mitigate significant rate increases
  - 86% of the 5 Year Capital Improvement Plan is forecasted to be debt financed
  - This does not allow for rates to be set at a level to insure pay go financing for future projects and system maintenance past 2014
  - Any financing above the \$500,000 appropriation beyond 2014 would require additional bond financing
- Rate increases are implemented throughout the forecast but at a lesser degree of increase if all projects were pay go
- Impact fees are used to help pay annual debt service cost along with rate increases

# Annual Capital Improvement Plan

- Utility Committee – CIP presentation of 4/13/09 has been reduced from \$37.9 million to \$32.6 million
- Fitch reviews average annual CIP per cost per customer
  - Officials try to accommodate rising capital costs by financing more projects with debt to alleviate the immediate effect on the ratepayers;
  - Utility capital improvement programs are growing overall from a combination of sharp recent hikes in material and labor costs, normal inflation, aging infrastructure, ongoing regulatory enhancements, and customer growth.
  - Fitch takes into account comprehensive plans to maintain existing infrastructure, and evaluates a utilities annual depreciation to gauge the amount of ongoing maintenance being performed

Note – Combined Water & Wastewater customers for FY10 = 11,887; no growth forecasted at this time;

Source: Fitch Ratings Public Finance Report January 2009 – 2009 Median Ratios for Water and Sewer Revenue Bonds – Retail Systems

	Five Year Plan In Thousands			Per Customer
	Water	Wastewater	Total	
2010	\$3,026	\$6,700	\$9,726	\$818
2011	4,084	1,950	6,034	\$508
2012	2,085	2,312	4,397	\$370
2013	2,908	2,363	5,271	\$443
2014	3,909	3,280	7,189	\$605
Total	\$16,012	\$16,605	\$32,617	\$2,744

# Forecasted Debt Issuance

<b>Fiscal Year</b>	<b>Total Issuance</b>	<b>Type of Debt</b>
2010	\$8.3 million	State Revolving Loan – secured by revenues; must keep debt coverage 1.5 – 2.0 times; Water & Wastewater projects;
2011	\$15.0 million	Revenue Bonds secured by revenues; Principal includes estimated set aside for bond reserve and cost of issuance; Water & Wastewater projects;
2013	\$3.3 million	Revenue Bonds secured by revenues; Principal includes estimated set aside for bond reserve and cost of issuance; Wastewater projects;
2014	\$3.3 million	Revenue Bonds secured by revenues; Principal includes estimated set aside for bond reserve and cost of issuance; Wate projects;

# Annual Capital Demands

## City of Dover – Long Term Debt

	Principal (000's)	Per Customer	Per Capita	Debt Ratio
2005	\$1,330	\$57.14	\$19.64	2.07
2006	\$1,376	\$57.88	\$20.26	2.86
2007	\$1,392	\$57.54	\$20.04	2.53
2008	\$654	\$26.61	\$9.41	3.98
2009	\$675	\$27.53	\$9.71	2.60
2010	\$691	\$28,20	\$9.95	3.25
2011	\$449	\$18.32	\$6.46	3.31
2012	\$1,120	\$45.72	\$16.13	1.86
2013	\$1,241	\$50.64	\$17.87	1.84
2014	\$1,575	\$64.28	\$22.68	1.70

## Fitch Comparison – Long Term Debt

		Per Customer	Per Capita	Debt Ratio
2009		\$1,875	\$474	7.0
2014		\$2,329	\$822	

Fitch Median – Rated A Credit  
 Population 68,309;  
 Median Income \$42,887  
 Water Customers 27,697;  
 Wastewater Customers 17,009;

City of Dover  
 Population – approximately 35,200  
 Water Customers – 12,254  
 Wastewater Customers – 11,519

# Affordability Measures

- A key measure of water and sewer rates is the percent of median household income for the area being served. The rating agencies use a threshold of 2% for this measure on combined systems.
- They also look for reserve policies for rehab and replacement funds, operating funds, and rate stabilization funds.
- Another measure used by the American Water Works Association is the ratio of the In City rate to the Out of City rate to insure the taxpayer's are not subsidizing the non-taxpayer's. This ratio is 2:1; The City's current ratio is 1.3:1;

2009	City	Fitch/AWWA
Median Household Income (2000 Census)	\$46,504	
Annual Utility Bill		\$930.08
In City	\$443.40	
Out City	\$580.20	
% of Median Household Income		2.0%
In City	1.0%	
Out City	1.2%	
Average Combined Rates		
In City	\$7.39	\$8.61
Out City	\$9.67	\$17.22
Ratio	1.3:1	2:1

## Kent County Comparables - Water Rates

### Avg. Quarterly Rate - \$/1,000 gallons

(Calculated on 15,000 gallons and includes customer charge)

Source: Synthesis of Water Rates in Delaware and Contiguous States - IPA, U of D, December 2008

	<b>2000</b>	<b>2004</b>	<b>2008</b>
Camden-Wyoming	---	6.16	7.14
Clayton Water Department	---	2.17	3.83
Dover			
Inside City	1.90	2.35	2.53
Outside City	2.85	3.53	3.76
Felton			2.53
Inside City	---	2.53	---
Outside City	---	3.80	---
Frederica	---	3.33	4.33
Greenwood	---	4.00	6.40
Harrington	---	2.24	5.58
Magnolia			
Inside City	---	3.33	3.67
Outside City	---	4.00	4.33
Smyrna		2.87	
Inside City	---	---	2.87
Outside City	---	---	5.33

## Rates - Past and Forecasted

Water	In City	Out City	\$ Chg	% Chg
2005	\$2.35	\$3.53		
2006	\$2.45	\$3.68	.10 - .15	10.5%
2007	\$2.45	\$3.68		
2008	\$2.45	\$3.68		
2009	\$2.45	\$3.68		
2010	\$2.70	\$4.05	.25 - .37	10.0%
2011	\$2.96	\$4.45	.26 - .40	10.0%
2012	\$3.26	\$4.90	.30 - .45	10.0%
2013	\$3.49	\$5.24	.23 - .34	7.0%
2014	\$3.84	\$5.77	.35 - .53	10.0%
2006	Implemented \$1.25 customer charge which is included in above rate			

Sewer	In City	Out City	\$ Chg	% Chg
2005	\$1.90	\$2.85		
2006	\$2.10	\$3.15	.20 - .30	10.5%
2007	\$2.10	\$3.15		
2008	\$2.10	\$3.15		
2009	\$2.10	\$3.15		
2010	\$2.10	\$3.15		
2011	\$2.31	\$3.47	.21 - .32	10.0%
2012	\$2.61	\$3.92	.30 - .45	13.0%
2013	\$2.87	\$4.31	.26 - .39	10.0%
2014	\$3.16	\$4.74	.29 - .43	10.0%
2006	Implemented \$1.25 customer charge which is included in above rate			

# Comparison of Annual Utility Bill

Residential Customer 60 T/Gallons per year

<b>In City</b>	<b>Annual \$</b>	<b>Increase</b>	<b>Out City</b>	<b>Annual \$</b>	<b>Increase</b>
2009	\$443.40		2009	\$580.20	
2010	\$458.10	\$14.70	2010	\$602.28	\$22.08
2011	\$486.87	\$28.77	2011	\$645.47	\$43.19
2012	\$522.68	\$35.80	2012	\$699.21	\$53.74
2013	\$552.03	\$29.36	2013	\$743.28	\$44.06
2014	\$590.20	\$38.16	2014	\$800.56	\$57.29

# Trends of Revenues & Expenses

(In Thousands)

	Revenues	Operating Expenses	Treatment Fees	Debt Service	Depreciation
2005	\$10,854	\$4,648	\$3,470	\$1,520	\$1,221
2006	\$12,103	\$4,586	\$3,628	\$1,604	\$1,234
2007	\$11,928	\$4,832	\$3,703	\$1,594	\$1,310
2008	\$12,258	\$5,637	\$3,634	\$830	\$1,428
2009	\$11,647	\$6,268	\$3,435	\$836	\$1,729
% Change	7.3%	34.9%	-1.0%	-45.0%	41.6%
2010	\$12,100	\$6,111	\$3,435	\$833	\$2,020
2011	\$13,132	\$6,704	\$3,435	\$947	\$2,232
2012	\$13,947	\$6,962	\$3,435	\$1,978	\$2,415
2013	\$14,547	\$7,219	\$3,435	\$2,189	\$2,618
2014	\$15,270	\$7,490	\$3,435	\$2,641	\$2,890
% Change	26.2%	22.6%	0.0%	217.0%	43.1%

Operating Expenses do not include transfers to reserves or the I & E Fund; Does include General Fund transfers;

Kent County Treatment Fee Increases – FY06 \$.28 or 15%; FY08 \$.21 or 9.9%;

	Year 0 2009	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
<b>Net Margins - Combined Water &amp; Wastewater</b>						
Water Fees	\$ 4,090,000	\$ 4,090,000	\$ 4,090,000	\$ 4,090,000	\$ 4,090,000	\$ 4,090,000
Wastewater Fees	2,400,000	3,045,560	3,045,560	3,045,560	3,045,560	3,045,560
Rate Increase	-	409,000	1,122,600	1,927,500	2,518,400	3,232,000
Treatment Fees - Kent County	4,080,950	3,435,390	3,435,390	3,435,390	3,435,390	3,435,390
Miscellaneous Income - Water	285,775	329,170	338,320	347,590	356,860	366,130
Miscellaneous Income - Wastewater	35,500	35,500	35,500	35,500	35,500	35,500
Impact Fees - Water	125,000	280,000	400,000	400,000	400,000	400,000
Impact Fees - Wastewater	630,000	475,000	665,000	665,000	665,000	665,000
Total Revenue	11,647,225	12,099,620	13,132,370	13,946,540	14,546,710	15,269,580
Treatment Fees - Kent County	(3,435,430)	(3,435,430)	(3,435,390)	(3,435,390)	(3,435,390)	(3,435,390)
Operating Expenses - Water	(3,471,527)	(3,506,042)	(3,815,817)	(3,964,574)	(4,105,832)	(4,252,278)
Operating Expenses - Wastewater	(2,232,016)	(2,106,652)	(2,367,448)	(2,465,512)	(2,554,303)	(2,646,445)
Operating Transfers - Out (4.5%) Water	(221,204)	(231,459)	(256,190)	(275,013)	(288,313)	(307,135)
Operating Transfers - Out (4.5%) Wastewater	(343,606)	(316,561)	(339,446)	(357,262)	(370,969)	(384,676)
Total Operating Expenses	(9,703,783)	(9,596,144)	(10,214,292)	(10,497,751)	(10,754,806)	(11,025,924)
Operating Margin	1,943,442	2,503,476	2,918,078	3,448,789	3,791,904	4,243,656
Non-Oper. Rev. - Interest on Operating	75,000	78,600	104,000	104,000	104,000	104,000
Non-Oper. Rev. - Interest on Reserves	151,152	121,344	110,172	124,756	135,249	146,056
Margins Available For Debt Service	2,169,594	2,703,420	3,132,250	3,677,546	4,031,153	4,493,712
Interest for Long-Term Debt	(161,066)	(141,881)	(497,751)	(857,343)	(947,424)	(1,065,146)
Cash From Operations	2,008,528	2,561,539	2,634,499	2,820,203	3,083,728	3,428,566
Debt Issue Cost Amort.-Outstanding Debt	(31,597)	(31,597)	(55,135)	(55,135)	(55,135)	(55,135)
Depreciation Expense	(1,728,960)	(2,020,534)	(2,232,203)	(2,414,550)	(2,618,532)	(2,890,517)
<b>Net Margins (\$)</b>	<b>\$ 247,970</b>	<b>\$ 509,408</b>	<b>\$ 347,162</b>	<b>\$ 350,518</b>	<b>\$ 410,062</b>	<b>\$ 482,914</b>
<b>Debt Service Coverage</b>						
Margins Avail. for Debt Service	\$ 2,169,594	\$ 2,703,420	\$ 3,132,250	\$ 3,677,546	\$ 4,031,153	\$ 4,493,712
Total Debt Service	\$ 835,600	\$ 832,951	\$ 946,687	\$ 1,977,853	\$ 2,188,564	\$ 2,640,501
Debt Service Coverage Ratio	2.60	3.25	3.31	1.86	1.84	1.70
Transfer to I & E Fund - Combined	\$ 700,000	\$ 700,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
Transfer to Impact Fee Reserve - Combined	\$ 264,260	\$ 110,062	\$ 150,963	\$ -	\$ -	\$ -
Transfer to Capital Asset Reserve	\$ -	\$ -	\$ 225,000	\$ 225,000	\$ 225,000	\$ 125,000
Reinvestment of Reserve Interest	\$ 151,152	\$ 121,344	\$ 110,172	\$ 124,756	\$ 135,249	\$ 146,056
Debt Service Principle - Combined	\$ 674,534	\$ 691,070	\$ 448,936	\$ 1,120,510	\$ 1,241,140	\$ 1,575,355
Total Cash Budget Requirements -Combined	\$ 1,789,946	\$ 1,622,476	\$ 1,935,072	\$ 2,470,266	\$ 2,601,389	\$ 2,846,411
<b>Net Positive/(Negative Cash)</b>	<b>\$ 218,582</b>	<b>\$ 939,063</b>	<b>\$ 699,428</b>	<b>\$ 349,936</b>	<b>\$ 482,339</b>	<b>\$ 582,154</b>

		10.0%	10.0%	10.0%	7.0%	10.0%
	Year 0 2009	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
<b>Net Margins - Water</b>						
Water Fees	\$ 4,090,000	\$ 4,090,000	\$ 4,090,000	\$ 4,090,000	\$ 4,090,000	\$ 4,090,000
Rate Increase	-	409,000	818,000	1,227,000	1,513,300	1,922,300
Miscellaneous Income - Water	285,775	329,170	338,320	347,590	356,860	366,130
Impact Fees - Water	125,000	280,000	400,000	400,000	400,000	400,000
Total Revenue	4,500,775	5,108,170	5,646,320	6,064,590	6,360,160	6,778,430
Operating Expenses - Water	(3,471,527)	(3,506,042)	(3,815,817)	(3,964,574)	(4,105,832)	(4,252,278)
Operating Transfers - Out (4.5%) Water	(221,204)	(231,459)	(256,190)	(275,013)	(288,313)	(307,135)
Total Operating Expenses	(3,692,731)	(3,737,501)	(4,072,007)	(4,239,586)	(4,394,145)	(4,559,413)
Operating Margin	808,044	1,370,669	1,574,313	1,825,004	1,966,015	2,219,017
Non-Oper. Rev. - Interest on Operating	28,982	35,370	46,800	46,800	46,800	46,800
Non-Oper. Rev. - Interest on Reserves	33,388	11,114	9,852	13,148	16,542	20,038
Margins Available For Debt Service	870,414	1,417,153	1,630,965	1,884,951	2,029,357	2,285,855
Interest for Long-Term Debt	(85,860)	(75,013)	(258,650)	(453,488)	(435,211)	(571,032)
Cash From Operations	784,554	1,342,140	1,372,314	1,431,464	1,594,146	1,714,824
Debt Issue Cost Amort.-Outstanding Debt	(18,958)	(18,958)	(32,838)	(32,838)	(32,838)	(32,838)
Depreciation Expense	(960,171)	(1,056,023)	(1,195,663)	(1,287,019)	(1,388,214)	(1,554,180)
<b>Net Margins (\$)</b>	<b>\$ (194,576)</b>	<b>\$ 267,159</b>	<b>\$ 143,813</b>	<b>\$ 111,607</b>	<b>\$ 173,094</b>	<b>\$ 127,805</b>
<b>Debt Service Coverage</b>						
Margins Avail. for Debt Service	\$ 870,414	\$ 1,417,153	\$ 1,630,965	\$ 1,884,951	\$ 2,029,357	\$ 2,285,855
Total Debt Service	\$ 469,860	\$ 468,013	\$ 432,650	\$ 949,138	\$ 1,034,974	\$ 1,188,343
Debt Service Coverage Ratio	1.85	3.03	3.77	1.99	1.96	1.92
Transfer to I & E Fund - Water	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
Transfer to Impact Fee Reserve - Water	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transfer to Capital Asset Reserve	\$ -	\$ -	\$ 100,000	\$ 100,000	\$ 100,000	\$ -
Reinvestment of Reserve Interest	\$ 33,388	\$ 11,114	\$ 9,852	\$ 13,148	\$ 16,542	\$ 20,038
Debt Service Principal	\$ 384,000	\$ 393,000	\$ 174,000	\$ 495,650	\$ 599,763	\$ 617,311
Total Cash Budget Requirements	\$ 917,388	\$ 904,114	\$ 783,852	\$ 1,108,798	\$ 1,216,305	\$ 1,137,349
<b>Net Positive/(Negative Cash)</b>	<b>\$ (132,834)</b>	<b>\$ 438,026</b>	<b>\$ 588,462</b>	<b>\$ 322,666</b>	<b>\$ 377,841</b>	<b>\$ 577,474</b>

		0.0%	10.0%	13.0%	10.0%	10.0%
	Year 0 2009	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
<b>Net Margins - Wastewater</b>						
Wastewater Fees	\$ 2,400,000	\$ 3,045,560	\$ 3,045,560	\$ 3,045,560	\$ 3,045,560	\$ 3,045,560
Rate Increase	-	-	304,600	700,500	1,005,100	1,309,700
Treatment Fees - Kent County	4,080,950	3,435,390	3,435,390	3,435,390	3,435,390	3,435,390
Miscellaneous Income - Wastewater	35,500	35,500	35,500	35,500	35,500	35,500
Contractor Contributions - Wastewater	-	-	-	-	-	-
Impact Fees - Wastewater	630,000	475,000	665,000	665,000	665,000	665,000
Total Revenue	7,146,450	6,991,450	7,486,050	7,881,950	8,186,550	8,491,150
Treatment Fees - Kent County	(3,435,430)	(3,435,430)	(3,435,390)	(3,435,390)	(3,435,390)	(3,435,390)
Operating Expenses - Wastewater	(2,232,016)	(2,106,652)	(2,367,448)	(2,465,512)	(2,554,303)	(2,646,445)
Operating Transfers - Out (4.5%) Wastewater	(343,606)	(316,561)	(339,446)	(357,262)	(370,969)	(384,676)
Total Operating Expenses	(6,011,052)	(5,858,643)	(6,142,285)	(6,258,164)	(6,360,662)	(6,466,511)
Operating Margin	1,135,398	1,132,807	1,343,765	1,623,786	1,825,888	2,024,639
Non-Oper. Rev. - Interest on Operating	46,018	43,230	57,200	57,200	57,200	57,200
Non-Oper. Rev. - Interest on Reserves	117,764	110,230	100,320	111,609	118,707	126,018
Margins Available For Debt Service	1,299,180	1,286,268	1,501,286	1,792,595	2,001,795	2,207,857
Interest for Long-Term Debt	(75,206)	(66,868)	(239,101)	(403,855)	(512,213)	(494,115)
Cash From Operations	1,223,974	1,219,400	1,262,185	1,388,739	1,489,582	1,713,742
Debt Issue Cost Amort.-Outstanding Debt	(12,639)	(12,639)	(22,297)	(22,297)	(22,297)	(22,297)
Depreciation Expense	(768,789)	(964,512)	(1,036,540)	(1,127,531)	(1,230,318)	(1,336,336)
Net Margins (\$)	\$ 442,546	\$ 242,249	\$ 203,348	\$ 238,911	\$ 236,968	\$ 355,109
<b>Debt Service Coverage</b>						
Margins Avail. for Debt Service	1,299,180	1,286,268	1,501,286	1,792,595	2,001,795	2,207,857
Total Debt Service	365,740	364,938	514,037	1,028,715	1,153,590	1,452,159
Debt Service Coverage Ratio	3.55	3.52	2.92	1.74	1.74	1.52
Transfer to I & E Fund - Wastewater	\$ 200,000	\$ 200,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
Transfer to Impact Fee Reserve - Wastewater	\$ 264,260	\$ 110,062	\$ 150,963	\$ -	\$ -	\$ -
Transfer to Capital Asset Reserve	\$ -	\$ -	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000
Reinvestment of Reserve Interest	\$ 117,764	\$ 110,230	\$ 100,320	\$ 111,609	\$ 118,707	\$ 126,018
Debt Service Principal	\$ 290,534	\$ 298,070	\$ 274,936	\$ 624,860	\$ 641,377	\$ 958,044
Total Cash Budget Requirements	\$ 872,558	\$ 718,362	\$ 1,151,220	\$ 1,361,469	\$ 1,385,084	\$ 1,709,062
Net Positive/(Negative Cash)	\$ 351,416	\$ 501,037	\$ 110,965	\$ 27,271	\$ 104,498	\$ 4,680

## Reserve Balances

<b>Reserve</b>	<b>2010 Estimate</b>	<b>2014 Estimate</b>	<b>Policy</b>
Contingency - Water	\$122,667	\$138,083	2% of Annual Operating Revenues
Contingency – Wastewater	\$136,674	\$153,828	2% of Annual Operating Revenues
Impact Fee – Water Used for projects related to system growth	\$0	\$0	Minimum 20% of Operating Revenues All impact fees used to help pay increase in debt service
Impact Fee – Wastewater Used for projects related to system growth	\$3,141,013	\$3,700,199	Minimum 20% of Operating Revenues After 2012, all impact fees used to help pay increase in debt service
Capital Asset – Water	\$205,734	\$549,918	Minimum \$500,000
Capital Asset – Wastewater	\$66,321	\$597,598	Minimum \$500,000

# Information Sources

- Fitch Ratings Public Finance – 2009 Median Ratios for Water and Sewer Revenue Bonds – Retail Systems, January 28, 2009
- Fitch Ratings Public Finance – Water and Sewer Revenue Bond Rating Guidelines, August 6, 2008
- Synthesis of Water Rates in Delaware and Contiguous States, December 2008

## Alternative Forecasts - Combined Revenues & CIP

Fiscal Year	Capital Improvements (In millions)	As Presented Revenue Increase	Revenue Increase FY10 & FY11 Covers all 5 years	Revenue Increase \$6 Mil. Transfer to I & E No layering new debt
2010	\$9.7	10.0%	10.0%	10.0%
2011	6.0	20.0%	80.0%	20.0%
2012	4.4	23.0%	0.0%	200.0%
2013	5.3	17.0%	0.0%	0.0%
2014	7.2	20.0%	0.0%	0.0%
Cumulative	\$32.6	90.0%	90.0%	230.0%

Fiscal Year	Capital Improvements (In millions)	No New Debt past FY10 Reduced Water Quality & I & I Projects
2010	\$9.7	10.0%
2011	1.3	0.0%
2012	1.0	10.0%
2013	0.9	4.0%
2014	1.2	0.0%
Cumulative	\$14.1	24.0%