

Presentation Premise

- The material in this presentation has been prepared to provide information supporting the preliminary proposed GLWA Water and Sewer Service Charges for FY 2019.
- The preliminary proposed Charges remain under review, and modifications may occur during the Board review process.
- Specific areas of ongoing review include:
 - ✓ *Capital Improvement Programs for both GLWA and DWSD*
 - ✓ *The portion of the Sewer O&M Budget allocable to:*
 - CSO programs – under review by GLWA and DWSD representatives
 - OMID specific facilities - also under GLWA review
 - The IWC program - also under GLWA review

Key Takeaways

- The FY 2019 BUDGETs represent a 2% increase compared to FY 2018 for both Water and Sewer
- Cost of Service Allocations represent application of “best available information”
 - ✓ *Specific FY 2019 Budget programs;*
 - ✓ *Water Units of Service (UoS) Study;*
 - ✓ *Water Contract Re-openers;*
 - ✓ *Phase 2 of FY 2018 Sewer SHARES*
- Overall average FY 2019 Charge Adjustments:
 - ✓ *Water = 2.7%*
 - ✓ *Sewer = 1.1% (but effectively 2.3% for Wholesale Service as Industrial Waste Control Charges are reduced by 37%)*



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Presentation Topics

1. Introduction and Key Terms
2. FY 2019 BUDGET and Revenue Requirements for Charges
3. FY 2019 Cost of Service Allocations
4. FY 2019 Cost of Service Results / Impact Analysis
5. Preliminary Proposed FY 2019 Service Charges
6. Discussion and Feedback



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Introduction – Defined Terms



“BUDGET” = Comprehensive Annual Revenue Requirement:

- Budgeted O&M Expense
- Master Bond Ordinance Commitments
 - ✓ *Projected Debt Service*
 - ✓ *“Fixed” Non-Operating Expenses*
 - Pension Reimbursement Obligations;
 - WRAP Deposit;
 - Lease Payment (part of revenue financed capital below);
 - Other Reserve Requirements, etc.
- Deposit to the Improvement and Extension (I&E) Funds
 - ✓ *Revenue Financed Capital Improvements*



“Financial Plan” Consists of

- Capital Improvement Program
- Operation and Maintenance Expense Budget
- Capital Financing elements of the BUDGET
✓ Debt Service, Revenue Financed Capital, etc.
- Charges for Service
- ***Each of these are subject to individual action by the Board***



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“The Agreements” Include:

- The Lease(s) establishing GLWA;
- The Water and Sewer Services Agreement between GLWA and the City of Detroit;
- The Master Bond Ordinance(s), authorizing issuance of debt by GLWA;
- The Trust Agreement(s) supporting the Master Bond Ordinances;
- Related supporting documentation



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“4% Increase Limitation” as defined by the Agreements

“As provided in the MOU, through the Fiscal Year ending June 30, 2025, the Water (Sewer) System is assumed to experience annual increases in the Authority Revenue Requirement of not more than 4%; provided however, this limitation shall not be applicable if the Authority Revenue Requirement must increase beyond the 4% assumption in order to satisfy the Rate Covenant or to pay the cost of improvements to the Leased Water (Sewer) Facilities that are required to be made by Applicable Laws.”



FY 2019 BUDGET and Revenue Requirements for Charges



FY 2019 BUDGET and “System Charge” Adjustments

- GLWA FY 2019 BUDGET reflects an increase of 2.0% compared to FY 2018 for both Water and Sewer
- The “Revenue Requirement from Charges” is net of “non Customer” revenue, including:
 - ✓ *Investment Income*
 - ✓ *Revenue from “non-contract” Customers (GCDC)*
- The net impact of these figures produces a “Charge adjustment” that is different from the BUDGET adjustment



FY 2019 Water “System Charge” Adjustments: *Impact of GCDC’s Customer status change*

- GCDC’s status change from full service to reciprocal backup service will create a \$3.7 million negative revenue variance in the FY 2019 Budget
- Anticipated revenue from Flint is somewhat lower than FY 2018, which accentuates this challenge
- However, projected sales revenue for other Customers reflects a minor increase, as does projected non-operating revenue
- Net impact is a negative revenue variance of \$2.2 million must be met from increased service charges to Customers, even without a BUDGET increase



**FY 2019 Water “System Charge” Adjustments:
Impact of GCDC’s Customer status change**

- The net \$2.2 million negative revenue variance equates to a 0.7% Charge increase

Revenue Profile @ FY 2018 Charges	FY 2018	FY 2018		FY 2019	Variance	Adj Needed
	Budget \$ millions	Estimate \$ millions	Variance \$ millions	Proforma \$ millions	\$ millions	
GLWA Contract Customers	317.5	317.5	0.0	318.3	0.8	
Flint	3.9	6.9	3.0	3.7	(0.2)	
Subtotal - Revenue from Contract Customers	321.4	324.4	3.0	322.0	0.6	-0.20%
GCDC	3.7	4.8	1.1	0.0	(3.7)	1.15%
Total Revenue from Charges	325.1	329.2	4.1	322.0	(3.1)	
Non-Operating Revenue	3.0	3.0	0.0	3.8	0.9	-0.27%
Total Revenue Variance	328.0	332.2	4.1	325.8	(2.2)	
Revenue from GLWA Contract Customers					2.2	0.7%



**FY 2019 Sewer “System Charge” Adjustments:
Impact of Highland Park Collection Assumptions**

- The preliminary FY 2019 Sewer Cost of Service and Charges Study assumes a 50% collection rate for Highland Park, compared with 20% in FY 2018
- The FY 2017 Bad Debt Expense for Highland Park is lower than that included in prospective FY 2017 charges
- These developments lower the amount in Suburban Wholesale Sewer Charges associated with Highland Park Bad Debt



**FY 2019 Sewer “System Charge” Adjustments:
Impact of Highland Park Collection Assumptions
(\$ millions)**

- The amount being carried in Suburban Wholesale Sewer Charges for Highland Park bad debt is reduced from 2.7% to 1.7%

	Existing Charges	Proposed Charges	Variance	% Variance
Projected Bad Debt Expense	4.39	2.78	(1.61)	-36.7%
Bad Debt True-Up	2.82	1.87	(0.94)	-33.5%
Total	7.20	4.65	(2.55)	-35.4%
Relative % of Suburban Revenue	2.7%	1.7%	-1.0%	



FY 2019 BUDGET and “System Charge” Adjustments

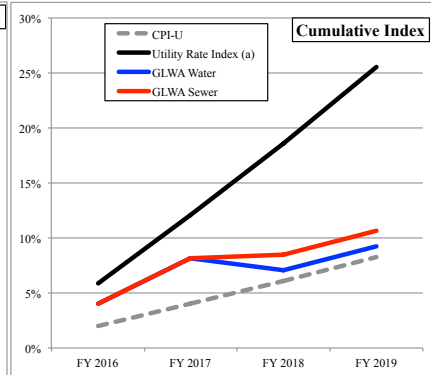
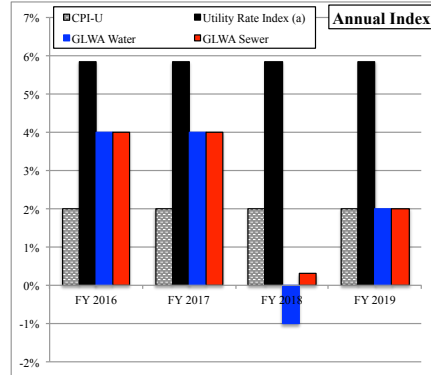
- Average “System Charge Adjustment” is 2.7% for Water and 1.1% for Sewer

Annual BUDGET	Water System				Sewer System				Total GLWA			
	FY 2018	FY 2019	Change	% Change	FY 2018	FY 2019	Change	% Change	FY 2018	FY 2019	Change	% Change
Operation and Maintenance Expense	121.6	125.3	3.7	3.1%	191.1	193.1	2.0	1.1%	312.6	318.4	5.8	1.9%
Master Bond Ordinance Commitments	173.7	171.3	(2.4)	-1.4%	262.5	269.7	7.2	2.7%	436.2	441.0	4.8	1.1%
Deposit to Improvement & Extension Fund	32.8	38.0	5.2	15.9%	11.9	12.0	0.1	0.7%	44.7	50.0	5.3	11.8%
TOTAL BUDGET	328.1	334.7	6.6	2.0%	465.5	474.8	9.3	2.0%	793.6	809.5	15.9	2.0%
less: “Non Customer” Revenue												
Investment Earnings & Miscellaneous	(4.2)	(3.8)	0.4	-9.7%	(2.8)	(4.6)	(1.8)	66.2%	(7.0)	(8.4)	(1.4)	20.1%
Genesee County Drain Commission	(3.7)	0.0	3.7	-100.0%	NA	NA	NA	NA	(3.7)	0.0	3.7	-100.0%
Subtotal Revenue Requirement “Offsets”	(7.9)	(3.8)	4.1	-51.7%	(2.8)	(4.6)	(1.8)	66.2%	(10.7)	(8.4)	2.3	-21.4%
Preliminary Revenue Req't from Charges plus: Expected “System” Bad Debt	320.2	330.8	10.7	3.3%	462.7	470.2	7.5	1.6%	782.9	801.1	18.2	2.3%
Revenue Required from Charges	321.4	332.4	10.9	3.4%	469.9	474.9	4.9	1.1%	791.4	807.3	15.9	2.0%
Proforma Billed Revenue - Existing Charges	321.4	323.6	2.2	0.7%	469.9	470.0	0.0	0.0%	791.4	793.6	2.2	0.3%
Charge Revenue Adjustment Needed		8.8				4.9				13.7		
% Charge Revenue Adjustment Needed		2.7%				1.1%				1.7%		



GLWA BUDGET Adjustments Compared to Utility Indices

Annual	Annual Index				Cumulative Index			
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2016	FY 2017	FY 2018	FY 2019
CPI-U	2.00%	2.00%	2.00%	2.00%	2.00%	4.04%	6.12%	8.24%
Utility Rate Index (a)	5.85%	5.85%	5.85%	5.85%	5.85%	12.04%	18.60%	25.53%
GLWA Water	4.00%	4.00%	-1.00%	2.00%	4.00%	8.16%	7.08%	9.22%
GLWA Sewer	4.00%	4.00%	0.30%	2.00%	4.00%	8.16%	8.48%	10.65%

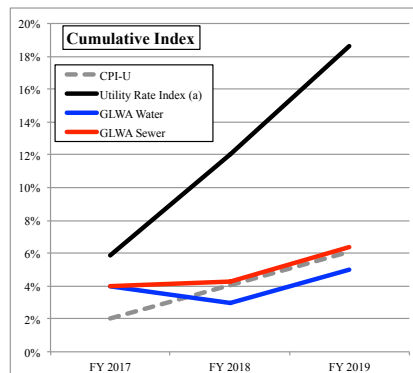
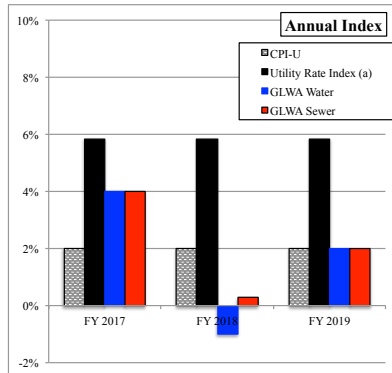


(a) Source: Black & Veatch 50 Largest Cities Rate Survey - 2016 - average 2001-2015



GLWA BUDGET Adjustments Compared to Utility Indices

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CPI-U	2.00%	2.00%	2.00%	2.00%	4.04%	6.12%
Utility Rate Index (a)	5.85%	5.85%	5.85%	5.85%	12.04%	18.60%
GLWA Water	4.00%	-1.00%	2.00%	4.00%	2.96%	5.02%
GLWA Sewer	4.00%	0.30%	2.00%	4.00%	4.31%	6.40%

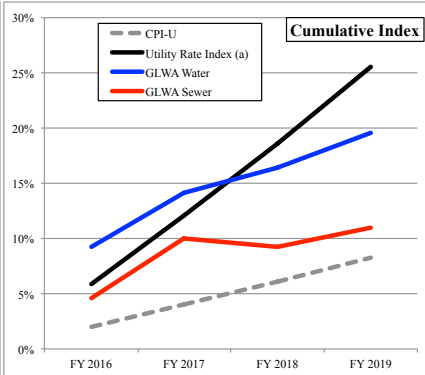
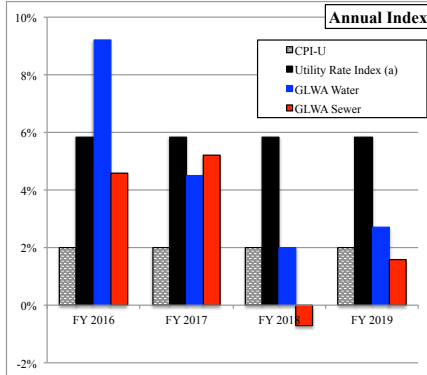


(a) Source: Black & Veatch 50 Largest Cities Rate Survey - 2016 - average 2001-2015



GLWA CHARGE Adjustments Compared to Utility Indices

Annual	Annual Index				Cumulative Index			
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2016	FY 2017	FY 2018	FY 2019
CPI-U	2.00%	2.00%	2.00%	2.00%	2.00%	4.04%	6.12%	8.24%
Utility Rate Index (a)	5.85%	5.85%	5.85%	5.85%	5.85%	12.04%	18.60%	25.53%
GLWA Water	9.20%	4.50%	2.00%	2.70%	9.20%	14.11%	16.40%	19.54%
GLWA Sewer	4.60%	5.20%	-0.70%	1.60%	4.60%	10.04%	9.27%	11.02%

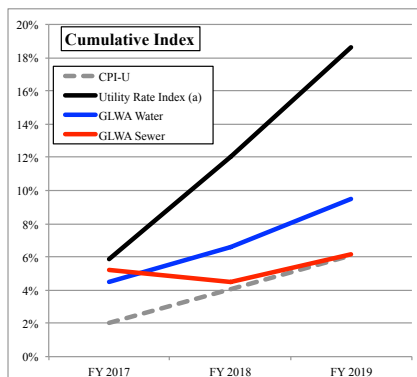
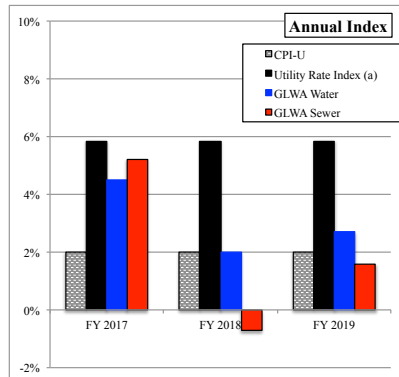


(a) Source: Black & Veatch 50 Largest Cities Rate Survey - 2016 - average 2001-2015



GLWA CHARGE Adjustments Compared to Utility Indices

Annual	Annual Index			Cumulative Index		
	FY 2017	FY 2018	FY 2019	FY 2017	FY 2018	FY 2019
CPI-U	2.00%	2.00%	2.00%	2.00%	4.04%	6.12%
Utility Rate Index (a)	5.85%	5.85%	5.85%	5.85%	12.04%	18.60%
GLWA Water	4.50%	2.00%	2.70%	4.50%	6.59%	9.47%
GLWA Sewer	5.20%	-0.70%	1.60%	5.20%	4.46%	6.14%



(a) Source: Black & Veatch 50 Largest Cities Rate Survey - 2016 - average 2001-2015



*FY 2019 Cost of Service
Allocations*



FY 2019 Cost of Service Allocations

- The FY 2019 BUDGET has been allocated to Customers based on the existing GLWA Methodologies, without ANY changes
- The FY 2019 Cost of Service Study focuses on key changes to inputs regarding:
 - ✓ *Allocation of costs of service to cost pools*
 - ✓ *Determination of Units of Service for individual Customers*



FY 2019 Cost of Service Allocations: Cost Pool Allocation Focus Areas

- Detailed review of the operating expense budget, and establishment of appropriate allocation of operating costs to cost pools, including:
 - ✓ *Recognition of the administrative and centralized services cost allocation plan;*
 - ✓ *Review of costs assignable to specific Sewer cost pools, such as CSO and OMID only.*
- Incorporation of information from the new fixed asset inventory and valuation analysis into capital revenue requirement cost of service allocations.

FY 2019 Cost of Service Allocations: Units of Service Focus Areas

- Incorporation of the updated Water units of service into cost of service allocations, including:
 - ✓ *Results of the Units of Service (“UoS”) study for non-master metered customers - and GLWA Administration implementation plan of same;*
 - ✓ *Updated customer demands from the contract re-opener negotiations;*
 - ✓ *Results of the master meter inventory update, into cost of service allocations.*
- Development of phase 2 of the implementation plan for the FY 2018 Sewer SHARES.

**FY 2019 Cost of Service Allocations:
*Additional Focus Areas***

- Direct recognition of Flint and Highland Park in the Water charge calculations, and elimination of GCDC from the charge calculations;
- Evaluation of customer collection performance and its impact on Water and Sewer charge strategies;
- Review and incorporation of DWSD Local System revenue requirements.



*FY 2019 Cost of Service
Results / Impact Analysis*



FY 2019 Cost of Service Results: *Water Supply System*

- Recognition of updated customer demands from the contract re-openers has the effect of:
 - ✓ *Decreasing cost allocations to those Customers;*
 - ✓ *Increasing cost allocations to all other Customers*
- The allocation of budgeted costs to cost pools has a moderate impact on Customer allocations.



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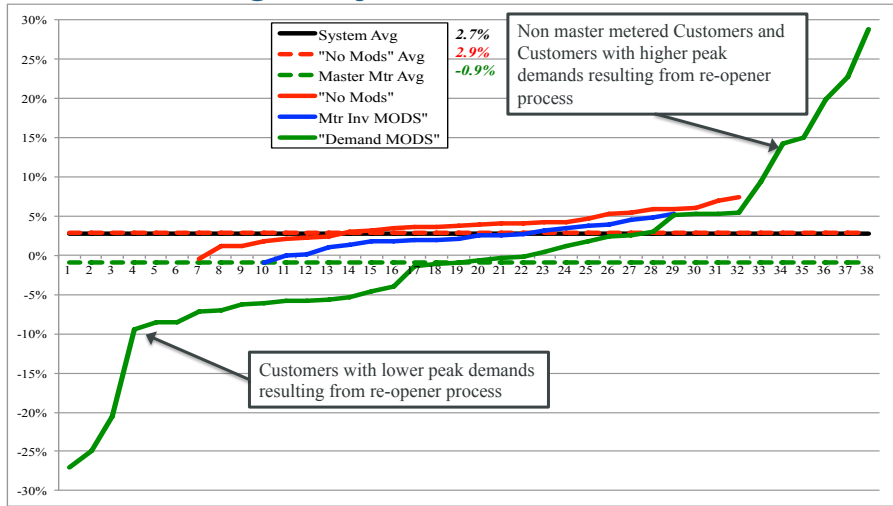
FY 2019 Cost of Service Results: *Water Supply System*

- The UoS Study, and the GLWA Administrative recommendation to implement it, has the effect of:
 - ✓ *Increasing cost allocations to “non master metered” Customers (Detroit, Dearborn, Highland Park;*
 - ✓ *Decreasing cost allocations to master metered Customers*
- GLWA is presenting two Scenarios of proposed Charges to Customers
 - ✓ *Scenario 1 = full implementation of UoS;*
 - ✓ *Scenario 2 = 2 year phased implementation*

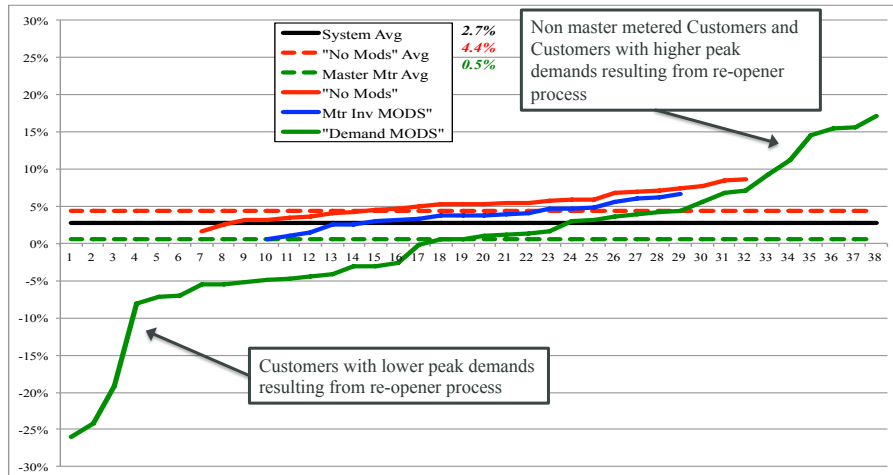


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FY 2019 Cost of Service Results: Water Charge Adjustments – Scenario 1



FY 2019 Cost of Service Results: Water Charge Adjustments – Scenario 2



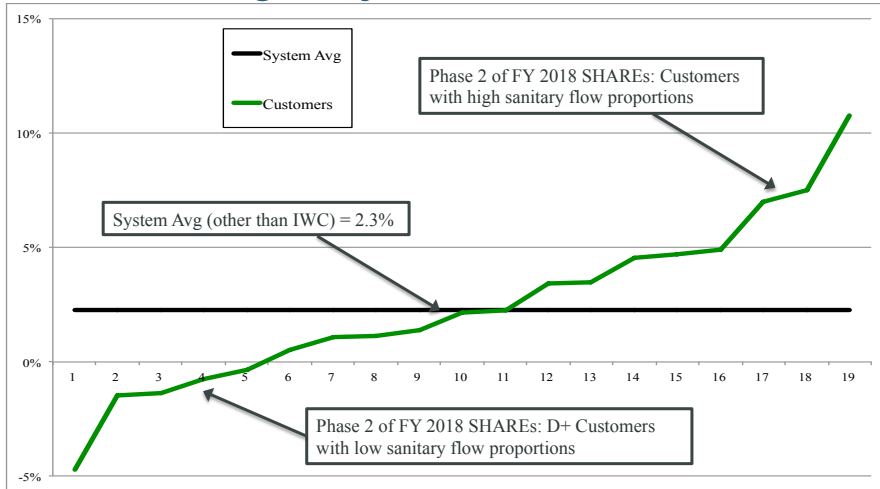
FY 2019 Cost of Service Results: Sewage Disposal System

- The allocation of budgeted costs to cost pools has an impact on Customer allocations
- A detailed review of the FY 2019 Sewer Operating Expense Budget indicates a shift of expenses away from Common-to-All (“CTA”) costs allocated based on SHAREs
 - ✓ CTA SHARE costs – **Decrease** of ~ \$7.1 million
 - ✓ CSO program costs – **Increase** of ~ \$9.2 million
 - ✓ OMID specific costs – **Increase** of ~ \$2.1 million
 - ✓ IWC program costs – **Decrease** of ~ \$4.7 million

FY 2019 Cost of Service Results: Sewage Disposal System

- The Industrial Waste Control Charges will decrease significantly
- The average Charge adjustment for all other Customers is 2.3%
- The 2nd (and final) phase implementation of the FY 2018 SHAREs (and strength of flow analyses) is not as material as originally envisioned

FY 2019 Cost of Service Results: Sewer Charge Adjustments



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Preliminary Proposed FY 2019 Service Charges



Preliminary Proposed FY 2019 Service Charges

- See Handouts

Key Takeaways

- The FY 2019 BUDGETs represent a 2% increase compared to FY 2018 for both Water and Sewer
- Cost of Service Allocations represent application of “best available information”
 - ✓ *Specific FY 2019 Budget programs;*
 - ✓ *Water Units of Service (UoS) Study;*
 - ✓ *Water Contract Re-openers;*
 - ✓ *Phase 2 of FY 2018 Sewer SHARES*
- Overall average FY 2019 Charge Adjustments:
 - ✓ *Water = 2.7%*
 - ✓ *Sewer = 1.1% (but effectively 2.3% for Wholesale Service as Industrial Waste Control Charges are reduced by 37%)*