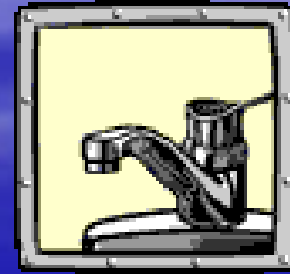


Sea Isle City Water & Sewer Rates

SICTA Research
September 12, 2009



Today's Presentation



Rates are Unfair!



Cost Cutting Actions Now!



Conservation Encouraged!

A Little Perspective Always Helps!

- 300mg well water, 400mg MUA sewage
- 6600 accounts (water 7100, sewer 6900 units)
- Average customer is 38,000g annually (largest 1,750,000g)
- 85% do not exceed base allowance (60,000g annually)
- Rough figures to keep in mind:
 - 250mg – Customer usage
 - 150mg – Infiltration & Inflow (I&I)
 - 50mg – Undetermined water usage



Where have we been?



Apr 2007

- City increases base charges 26%, excess rates 0%



Dec 2008

- SICTA starts W&S rate comparison initiative



Jan - Mar 2009

- Mayor announces surprise deficit & rate increase
- SICTA surfaces health insurance allocation question
- SICTA shares research in private City meetings
- City increases base charges 16%, excess rates 0%



Mar - Aug 2009

- City holds rate and allocation committee meetings
- SICTA continues research and shares new findings
 - MUA summer charges
 - Costs by customer size, business/residential, resident/non-resident
 - Daily sewage flows versus precipitation & tides

Rate History

	Base Allowance (Gallons)	<u>Water Rents</u>		<u>Sewer Rents</u>	
		<u>Base Charge</u>	<u>Excess Rate</u>	<u>Base Charge</u>	<u>Excess Rate</u>
2006 Rates	30,000	\$70.00	\$1.50	\$280.00	\$1.50
2007 & 2008 Rates	30,000	\$120.00	\$1.50	\$320.00	\$1.50
2009 Rates	30,000	\$140.00	\$1.50	\$370.00	\$1.50

Note: Charges shown are for 6 month billing periods.

Increases Since 2006 Rates

*Bottom 5800 Customers
(Under 60,000g)*



*Top 18 Customers
(Over 400,000g)*

+46%

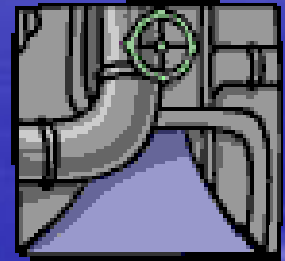


+19%

Fixed & Variable Costs

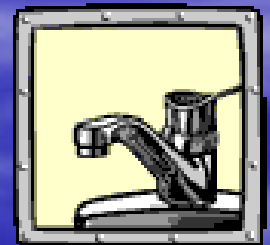
Fixed = Costs for Infrastructure construction and maintenance

- 🔧 Well pumps, water towers, underground pipes
- 🔧 Debt payments
- 🔧 Most staff costs
- 🔧 I&I treatment costs
- 🔧 Municipal usage



Variable = Costs directly related to customer usage

- 🔧 Turn on water tap, flush toilet, water lawn, etc.
- 🔧 Starts with first gallon of usage
- 🔧 Costs of usage, regardless of when City pays for it



2009 Utility Costs



		<u>SICTA</u>		<u>City</u>
SIC Internal Costs	\$4,418	95% Fixed	☺	98+% Fixed
Infiltration & Inflow	\$750	100% Fixed	☺	100% Fixed
<u>Customer Usage</u>	<u>\$2,289</u>	100% Variable	☹	100% Fixed
MUA Charges	\$3,039			
Total Budget	\$7,457	66% Fixed	☹	98% Fixed

Is MUA a Variable Cost?

- It's how the MUA charges Sea Isle!
 - At beginning of year, MUA produces initial deposit bills based on estimated historical flows for all municipalities.
 - After end of year, MUA adjusts charges for actual flows with adjustments paid in the following year.
 - If municipality reduces flow 10%, then bill is 10% less than it otherwise would be! (note: other municipal flows can still affect us as they have in the past)
- It's why we are spending to reduce I&I flows!
 - We expect to have lower treatment costs with reduced flows.
- It's logical that increased usage affects treatment costs in some material way!
 - Conservation is not the only reason to encourage decreased usage.

Conclusion: MUA charges are tied to usage \Rightarrow Variable!!!



Constructing Rates

Fixed Costs

- 💰 Base charges
- 💰 Separate charges for water & sewer
- 💰 Spread equally to every billable unit

Variable Costs

- 🚰 Excess rates
- 🚰 Separate rates for water & sewer
- 🚰 Rate for each 1,000 gallons of usage
- 🚰 Based on annual estimate of town-wide usage

Base Charge Allowance

- 💰 “Free” 30,000 gallons allowance
- 💰 Average customer usage
- 💰 Cleaner understanding of fixed and variable costs

Rate Structure Principles

Prudent - Ensure sufficient revenues to avoid deficits

Fair - Match rates to customer cost drivers

Responsive - Flex revenues to match changing costs

Stable - Minimize customer bill trauma not related to their usage

Responsible - Motivate water & sewer conservation
(especially summer season usage)

Proactive - Fund for future infrastructure needs



SICTA Proposal

	Base Allowance (Gallons)	<u>Water Rents</u>		<u>Sewer Rents</u>	
		<u>Base Charge</u>	<u>Excess Rate</u>	<u>Base Charge</u>	<u>Excess Rate</u>
2009 Rates	30,000	\$140.00	\$1.50	\$370.00	\$1.50
2009 Costs - SICTA	0	\$131.35	\$0.45	\$188.27	\$9.86

Note: Charges shown are for 6 month billing periods.

- ✓ Accept costs as the best basis for rates
- ✓ Transition to cost estimates in 3 even annual steps
- ✓ Update costs annually for inflation, cost reductions, research, etc.

Costs versus Current Rates

*Bottom 5800 Customers
(Under 60,000g)*



*Top 18 Customers
(Over 400,000g)*

-12%



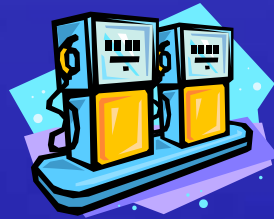
+111%

Usage drives customer's % change

⇒ Results spread out +/- within businesses, residents & non-residents groups

Cost Reduction & Conservation

-  Emphasize cost-based rates to reduce usage










-  Motivate high volume users still being subsidized

- Subsidize high flow fixtures replacement (Funds for Flushes program!)
- Require low flow certificate to avoid 25% additionally surcharged excess rates



Cost Reduction & Conservation (cont'd)

-  Read all meters monthly (private & municipal)
-  Determine usage of 50mg water
-  Invest in I&I flow reduction (where cost effective)
-  Allocate expenses to utility more reasonably
-  Evaluate pros/cons for outsourcing utility services
-  Research summer season sewer rates
-  Increase public awareness
 - Share system costs and customer usage information more widely and frequently
 - Suggest actions customers can take now



Future SICTA Research

- W&S bill for every assessed building
- Daily MUA flows versus tides, precipitation, elevation, etc.
- New City meter readings
- Refine rates further to track MUA charges
 - Summer season rates ?
 - Adjustment for adjustment ?

Takeaways !



Rates are Unfair!

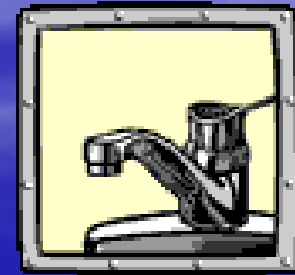


Cost Cutting Actions Now!



Conservation Encouraged!

Appendices Research Exhibits



Sea Isle City W&S Account Activity - Twelve Months Ending March 2009



Summary of all Accounts

Account Size - Annual Gallons of Usage	Count	Water Usage in Gallons			Rents based on Twelve Months of Water Usage and:				
		Summer	Winter	Total	2008 Rates	2009 Rates	Chg	2009 Costs	Chg
Under 60,000	5,786	125,227,736	28,094,764	153,322,500	\$5,236,506	\$6,065,626	16%	\$5,345,347	2%
60,000 to 200,000	755	46,914,863	22,759,249	69,674,112	\$893,187	\$1,023,987	15%	\$1,286,574	44%
200,000 to 400,000	61	10,599,453	6,021,174	16,620,627	\$117,394	\$131,074	12%	\$219,046	87%
Over 400,000	18	9,996,841	4,813,134	14,809,975	\$64,951	\$69,831	8%	\$147,340	127%
Total of All Accounts	6,620	192,738,893	61,688,321	254,427,214	\$6,312,038	\$7,290,518	16%	\$6,998,308	11%

Items of Note:

- Chart is an update to SICTA's February 27th review (see website for more background and improvement recommendations).
- Roughly, 6600 accounts used 254 million gallons (actual rents were \$6.8 million, not shown above).
- Smaller accounts represent 87% (5,786) of the accounts, paid 83% (\$5.6M) of actual rents but used only 60% (153mg) of water.
- City increased W&S fees in April for the first 30,000 gallons of semi-annual water usage, while excess rates were unchanged (see next page).
- Using actual water usage, SICTA calculated the rents that each account would have paid under the old and new rates. The resulting overall increase is 16%, which decreases with account size.
- City Government passed a \$7M W&S 2009 budget, which SICTA allocated to water vs sewer as well as to fixed vs variable (fixed costs => infrastructure, variable costs => change with account usage). Thus "Costs" represent the cost of service provided for each account.
- Account "Costs" do not reflect higher MUA usage charges for the June 15th to Sept 15th period, which may be a future enhancement.
- Account "Costs" differ significantly from the City rate action. Generally, larger accounts are paying less than the cost to provide service to them and are being subsidized by smaller accounts.

Individual Large Accounts (400,000+ Gallons)

Account	Service Location	Bill Label Name	Count	Water Usage in Gallons			Rents based on Twelve Months of Water Usage and:				
				Summer	Winter	Total	2008 Rates	2009 Rates	Chg	2009 Costs	Chg
1083-3	3909-3915 LANDIS NORTH	JERSEY SHORE PROPERTIES LLC		364,110	40,620	404,730	\$1,914	\$2,054	7%	\$4,812	151%
7944-0	105 88TH STREET 1ST FLOOR	VANDEGRIFT, RAYMOND C & KATHLEEN		295,760	137,839	433,599	\$2,001	\$2,141	7%	\$5,110	155%
1528-0	CARMENS RESTAURANT	CONTI FAMILY LLC		292,965	145,469	438,434	\$2,715	\$2,995	10%	\$5,799	114%
3340-5	6400 LANDIS AVE EAST	FREDA SEA ISLE INN INC @ DESIDERI		403,100	72,700	475,800	\$5,159	\$5,859	14%	\$8,102	57%
1420-14	4222 PARK ROAD DOCK	MONICHETTI, MARY J.		378,340	102,850	481,190	\$872	\$912	5%	\$479	-45%
1300-0	BRACA'S CAFE	GIBSON FAMILY ENTERPRISES LLC		65,730	445,180	510,910	\$2,933	\$3,213	10%	\$6,546	123%
5153-3	87TH & LANDIS AVE NORTH	BUSCH'S		537,600	59,000	596,600	\$2,490	\$2,630	6%	\$6,790	173%
6059-5	229 59TH STREET EAST	FEHRLE, ROGER F & AURORA K		347,689	280,688	628,377	\$2,585	\$2,725	5%	\$7,118	175%
1251-0	MTG BLDG	FIRST SAVINGS & LOAN ASSN		50,135	605,330	655,465	\$2,666	\$2,806	5%	\$7,397	177%
3206-0	6104 PLEASURE AVE	MC KENNA, CHARLES & BARBARA TRUSTE		444,588	273,184	717,772	\$2,853	\$2,993	5%	\$8,039	182%
1684-4	4304 PARK ROAD SOUTH	ROMANO, SILVERIO & DIANE		693,903	132,425	826,328	\$3,179	\$3,319	4%	\$9,159	188%
4362-0	7704 ROBERTS AVE	D'ANJOLELL, ROBERT L TRUSTEE		699,205	212,555	911,760	\$3,435	\$3,575	4%	\$10,039	192%
5319-0	218 89TH ST WEST	MARGIOTTI, GERARD A & PATRICIA M		83,568	878,366	961,934	\$3,586	\$3,726	4%	\$10,557	194%
1508-11	228-232 42ND ST ICE	ROMANO, JOSEPH & SUE ANN		1,046,220	0	1,046,220	\$1,764	\$1,804	2%	\$734	-58%
1626-242	12-14 43RD ST BAR #2	SPRINGFIELD INN % BISCOTTI		1,108,790	71,810	1,180,600	\$4,242	\$4,382	3%	\$12,811	202%
5528-0	DENNIS TOWNSHIP MARINA	MINMAR, INC., % DR. R. MINOR		491,438	808,018	1,299,456	\$2,099	\$2,139	2%	\$847	-60%
1263-21	118 40TH STREET MOTEL	TO-GLO CORPORATION % BENNETT ENT.		1,268,700	221,700	1,490,400	\$11,706	\$13,106	12%	\$21,758	86%
3340-6	6400 LANDIS AVE WEST	FREDA SEA ISLE INN INC @ DESIDERI		1,425,000	325,400	1,750,400	\$8,751	\$9,451	8%	\$21,243	143%
Accounts over 400,000 gallons			18	9,996,841	4,813,134	14,809,975	\$64,951	\$69,831	8%	\$147,340	127%

Items of Note:

- Chart details the 18 largest accounts based on the 12 months of water usage (individual accounts in blue are water only).
- For some perspective, keep in mind that for all 6,620 accounts we average less than 40,000 gallons of annual water usage.
- Large accounts generally received smaller increases from City rate action (8%), but the results vary considerably by account.
- While larger accounts are generally paying significantly less than the City's cost to provide the service, this also varies considerably by account due to individual circumstances.

Sea Isle City W&S Business Account Activity - Twelve Months Ending March 2009

Account Category	Count	Water Usage in Gallons			Rents based on Twelve Months of Water Usage and:				
		Summer	Winter	Total	2008 Rates	2009 Rates	Chg	2009 Costs	Chg
Rest Dock	3	440,154	112,871	553,025	1,358	1,478	9%	1,037	-24%
Golf	1	148,208	4,521	152,729	417	457	10%	331	-21%
Gym	1	8,442	0	8,442	880	1,020	16%	726	-17%
Cleaners	1	16,034	11,452	27,486	880	1,020	16%	923	5%
Store	41	1,132,487	608,446	1,740,933	46,335	53,475	15%	50,550	9%
Bakery	2	62,313	70,953	133,266	2,746	3,166	15%	3,292	20%
Deli	5	275,498	172,037	447,535	9,029	10,429	16%	11,006	22%
Salon	5	474,806	46,389	521,195	7,067	8,047	14%	9,848	39%
Gas	2	111,272	33,246	144,518	1,986	2,266	14%	2,768	39%
Ice Cream	7	1,711,244	77,912	1,789,156	8,675	9,555	10%	12,229	41%
Laundry	1	78,017	63,320	141,337	1,824	2,104	15%	2,736	50%
Bar	3	292,411	80,902	373,313	3,417	3,837	12%	5,767	69%
Dock	3	135,973	500,196	636,169	3,335	3,655	10%	5,688	71%
Market	6	482,130	497,579	979,709	8,061	9,041	12%	14,575	81%
Restaurant	29	5,425,992	1,843,907	7,269,899	59,085	66,225	12%	107,554	82%
Motel	3	<u>3,096,800</u>	<u>619,800</u>	<u>3,716,600</u>	<u>25,617</u>	<u>28,417</u>	<u>11%</u>	<u>51,103</u>	<u>99%</u>
Business Subtotal	113	13,891,781	4,743,531	18,635,312	180,711	204,191	13%	280,133	55%
Residential	6,507	178,847,112	56,944,790	235,791,902	6,131,327	7,086,327	16%	6,718,175	10%
Total of All Accounts	6,620	192,738,893	61,688,321	254,427,214	6,312,038	7,290,518	16%	6,998,308	11%

Items of Note:

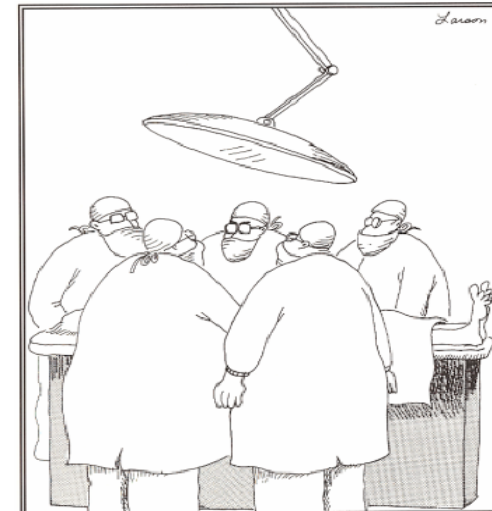
- 1) Chart is an update to SICTA's February 27th review (see website for more background and improvement recommendations).
- 2) Business accounts represent 2% (113) of the accounts, used 7% (18.6mg) of water. But paid only 3% (\$192K) of actual rents
- 3) City increased W&S fees in April for the first 30,000 gallons of semi-annual water usage, while excess rates were unchanged (see below).
- 4) City Government passed a \$7M W&S 2009 budget, which SICTA allocated to water vs sewer as well as to fixed vs variable (fixed costs => infrastructure, variable costs => change with account usage). Thus "Costs" represent the cost of service provided for each account.
- 5) Account "Costs" differ significantly from the City rate action. Business accounts are generally paying less than the cost to provide service to them and are being subsidized by residential accounts. However, this differs widely by category and account.

**Hearts really do have four chambers!
W&S costs are real and differ greatly by each account!
While not surgically precise, cost estimates can be made reasonably!**

	Base Allowance (Gallons)	Water Rents		Sewer Rents	
		Base Charge	Excess Rate	Base Charge	Excess Rate
2008 Rates	30,000	\$120.00	\$1.50	\$320.00	\$1.50
2009 Rates	30,000	\$140.00	\$1.50	\$370.00	\$1.50
2009 Costs - SICTA	0	\$131.35	\$0.45	\$188.27	\$9.86

Items of Note:

- 1) Charges shown are for 6 month billing periods.
- 2) SICTA "Costs" do not reflect higher MUA usage charges during 6/15 to 9/15 period.



“Okay, Williams, we’ll just vote. ... How many here say the heart has four chambers?”

Sea Isle City W&S Resident/Business Account Activity - Twelve Months Ending March 2009

<u>Account Category</u>	<u>Water Usage in Gallons</u>						<u>Rents based on Twelve Months of Water Usage and:</u>						
	<u>Count</u>	<u>Share</u>	<u>Summer</u>	<u>Share</u>	<u>Winter</u>	<u>Share</u>	<u>Total</u>	<u>Share</u>	<u>2008 Rates</u>	<u>2009 Rates</u>	<u>Chg</u>	<u>2009 Costs</u>	<u>Chg</u>
Under 60,000	711	11%	15,609,433	8%	7,709,001	12%	23,318,434	9%	647,288	749,898	16%	703,977	9%
60,000 to 200,000	323	5%	19,084,223	10%	11,494,136	19%	30,578,359	12%	374,475	429,635	15%	551,758	47%
200,000 to 400,000	22	0%	3,218,812	2%	2,274,766	4%	5,493,578	2%	37,391	41,671	11%	71,840	92%
<u>Over 400,000</u>	<u>4</u>	<u>0%</u>	<u>1,998,052</u>	<u>1%</u>	<u>1,765,846</u>	<u>3%</u>	<u>3,763,898</u>	<u>1%</u>	<u>11,593</u>	<u>12,053</u>	<u>4%</u>	<u>28,174</u>	<u>143%</u>
Residents	1,060	16%	39,910,520	21%	23,243,749	38%	63,154,269	25%	1,070,747	1,233,257	15%	1,355,749	27%
Under 60,000	5,025	76%	108,775,159	56%	20,208,608	33%	128,983,767	51%	4,542,839	5,261,989	16%	4,597,794	1%
60,000 to 200,000	398	6%	25,127,030	13%	10,006,302	16%	35,133,332	14%	474,076	543,516	15%	667,079	41%
200,000 to 400,000	20	0%	3,511,282	2%	1,984,187	3%	5,495,469	2%	31,790	35,130	11%	63,807	101%
<u>Over 400,000</u>	<u>4</u>	<u>0%</u>	<u>1,523,121</u>	<u>1%</u>	<u>1,501,944</u>	<u>2%</u>	<u>3,025,065</u>	<u>1%</u>	<u>11,875</u>	<u>12,435</u>	<u>5%</u>	<u>33,745</u>	<u>184%</u>
Non-Residents	5,447	82%	138,936,592	72%	33,701,041	55%	172,637,633	68%	5,060,580	5,853,070	16%	5,362,425	6%
Businesses	113	2%	13,891,781	7%	4,743,531	8%	18,635,312	7%	180,711	204,191	13%	280,133	55%
Total of All Accounts	6,620	100%	192,738,893	100%	61,688,321	100%	254,427,214	100%	6,312,038	7,290,518	16%	6,998,308	11%

<u>Account Category</u>	<u>Count</u>	<u>Average Water Usage in Gallons</u>		
		<u>Summer</u>	<u>Winter</u>	<u>Total</u>
Under 60,000	711	21,954	10,842	32,797
60,000 to 200,000	323	59,084	35,586	94,670
200,000 to 400,000	22	146,310	103,398	249,708
<u>Over 400,000</u>	<u>4</u>	<u>499,513</u>	<u>441,462</u>	<u>940,975</u>
Residents	1,060	37,651	21,928	59,579
Under 60,000	5,025	21,647	4,022	25,668
60,000 to 200,000	398	63,133	25,141	88,275
200,000 to 400,000	20	175,564	99,209	274,773
<u>Over 400,000</u>	<u>4</u>	<u>380,780</u>	<u>375,486</u>	<u>756,266</u>
Non-Residents	5,447	25,507	6,187	31,694
Businesses	113	122,936	41,978	164,914
Total of All Accounts	6,620	29,115	9,318	38,433

Note: As groups, residents and non-residents will have different changes moving from the 2009 rates to the 2009 costs estimates. This is explained by the differences in usage between the two groups. A larger majority of non-residents use less than 60,000g annually. If you compare the affects by each of the usage size categories, the differences become very similar.

	<u>Base Allowance (Gallons)</u>	<u>Water Rents</u>		<u>Sewer Rents</u>	
		<u>Base Charge</u>	<u>Excess Rate</u>	<u>Base Charge</u>	<u>Excess Rate</u>
2008 Rates	30,000	\$120.00	\$1.50	\$320.00	\$1.50
2009 Rates	30,000	\$140.00	\$1.50	\$370.00	\$1.50
2009 Costs - SICTA	0	\$131.35	\$0.45	\$188.27	\$9.86

Items of Note:
1) Charges shown are for 6 month billing periods.
2) SICTA "Costs" do not reflect higher MUA usage charges during 6/15 to 9/15 period.

MUA Treatment Cost Research

Research Results

1) **SIC projected to pump 411.7M gallons in 2009 with MUA charges of \$2,922,584.**
 - Average cost equates to \$7.10 per 1,000 gallons

2) **Majority of MUA charges to us are based on 6/15 to 9/15 volume flows.**

	<u>Charges</u>	<u>SIC Flows</u>	<u>Avg</u>
MUA "Fixed"	\$2,602,631	170.7	\$15.25
<u>MUA "Variable"</u>	<u>\$319,953</u>	411.7	<u>\$0.78</u>
MUA Total	\$2,922,584		

3) **Summer Flow (6/15 to 9/15) is very expensive!**

	<u>SIC 2009</u>	<u>Avg</u>	<u>Charges</u>	
Flows 6/15-9/15	170.7	\$16.03	\$2,735,268	Note: \$16.03 = \$15.25 + \$0.78
<u>Flows Other</u>	<u>241.0</u>	<u>\$0.78</u>	<u>\$187,316</u>	
Flows Total	411.7	\$7.10	\$2,922,584	
Summer / Total	41%			

4) **SIC sewage flow spikes in the summer, but Infiltration / Inflow (I&I) does not!**

(e.g. 2008 had relatively less summer I&I and would create lower 2009 average costs)

	<u>2008 Overall Flows</u>			<u>2008 I&I Flows (est.)</u>		
	<u>SIC</u>	<u>Avg</u>	<u>09 Charges</u>	<u>SIC</u>	<u>Avg</u>	<u>09 Charges</u>
Flows 6/15-9/15	171.1	\$16.03	\$2,742,032	30.2	\$16.03	\$483,718
<u>Flows Other</u>	<u>253.5</u>	<u>\$0.78</u>	<u>\$197,039</u>	<u>134.2</u>	<u>\$0.78</u>	<u>\$104,325</u>
Flows Total	424.6	\$6.92	\$2,939,071	164.4	\$3.58	\$588,043
Summer / Total	40%			18%		

Possible Implications

A) Reducing our MUA charges significantly must include:

- 1) Reducing our flows faster than other municipalities, or we will make no progress.
- 2) Strongly focussing on 6/15 to 9/15 flows to get the biggest bang for our investments.

B) I&I treatment costs still significant, but somewhat less than the previously projected.

C) To be most effective, I&I investments should focus on 6/15 to 9/15 flow sources.

Can we determine which I&I sources differ by season to concentrate our efforts?

D) Depending on the seasonality of the I&I sources, investments to reduce other sewage flows may have greater benefits (e.g. low-flow fixtures for municipal or other large users).

I&I is still important, but every I&I efforts should not necessarily be first in line for investment.

E) Enhanced flow measurements needed to improve our understanding and actions.

- 1) Meter readings for all Municipal facilities. Note: 54MG pumped but not metered
- 2) Monthly readings of all meters. Note: Does not change billings

F) SIC needs initiatives to promote water conservation and retrofitting.

- 1) Use data on buildings by age and low flow fixtures to estimate possible reductions.
- 2) Institute a program to subsidize retrofitting of low flow fixtures, where appropriate.
- 3) Change rate structure to surcharge larger users without low flow fixtures.
- 4) Are all Municipal facilities using low flow fixtures? (buildings, restrooms, marina, etc.)

G) Our W&S utility bills treat all flows throughout the year equally, even though we now know that sewage costs differ significantly. An improved rate structure should have bills that follow the cost for providing service. Otherwise, water conservation / cost reduction efforts will not be motivated.

DRAFT

TABLE 1: COMPARISON OF MONTHLY/YEARLY FLOWS FOR 48-MONTH STUDY PERIOD

2005					2006				
	Water Pumped (MG) (1)	Sewage Metered (MG) (2)	85% Water (MG) (3)	Estimated I/I (MG) (4)		Water Pumped (MG) (1)	Sewage Metered (MG) (2)	85% Water (MG) (3)	Estimated I/I (MG) (4)
Jan	13.94	22.06	11.85	10.21	Jan	10.63	28.13	9.04	19.10
Feb	11.75	21.72	9.99	11.73	Feb	9.14	21.13	7.77	13.36
Mar	11.67	25.60	9.92	15.68	Mar	8.16	17.79	6.94	10.86
Apr	16.36	23.59	13.91	9.68	Apr	9.04	20.77	7.68	13.08
May	22.51	32.82	19.13	13.69	May	18.32	30.38	15.57	14.80
Jun	35.94	40.93	30.54	10.39	Jun	29.17	40.42	24.79	15.62
Jul	63.73	65.91	54.17	11.75	Jul	61.72	65.08	52.46	12.62
Aug	60.73	61.77	51.62	10.15	Aug	59.68	59.36	50.73	8.63
Sep	31.83	32.16	27.06	5.10	Sep	25.93	38.15	22.04	16.11
Oct	16.08	29.06	13.67	15.39	Oct	14.23	29.48	12.10	17.38
Nov	13.88	22.07	11.79	10.28	Nov	11.53	28.98	9.80	19.18
Dec	11.30	24.43	9.60	14.83	Dec	10.41	21.99	8.85	13.14
TOT	309.71	402.13	263.3	138.88	TOT	267.97	401.65	227.8	173.88

2007					2008				
	Water Pumped (MG) (1)	Sewage Metered (MG) (2)	85% Water (MG) (3)	Estimated I/I (MG) (4)		Water Pumped (MG) (1)	Sewage Metered (MG) (2)	85% Water (MG) (3)	Estimated I/I (MG) (4)
Jan	11.08	22.50	9.42	13.08	Jan	10.98	22.58	9.33	13.24
Feb	12.45	19.13	10.58	8.55	Feb	9.85	23.08	8.20	14.88
Mar	8.19	23.49	6.96	16.52	Mar	11.69	23.48	9.94	13.54
Apr	7.89	25.95	6.71	19.24	Apr	12.78	22.58	10.86	11.71
May	17.87	29.65	15.19	14.46	May	22.85	39.97	19.42	20.55
Jun	30.53	43.70	25.95	17.75	Jun	37.66	45.30	32.01	13.28
Jul	55.01	61.84	46.76	15.08	Jul	66.10	64.67	56.19	8.48
Aug	56.30	60.29	47.86	12.44	Aug	67.05	66.18	56.99	9.19
Sep	27.15	33.45	23.08	10.38	Sep	27.56	35.16	23.43	11.74
Oct	16.01	25.38	13.61	11.77	Oct	17.07	24.95	14.51	10.44
Nov	11.84	21.25	10.06	11.19	Nov	11.86	26.68	10.08	16.60
Dec	10.98	26.16	9.33	16.83	Dec	10.86	29.99	9.23	20.76
TOT	265.30	392.79	225.5	167.29	TOT	306.11	424.60	260.2	164.41

NOTES:
 (1) City of Sea Isle City Metered Well Water Pumping Records, Prepared by the Public Works Department
 (2) County Sanitary Sewer Meter Records, Prepared by the Cape May County Municipal Utilities Authority
 (3) Calculated Water Theoretically Entering Sewer System [85% of Pumped Water (1)]
 (4) Estimated Excess Flow (I/I) [Sewage Metered (2) minus 85% Water (3)]

Source: Maser Consulting P.A. April 2009 Draft Report

	SIC	Avg	Overall Flows 09 Charges	SIC	Avg	I&I Flows (est.) 09 Charges
2005						
Flows 6/15-9/15	163.7	\$16.03	\$2,624,148	29.6	\$16.03	\$475,143
Flows Other	<u>238.4</u>	<u>\$0.78</u>	<u>\$185,291</u>	<u>109.2</u>	<u>\$0.78</u>	<u>\$84,899</u>
Flows Total	402.1	\$6.99	\$2,809,439	138.9	\$4.03	\$560,042
Summer / Total	41%			21%		
2006						
Flows 6/15-9/15	163.7	\$16.03	\$2,624,148	37.1	\$16.03	\$594,871
Flows Other	<u>237.9</u>	<u>\$0.78</u>	<u>\$184,918</u>	<u>136.8</u>	<u>\$0.78</u>	<u>\$106,295</u>
Flows Total	401.7	\$6.99	\$2,809,066	173.9	\$4.03	\$701,166
Summer / Total	41%			21%		
2007						
Flows 6/15-9/15	160.7	\$16.03	\$2,575,744	41.6	\$16.03	\$666,515
Flows Other	<u>232.1</u>	<u>\$0.78</u>	<u>\$180,379</u>	<u>125.7</u>	<u>\$0.78</u>	<u>\$97,699</u>
Flows Total	392.8	\$7.02	\$2,756,123	167.3	\$4.57	\$764,214
Summer / Total	41%			25%		
2008						
Flows 6/15-9/15	171.1	\$16.03	\$2,742,032	30.2	\$16.03	\$483,718
Flows Other	<u>253.5</u>	<u>\$0.78</u>	<u>\$197,039</u>	<u>134.2</u>	<u>\$0.78</u>	<u>\$104,325</u>
Flows Total	424.6	\$6.92	\$2,939,071	164.4	\$3.58	\$588,043
Summer / Total	40%			18%		