

December 16, 1999

To the Joint Meeting

Ladies and Gentlemen:

ANNUAL REPORT OF THE SEWAGE CONTRIBUTION
OF THE MUNICIPALITIES ORGANIZED IN
JOINT MEETING (FOR THE PURPOSE OF
ASSESSMENT FOR THE YEAR 2000)

I present herewith the 65th Annual Report for the eleven municipalities organized in Joint Meeting, covering their respective contribution to Section One of the Supplementary Joint Trunk Sewer and to the Treatment Plant, as called for under the terms of the 1926 Contract.

Article X of the 1926 Contract requires that an estimate be made for the purpose of assessing the costs of maintenance and operation each year.

In order that the amount of work necessary for the preparation of this estimate be completed in time for consideration by the Joint Meeting before the date specified by law for the adoption of the new budget, it has been customary to use the twelve-month period immediately prior thereto as the basis of consideration for the assessment purpose only.

You will please note that this is the first of the two Annual Reports prepared each year, and that it covers the twelve-month period from November 1, 1998 through October 31, 1999. Subsequently, at the beginning of each succeeding year, a second and final report is prepared covering the previously completed calendar year, which coincides with the fiscal year of the Joint Meeting.

Pursuant to the Federal Water Pollution Control Act Amendments of 1972, PL 92-500 and as a requirement of our Construction Grant for the expansion in Secondary Treatment, a "User Charge System" is used to apportion the operation and maintenance costs for the Joint Meeting for 2000. During the year 1978, a User Charge System was prepared and adopted by the member municipalities and is entitled "An Ordinance Establishing and Defining User Charges in Connection with the Collection and Treatment of Wastewater and Providing for the Payment of Said User Charges". During the year 1999, this "User Charge System" was utilized by the various municipalities for collection of the charges associated with the operation and maintenance of the trunk sewer system, the treatment plant, and the Sludge Dewatering Facility, the percentage of assessment based upon a report dated December 17, 1998.

During 1999, the various municipalities computed the actual dwelling units for each of their respective towns in accordance with the revised schedule included in the Sewer Use Ordinance. Table II depicts the new (2000) dwelling unit figures formulated by each municipality in 1999.

It should be noted that the methodology used to assess the City of Elizabeth for services rendered by the Joint Meeting is based on quantity and quality of sewage as measured at the Trenton Avenue Pumping Station, plus the Equivalent Dwelling Units (EDU's) tributary to the gravity Joint Meeting sewer through the Elmora Avenue Area in Elizabeth, plus the tributary area from the City of Linden. This methodology was approved by the Joint Meeting and the Elizabeth City Council. The percentage used in this assessment report for the City will be based upon a twelve (12) month, 365 day period of November 1, 1998, through October 31, 1999 and projected for a twelve (12) month period in 2000. This allocation will be assessed and paid in accordance with the member municipalities billing procedure. Then, based on the analysis of the samples taken at the Trenton Avenue Pumping Station, an adjustment is made (on a quarterly basis) to the percent allocation from the City. At the end of 2000, utilizing twelve (12) months of data, the actual percent contribution by the City will be calculated and certified thereto.

The accompanying computations include the total Dwelling Unit number of 47,181 for the City. (This Equivalent Dwelling Unit number was computed by Elson T. Killam Associates during the period November 8, 1979 and December 12, 1979 and revised by the City Engineer on February 9, 1982).

USER CHARGE APPORTIONMENT

Set forth below are the basis factors concerning flow, waste characteristics and projected cost of operations of the Facilities derived for the 365 day period from November 1, 1998, through October 31, 1999, and projected for 2000 and are based upon actual 1998-1999 operating statistics as well as a recent upgraded 1999 industrial waste survey. The industrial waste figures take into consideration actual yearly operational time for each industry (i.e., 5 day or 7 day working week, etc.).

1.	Flow	21,995.8430 MG/Year	60.2626 MGD
2.	BOD	17,867.9049 Tons/Year	97,906.3282 Lbs/Day
	TSS	15,065.4504 Tons/Year	82,550.4132 Lbs/Day
3.	Estimated Industrial Flow	914.0970 MG/Year	2.5044 MGD
4.	Estimated Industrial BOD	2,340.1392 Tons/Year	12,822.6805 Lbs/Day
5.	Estimated Industrial TSS	826.8397 Tons/Year	4,530.6285 Lbs/Day
6.	Estimated Total Operating Expenses in 1999		
			\$10,723,439 STP
			4,652,146 SDWF
			850,655 SDF
			301,760 Sewers
			<hr/> \$16,528,000 Total
7.	Estimated Total Dwelling Units in System		
			147,536 JM Members
			47,181 Elizabeth
			<hr/> 194,717 Total

In addition to the foregoing, it has been determined that the following cost allocations would fairly represent the actual costs of treatment.

Flow	27.9289903%
BOD	46.2290432%
Suspended Solids	25.8419665%

The basis for these cost allocations is set forth in Appendix A.

Based upon the foregoing allocations, Table I has been prepared which shows the projected and estimated flow and waste characteristics for 2000 and the projected estimated cost allocation between domestic sewage treated from residential and commercial establishments, and the industrial waste treatment reflecting industrial flow from industries in the collection system. This system takes into consideration the fact that the City of Elizabeth does not use the trunk sewer and will accordingly not be

charged for its use. The trunk sewer charge is assessed only against member municipalities, and their respective industries.

Table I
Joint Meeting of Essex & Union Counties
Estimated Flow Waste Characteristics and Cost Allocation for Treatment in 2000

Treatment Plant

	<u>Total for 2000</u>	<u>Domestic & Commercial</u>	<u>Industrial</u>
Flow	21,995.8430 MG/Yr. ¹	21,081.7460 MG/Yr.	914.0970 MG/Yr.
BOD	17,867.9049 Tons/Yr. ¹	15,527.7657 Tons/Yr.	2,340.1392 Tons/Yr.
Suspended Solid	15,065.4504 Tons/Yr. ¹	14,238.6107 Tons/Yr.	826.8397 Tons/Yr.

(1) Based upon data from November 1, 1998 thru October 31, 1999 (365 days)

Cost Allocation

	<u>Total for 2000</u>	<u>Domestic & Commercial</u>	<u>Industrial</u>
Flow	\$4,531,825.00	\$4,343,493.00	\$188,332.00
BOD	7,501,235.50	6,518,807.00	982,428.50
Suspended Solid	4,193,179.50	3,963,045.00	230,134.50
	<u>\$16,226,240.00</u>	<u>\$14,825,345.00</u>	<u>\$1,400,895.00</u>
	100.000000%	91.36648420%	8.63351580%

Elizabeth Contribution

Flow	-	5,468.5210 MG/Yr.
BOD	-	7,441.0632 Tons/Yr.
TSS	-	3,552.8499 Tons/Yr.

Trunk Sewer Flow¹

<u>Total for 2000</u>	<u>Domestic & Commercial</u>	<u>Industrial</u>
16,527.3220 MG/Yr. ²	15,789.9050 MG/Yr.	737.417 MG/Yr.

(1) Based upon data from November 1, 1998 thru October 31, 1999 (365 days)

(2) (21,995.843 - 5,468.5210)

COST ALLOCATION

\$301,760.00	\$288,296.06	\$13,463.94
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Member municipalities will be assessed \$1.95 (\$288,296.06/147,536) for trunk sewer O&M per equivalent dwelling unit.

The estimated cost for treating industrial wastes has been determined to be \$224.29 per MG for flow, \$419.82 per ton of BOD, and \$278.33 per ton of suspended solids. These estimates are predicated upon the cost allocation to industry and the estimates of flow and strength characteristics of the industrial waste, all as indicated on Table I. These costs were determined as follows:

Flow	\$188,332.00	/	914.0970	=	\$206.0306510	/MG
BOD	\$982,428.50	/	2,340.1392	=	\$419.8162656	/Ton
Suspended Solids	\$230,134.50	/	826.8397	=	\$278.3302495	/Ton

All industries within the member municipalities (excluding Elizabeth) will be required to pay an additional \$18.26/MG of flow for trunk sewer use ($\$13,463.94/737.417 = \$18.258/\text{MG}$). This brings the total flow cost to \$224.29/MG ($\$206.030 + \18.258) for the indicated industries of member municipalities.

Based upon the user charges for 2000, a computation has been made to show the budget prepayment for each municipality of the Joint Meeting. These estimates are subject to revision annually, dependent upon the actual number of dwelling units which must be determined for each municipality in accordance with the schedule of dwelling units set forth in the ordinance. In addition thereto, the computation for the industrial user charges has been based upon actual calculations of flow and waste characteristics for the industries in the district as a result of the 1999 industrial waste survey of the service area. These are estimates for 2000 and must be verified on an annual basis to reflect the actual flow and waste characteristics.

The basis for the industrial waste flow and characteristics are set forth in Appendix B of this report. The dwelling unit figures have been compiled by each municipality with the exception of Elizabeth in accordance with the revised Schedule of Dwelling Units incorporated into the User Charge Ordinance.

Table VII sets forth the cost to each municipality to establish the budget requirements of \$16,528,000.00 for 2000. However, it should be noted that in accordance with the Agreement between the Joint Meeting and the City of Elizabeth noted previously, and as a result of the monitoring of the Trenton Avenue Pumping Station, the City would provide for 34.0402733% of the treatment plant, sludge dewatering facility and sludge drying facility budgets initially with adjustments made quarterly. Upon completion and verification of the quality and quantity of the City's contribution as measured at the Trenton Avenue Pumping Station, plus the EDU's from the Elmora Avenue area, plus the City of Linden's contribution, an adjustment will then be made for the member municipalities.

Table II
Joint Meeting of Essex and Union Counties
Annual Report of the Sewer Contribution of the Municipalities
Municipality Dwelling Units and Industrial User Charge
2000

<u>Municipality</u>	<u>Dwelling Units ¹</u>	<u>User Charges Industrial</u>
East Orange	7,218	\$ -
Hillside	8,417	180,380
Irvington	26,707	34,060
Maplewood	9,293	10,692
Millburn	9,762 ⁴	-
Newark	16,972	-
Roselle Park	4,739	546
South Orange	6,833	-
Summit	13,919 ²	87,902 ³
Union	24,218	575,382
West Orange	19,458	12,688
Elizabeth	47,181	512,709
	<u>194,717</u>	<u>\$ 1,414,359</u>

(1) Based on actual calculation and verification by Municipalities; City of Elizabeth computed by Elson T. Killam Associates in 1979 and updated by City Engineer on February 9, 1982.

(2) Includes New Providence (3580)

(3) Includes Murray Hill

(4) Includes Livingston (423)

Table III
Joint Meeting of Essex and Union Counties
Computation of Estimated Percent
Contribution By City of Elizabeth

For Period 11/1/98-10/31/99 and Projected Contribution for 2000

Flow:	Treatment Plant	Elizabeth Pumping Station		Joint Meeting	
	21,995.843 MG	5,468.521 MG		16,527.322 MG	
		<i>Industrial</i>	<i>D&C</i>	<i>Industrial</i>	<i>D&C</i>
		152.042	5,316.479	737.417	15,789.905
		\$ 31,325.31	\$ 1,095,357.63	\$ 165,394.44	\$ 3,541,500.36
Unit Charge	\$ 206.0306510 Per MG for Elizabeth				
Unit Charge	\$ 224.2888957 Per MG for Joint Meeting				
BOD:	17867.9049 Tons	7,441.0632 Tons		10,426.8417 Tons	
		<i>Industrial</i>	<i>D&C</i>	<i>Industrial</i>	<i>D&C</i>
		977.5674	6,463.4958	1,326.814	9,100.0277
		\$ 410,398.70	\$ 2,713,480.67	\$ 557,018.10	
Unit Charge	419.8162656 Per Ton				
TSS:	15,065.4504 Tons	3,552.8499 Tons		11,512.6005 Tons	
		<i>Industrial</i>	<i>D&C</i>	<i>Industrial</i>	<i>D&C</i>
		167.895	3,384.9549	643.9742	10,868.6263
		\$ 46,730.26	\$ 942,135.34	\$ 179,237.50	
Unit Charge	278.3302495 Per Ton				
			\$ 5,239,427.91	\$ 901,650.04	

City of Elizabeth (Contribution from Pumping Station) \$ 5,239,427.91

City of Elizabeth (Industry Tributary to Joint Meeting Trunk)

Flow:	24.6380 MG/Year at	\$ 206.0306510	5,076.18
BOD:	35.7578 Tons/Year at	419.8162656	15,011.71
TSS:	14.9705 Tons/Year at	278.3302495	4,166.74

Joint Meeting Industrial	901,650.04
Subtotal	\$ 6,165,332.58

Total 2000 Budget	\$ 16,528,000.00
Subtotal (above)	(6,165,332.58)
Subtotal (EDU's)	\$ 10,362,667.42

Joint Meeting EDU's (X + Y) + Elmora EDU's (X) = \$ 10,362,667
 (Y = Additional Assessment to Member Municipalities for Trunk Sewer O&M)
 147,536 (X + \$1.954072633) + 3905 (X) = \$ 10,362,667

Equivalent Units-Member Municipalities 147,536

Elmora EDU's = 3,905 \$ 66.5234075320 Per Unit = X
 \$ 68.4774801650 Per Unit = X+Y

Joint Meeting EDU Assessment \$ 10,102,893.51
 Elmora Area Assessment \$ 259,773.91

Total Anticipated Payment from the City of Elizabeth

Pumping Station \$ 5,239,427.91
 Elmora EDU's 259,773.91
 Elmora Industrial 24,254.63
 \$ 5,523,456.45

Total Anticipated Payment from Member Municipalities

EDU's 10,102,893.51
 Industrial 901,650.04
 \$ 11,004,543.55

Estimated Percent Contribution of Treatment Plant, Sludge Dewatering and Sludge Drying Facility Budgets by
 City of Elizabeth

\$ 5,523,456.45 / \$ 16,226,240.00 = 34.0402733%

Table IV
Joint Meeting of Essex and Union Counties
Percent Allocation of Infiltration / Inflow

Municipality	Capacity By Contract		Base Year - 1982		Base Year - 1982		Base Year - 1982		Base Year - 1982	
	(MGD)	(Percent)	Phase IIB - SSES ¹		Phase IIB - SSES ²		Phase IIB - SSES ²		Phase IIB - SSES ²	
			Infiltration (GPD) ³	(Percent)	SSES - November 1999 (GPD) ⁴	(Percent)	Inflow (GPD)	(Percent)	SSES - November 1999 (GPD) ⁵	(Percent)
East Orange	5.50	4.88%	70,747	2.11%	46,610	2.61%	3,007,440	5.79%	3,560,358	6.21%
Hillside	12.20	10.83%	79,012	2.36%	28,216	1.58%	1,185,120	2.28%	1,307,184	2.28%
Irvington	18.61	16.52%	1,115,672	33.31%	683,618	38.28%	8,612,640	16.57%	9,224,823	16.09%
Maplewood	7.08	6.29%	389,078	11.62%	171,083	9.58%	5,449,680	10.48%	6,449,923	11.25%
Millburn	6.00	5.33%	191,609	5.72%	130,545	7.31%	2,729,520	5.25%	2,809,300	4.90%
Newark	15.50	13.76%	234,484	7.00%	185,548	10.39%	1,959,540	3.77%	2,321,972	4.05%
Roselle Park	9.44	8.38%	106,187	3.17%	55,897	3.13%	1,576,080	3.03%	1,863,311	3.25%
South Orange	7.00	6.22%	410,876	12.27%	65,147	4.03%	2,183,760	4.20%	1,576,080	4.45%
Summit	7.50	6.66%	171,657	5.13%	71,969	4.22%	3,651,120	7.02%	2,551,303	4.17%
Union	10.30	9.14%	329,127	9.83%	83,883	11.43%	14,534,640	27.96%	2,153,520	29.42%
West Orange	13.50	11.99%	250,811	7.48%	132,866	7.44%	7,097,040	13.65%	2,390,772	13.93%
	112.63	100.00%	3,349,260	100.00%	1,785,835	100.00%	51,986,580	100.00%	57,332,651	100.00%

(1) Identified by Hazen & Sawyer Phase IIB SSES (pg. S-2) with trunk sewer infiltration allocated based on contract capacity.

(2) Identified by Hazen & Sawyer Phase IIB SSES (pg. S-3)

(3) "Base Year - 1982" Infiltration: 3.35 MGD / 52.79 MGD = 6.346%

(4) 1999 - Infiltration related to base year total = 2.082 MGD / 52.79 MGD = 3.94392877%

- Adjusted for period 11/1/98 - 10/31/99; (3.94392877% x 16,527.3220 = 651.82 MG / Year / 365 = 1,785,835 GPD)

(5) 1999 inflow adjusted for period 11/1/98 - 10/31/99 - (39.33" / 33.22") x (48,425,900) = 57,332,651 GPD

Table IV - A
Joint Meeting of Essex and Union Counties
Adjusted 1999 - Summary of Infiltration and Inflow

Municipality	Phase IIB		1999		Phase IIB		1999		1999	
	SSES Infiltration (GPD)	1998 Infiltration (GPD)	1998 Infiltration Removed (GPD)	1999 Infiltration (GPD)	SSES Inflow (GPD)	1998 Inflow (GPD)	1999 Inflow Removed (GPD)	1999 Inflow (GPD)	1999 Inflow Removed (GPD)	1999 Inflow (GPD)
East Orange	70,747	54,327	-	54,327	3,007,440	3,007,440	220	3,007,220		
Hillside	79,012	32,980	-	32,980	1,185,120	1,185,120	79,200	1,105,920		
Irvington	1,115,672	797,026	-	797,026	8,612,640	7,791,840	-	7,791,840		
Maplewood	389,078	199,485	-	199,485	5,449,680	5,449,680	-	5,449,680		
Millburn	191,609	152,240	-	152,240	2,729,520	2,384,640	12,960	2,371,680		
Newark	234,484	216,248	-	216,248	1,959,540	1,959,840	-	1,959,840		
Roselle Park	106,187	65,147	-	65,147	1,576,080	1,576,080	-	1,576,080		
South Orange	410,876	83,906	23	83,883	2,183,760	2,178,000	24,480	2,153,520		
Summit	171,657	88,296	630	87,666	3,651,120	2,079,360	60,480	2,018,880		
Union	329,127	238,013	-	238,013	14,534,640	14,246,640	-	14,246,640		
West Orange	250,811	154,847	-	154,847	7,097,040	6,744,600	-	6,744,600		
Total	3,349,260	2,082,515	653	2,081,862	51,986,580	48,603,240	177,340	48,425,900		

Table V

Joint Meeting of Essex and Union Counties

Cost Allocation - Flow, BOD & TSS with Infiltration / Inflow

	Total	Domestic & Commercial		Industrial	
		MG	MG	MG	MG
Flow	16,527.3220	15,789.9050	737.4170		
	\$3,422,880.83	\$3,257,486.39			
Infiltration	3.9439288%	651.82	\$128,472.41		
Inflow	9.8140521%	1,622.00	\$319,691.51		
BOD	at \$419.8162656 Per Ton	10,426.8417 Tons	9,100.0277 Tons	1,326.8140 Tons	
		\$4,377,357.74	\$3,820,339.65	\$557,018.10	
TSS	at \$278.3302495 Per Ton	11,512.6005 Tons	10,868.6263 Tons	643.9742 Tons	
		\$3,204,304.97	\$3,025,067.47	\$179,237.50	
Total		\$11,004,543.54	\$10,102,893.51	\$901,650.04	

(1) Amount anticipated from Members after allocation of

34.0402733% to City of Elizabeth

\$ 5,523,456.45

"Base Year - 1982"

Infiltration: 3.35 MGD / 52.79 MGD =

6.34590% (Per H&S Phase IIB Report)

Inflow: 113 MGD (Excluding Elizabeth) / 137 MGD (Total) =

82.4817518% 1 inch of rain = 50 mg of inflow (Per H&S Phase IIB Report)

"1998 - 1999"

Infiltration: 2.082 MGD/52.79MGD =

16.527.3220 651.83 MG / Year

(November 1, 1998 - October 31, 1999)

Inflow: Rainfall = 39.33 Inches X 50 MG X 82.482%

1,622.00 MG / Year

Total D&C

\$10,102,893.51

Less: Infiltration

(128,472.41)

Less: Inflow

(319,691.51)

Net after infiltration and inflow

\$9,654,729.59

Equivalent Dwelling Units

147,536

User Charge Per Unit

\$65.4398220773235

Table VI
Joint Meeting of Essex and Union Counties
Estimated Annual Operation Expenses To Member Municipalities
2000

Municipality	User Charge					Domestic & Commercial			
	Dwelling Units	\$	65.43982208 Per Unit	Infiltration		Percent ²	Inflow Amount	Total Cost	Unit Cost
				Percent ¹	Amount				
East Orange	7,218		\$472,344.64	2.61%	\$3,353.13	6.21%	\$19,852.84	\$495,550.61	\$68.6548
Hillside	8,417		550,806.98	1.58%	2,029.86	2.28%	7,288.97	560,125.81	66.5470
Irvington	26,707		1,747,701.33	38.28%	49,179.24	16.09%	51,438.36	1,848,318.93	69.2073
Maplewood	9,293		608,132.27	9.58%	12,307.66	11.25%	35,965.29	656,405.22	70.6344
Millburn	9,762 ³		638,823.54	7.31%	9,391.33	4.90%	15,664.88	663,879.75	68.0065
Newark	16,972		1,110,644.66	10.39%	13,348.28	4.05%	12,947.51	1,136,940.45	66.9892
Roselle Park	4,739		310,119.32	3.13%	4,021.19	3.25%	10,389.97	324,530.48	68.4808
South Orange	6,833		447,150.30	4.03%	5,177.44	4.45%	14,226.27	466,554.01	68.2795
Summit	13,919 ⁴		910,856.88	4.22%	5,421.54	4.17%	13,331.14	929,609.56	66.7871
Union	24,218		1,584,821.61	11.43%	14,684.40	29.42%	94,053.24	1,693,559.25	69.9298
West Orange	19,458		1,273,328.06	7.44%	9,558.35	13.93%	44,533.03	1,327,419.44	68.2197
	147,536		\$9,654,729.59	100.00%	\$128,472.42	100.00%	\$319,691.50	\$10,102,893.51	\$68.4775

(1) See Table IV - Infiltration for November of the Prior Year

(2) See Table IV - Inflow for November of the Prior Year

(3) Includes Livingston (423)

(4) Includes New Providence (3580)

Table VI (Continued)
Joint Meeting of Essex and Union Counties
Estimated Annual Operation Expenses To Member Municipalities

Municipality	2000									
	Industrial									
	Flow (MG / Year)									
	BOD (Tons / Year)	BOD ¹ (\$/Year)	TSS (Tons / Year)	TSS ² (\$/Year)	Dry Weather	Infiltration 3,943929%	Inflow 9.814052%	Total	Flow ³ (\$/Year)	Total Cost
East Orange	0.0000	\$0.00	0.0000	\$0.00	0.00	0.00	0.00	0.00	\$0.00	\$0.00
Hillside	370.0738	155,363.00	38.8901	10,824.29	54.58	2.50	6.21	63.28	14,193.45	180,380.74
Irvington	50.6100	21,246.90	19.0453	5,300.88	28.89	1.32	3.29	33.49	7,512.11	34,059.89
Maplewood	13.6167	5,716.51	8.5201	2,371.40	10.01	0.46	1.14	11.61	2,603.99	10,691.91
Millburn	0.0000	0.00	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Newark	0.0000	0.00	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roselle Park	0.1742	73.13	0.3261	90.76	1.47	0.07	0.17	1.70	381.74	545.64
South Orange	0.0000	0.00	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Summit ⁴	47.7019	20,026.03	51.3932	14,304.28	205.99	9.42	23.44	238.85	53,571.63	87,901.95
Union	832.9952	349,704.93	521.4781	145,143.13	309.66	14.16	35.24	359.06	80,534.07	575,382.13
West Orange	11.6422	4,887.58	4.3213	1,202.75	25.37	1.16	2.89	29.42	6,597.46	12,687.79
	1,326.8140	\$ 557,018.08	643.9742	\$179,237.49	635.96	29.08	72.37	737.42	\$165,394.44	\$901,650.04

(1) At \$419.8162656/Ton

(2) At \$278.3302495/Ton

(3) At \$224.2888957/MG

(4) Includes Murray Hill

Table VII
Joint Meeting of Essex and Union Counties
Summary of Estimated Annual Operational and Maintenance Expenses To Member Municipalities
2000

Domestic & Commercial					
Municipality	Total Assessments ¹	User Charge		Infiltration / Inflow Charges	Assessment Percentage
		Domestic Sewage 65.43982208	User Charges Industrial		
East Orange	\$495,550.61	\$472,344.64	\$0.00	\$23,205.97	4.5031%
Hillside	740,506.55	550,806.98	180,380.74	9,318.83	6.7291%
Irvington	1,882,378.82	1,747,701.33	34,059.89	100,617.60	17.1055%
Maplewood	667,097.13	608,132.27	10,691.91	48,272.95	6.0620%
Millburn	663,879.75	638,823.54	0.00	25,056.21	6.0328%
Newark	1,136,940.45	1,110,644.66	0.00	26,295.79	10.3316%
Roselle Park	325,076.12	310,119.32	545.64	14,411.16	2.9540%
South Orange	466,554.01	447,150.30	0.00	19,403.71	4.2396%
Summit	1,017,511.51	910,856.88	87,901.95	18,752.68	9.2463%
Union	2,268,941.38	1,584,821.61	575,382.13	108,737.64	20.6182%
West Orange	1,340,107.23	1,273,328.06	12,687.79	54,091.38	12.1778%
	<u>\$11,004,543.55</u>	<u>\$9,654,729.59</u>	<u>\$901,650.04</u>	<u>\$448,163.92</u>	<u>100.0000%</u>
Elizabeth	5,523,456.45				
Total	<u>\$ 16,528,000.00</u>				

(1) Reflects anticipated payment of \$5,523,456.45 from the City of Elizabeth which is 34.0402733% of allocation from Treatment Plant, Sludge Dewatering, and Sludge Drying budget. Exact 2000 percent contribution to be calculated at the end of fiscal year. Quarterly adjustments to be made in accordance with Agreement between Elizabeth and Joint Meeting.

Table VIII
Joint Meeting of Essex and Union Counties
Comparison of 2000 Assessment with 1999 Assessment

Municipality	1999	2000		Comparison	
				Amount	Percentage
East Orange	\$463,149.25	\$495,550.61	(+)	\$32,401.36	7.00%
Hillside	755,530.98	740,506.55	(-)	(15,024.43)	-1.99%
Irvington	1,752,707.32	1,882,378.82	(+)	129,671.50	7.40%
Maplewood	623,028.39	667,097.13	(+)	44,068.74	7.07%
Millburn	614,167.57	663,879.75	(+)	49,712.18	8.09%
Newark	1,049,110.27	1,136,940.45	(+)	87,830.18	8.37%
Roselle Park	301,696.86	325,076.12	(+)	23,379.26	7.75%
South Orange	432,795.09	466,554.01	(+)	33,758.92	7.80%
Summit	960,574.20	1,017,511.51	(+)	56,937.31	5.93%
Union	2,236,999.02	2,268,941.38	(+)	31,942.36	1.43%
West Orange	1,230,916.98	1,340,107.23	(+)	109,190.25	8.87%
	<u>\$10,420,675.94</u>	<u>\$11,004,543.55</u>	(+)	<u>\$583,867.62</u>	<u>5.60%</u>
Elizabeth	6,123,904.06	5,523,456.45	(-)	\$ (600,447.61)	-9.80%
Total	<u>\$16,544,580.00</u>	<u>\$16,528,000.00</u>	(-)	<u>(\$16,579.99)</u>	<u>-0.10%</u>

Note: City of Elizabeth percentage contribution of Treatment Plant, Sludge Dewatering, and Sludge Drying Budget:

1996	37.06967270%
1997	34.89536790%
1998	31.17283950%
1999	37.78119050%
2000	34.04027330%

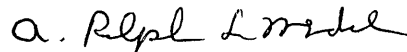
Table III, IV, V, VI, and VII, have been prepared to reflect the Domestic Sewer Usage and Industrial User assessment to each municipality for 2000 as a result of the Agreement with the City of Elizabeth which requires 34.0402733% of the 2000 Treatment Plant, Sludge Dewatering and Sludge Drying Budget to be paid in Quarterly assessments with adjustments made following the determination of the actual percentage of contribution for each quarter. The 34.0402733% figure is an estimate based upon actual monitoring of quality and quantity at the Trenton Avenue Pumping Station, etc., in accordance with the Agreement. The actual percentage of contribution will be determined following the completion of the annual audit of expenses. In addition, these tables reflect the costs associated with Infiltration / Inflow for the member municipalities, the percentages of which were determined from the Phase IIB SSES Reports, adjusted as a result of rehabilitation work, and updated in 1999.

Summary and Certification

On the basis of the measured usage of Section One of the Supplementary Joint Trunk Sewer and the Treatment Plant, including the Sludge Dewatering and Sludge Drying Facilities, and an estimate of Dwelling Units and Waste Characteristics for the municipalities organized in Joint Meeting, and in accordance with the provisions of the 1926 contract, I hereby certify that the estimated maintenance and operating costs of the Joint Meeting for the 2000 are apportioned as follows:

	<u>2000</u>	<u>1999</u>		<u>2000</u>	<u>1999</u>
East Orange	4.5031%	4.4445%	Roselle Park	2.9540%	2.8952%
Hillside	6.7291%	7.2503%	South Orange	4.2396%	4.1532%
Irvington	17.1055%	16.8195%	Summit	9.2463%	9.2180%
Maplewood	6.0620%	5.9788%	Union	20.6182%	21.4669%
Millburn	6.0328%	5.8937%	West Orange	12.1778%	11.8123%
Newark	10.3316%	10.0676%	Total	<u>100.0000%</u>	<u>100.0000%</u>

Respectfully submitted,



A. Ralph LaMendola
Chief Engineer

Joint Meeting of Essex and Union Counties
Annual Report of the Sewer Contribution of the Municipalities
Appendix A
2000 Budget

	Treatment Plant	Dewatering Facility	Drying Facility	Sewer	Total
Electric Service	\$ 1,377,000	\$ 122,400	\$ 30,600	\$ -	\$ 1,530,000
Gas Service	71,000	10,000	140,000	-	221,000
Fuel, Oil & Kerosene	130,800	43,200	-	-	174,000
Water Service	133,000	72,000	-	-	205,000
Chemicals	276,300	577,900	16,600	2,200	873,000
Sludge Disposal	-	1,825,000	-	-	1,825,000
Insurance	260,274	54,631	29,305	5,790	350,000
Administration	1,108,000	553,000	45,000	39,000	1,745,000
Labor	3,348,000	738,300	74,500	8,200	4,169,000
Benefits	1,079,265	238,015	6,050	12,670	1,336,000
Equipment	168,000	58,000	-	-	226,000
Printing & Stationery	18,000	5,000	1,000	1,000	25,000
Maintenance, Supplies & Spare Parts	958,500	253,000	-	192,500	1,404,000
Screening Disposal	130,000	-	-	-	130,000
Reserve Contingency	56,000	-	-	-	56,000
Miscellaneous Expenses	120,000	50,000	-	25,000	195,000
Technical & Professional Services	320,000	50,000	250,000	10,000	630,000
Replacement Fund	900,000	-	-	-	900,000
NJPDES & Miscellaneous Permit Fee	269,300	1,700	257,600	5,400	534,000
	\$ 10,723,439	\$ 4,652,146	\$ 850,655	\$ 301,760	\$ 16,528,000
	64.88%	28.15%	5.15%	1.82%	100.00%

Joint Meeting of Essex and Union Counties
Annual Report of the Sewer Contribution of the Municipalities
Appendix A (Continued)
Operations and Management Cost Allocations
(Treatment Plant)

	Estimated Total Cost	Percent Flow	Cost Flow	Percent SS	Cost SS	Percent BOD	Cost BOD
General Expenditures ¹	\$ 1,388,874	80%	\$ 1,111,099	10%	\$ 138,887	10%	\$ 138,888
Power	1,377,000	40%	\$ 550,800	5%	\$ 68,850	55%	\$ 757,350
Chlorine	51,000	40%	\$ 20,400			60%	\$ 30,600
Maintenance, Equipment, Supplies, Spare Parts, & Replacement Fund	2,082,500	28%	\$ 583,100	27%	\$ 562,275	45%	\$ 937,125
Fuel, Oil & Kerosene	130,800	40%	\$ 52,320	30%	\$ 39,240	30%	\$ 39,240
Administration, Labor & Benefits (Payroll Retirement)	5,535,265	40%	2,214,106	10%	\$ 553,527	50%	\$ 2,767,632
Sludge Processing ²	158,000			50%	\$ 79,000	50%	\$ 79,000
Total	\$10,723,439		\$ 4,531,825		\$ 1,441,779		\$ 4,749,835
	100%		42.2609295%		13.4451177%		44.2939528%

(1) General Expenditures
(From the Approved Budget)

Insurance	\$ 260,274
Technical & Professional Services	320,000
Stationery & Printing	18,000
Gas	71,000
Water	133,000
Miscellaneous	120,000
Service Contracts	130,000
Permit Fees	269,300
Sodium Bisulfite & Misc. Chemicals	67,300
	<u>\$1,388,874</u>

(2) Sludge Processing

Polymer	\$ 146,000
K2MnO4	12,000
	<u>\$ 158,000</u>

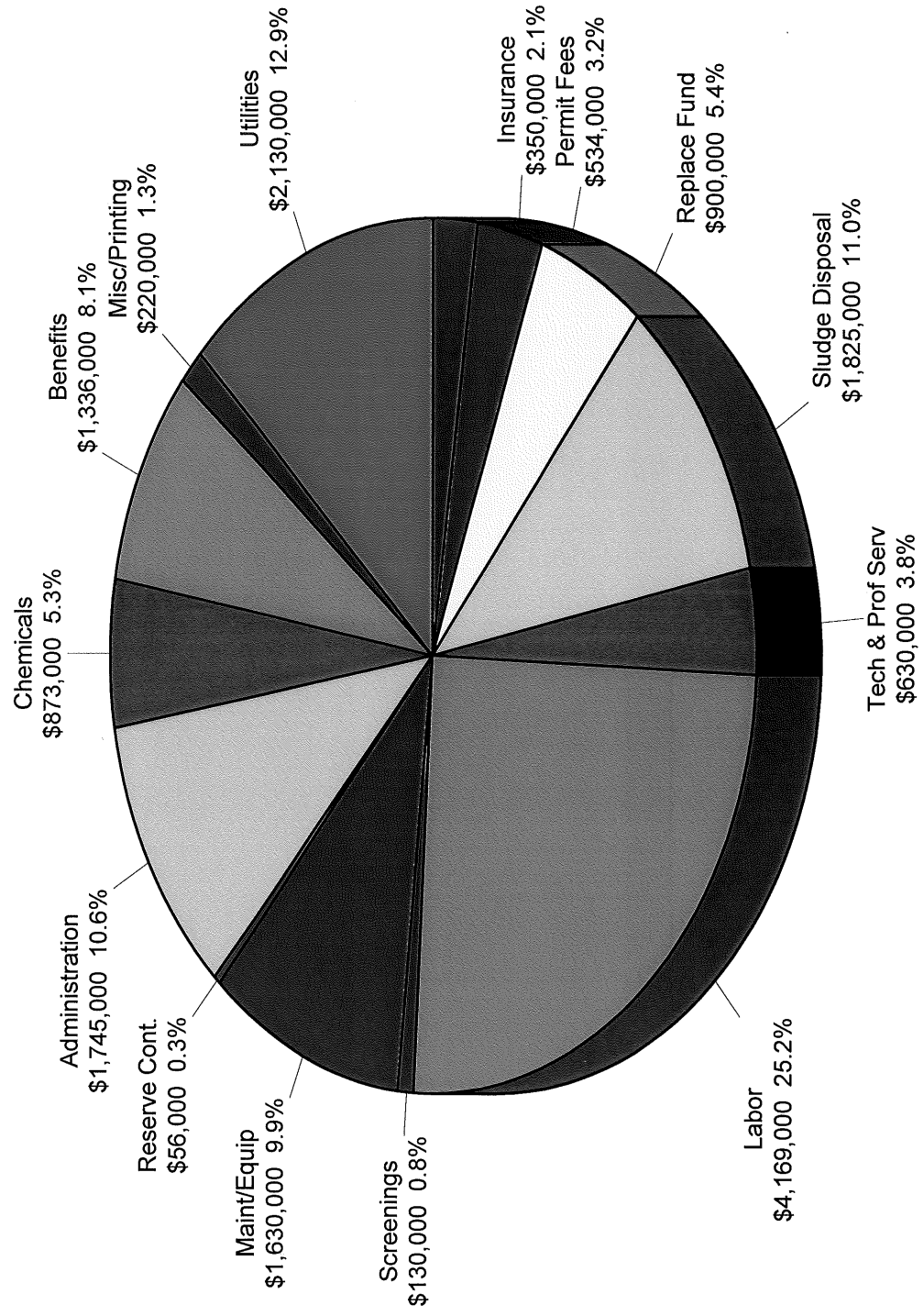
Joint Meeting of Essex and Union Counties
Annual Report of the Sewer Contribution of the Municipalities
Appendix A (Continued)
Operations and Management Allocations

	Estimated			
	Total Cost	Cost Flow	Cost TSS	Cost BOD
Treatment Plant	\$ 10,723,439	\$ 4,531,825	\$ 1,441,779	\$ 4,749,835
Dewatering Facility	4,652,146		2,326,073	2,326,073
Drying Facility	850,655		425,328	425,328
	<u>\$ 16,226,240</u>	<u>\$ 4,531,825</u>	<u>\$ 4,193,180</u>	<u>\$ 7,501,236</u>
Subtotal	100.00%	27.9289903%	25.8419665%	46.2290432%
Sewers ¹	\$ 301,760			
Total	<u>\$ 16,528,000</u>			

(1) Joint Meeting Members Only

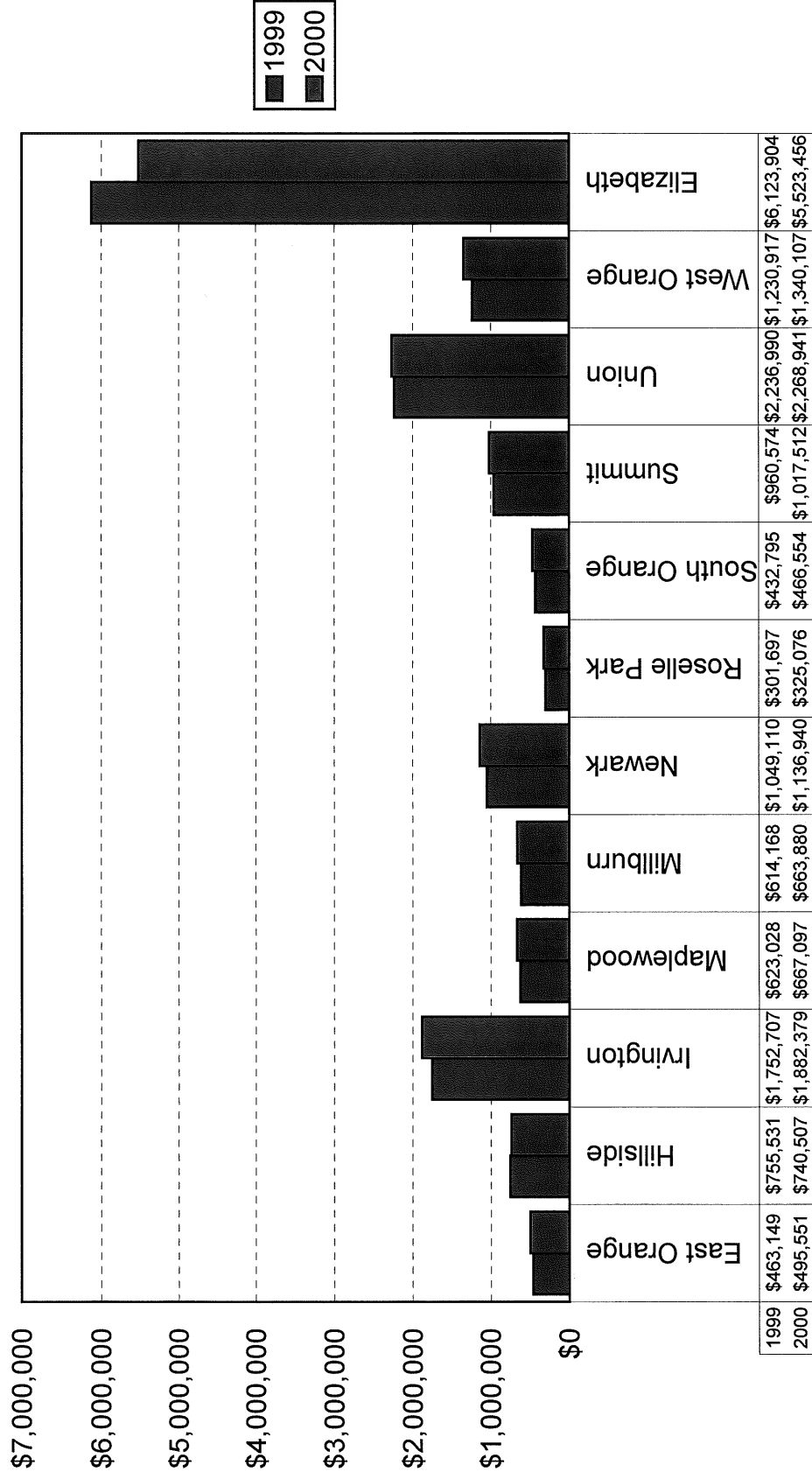
Joint Meeting of Essex & Union Counties

2000 O&M Budget



Joint Meeting of Essex & Union Counties

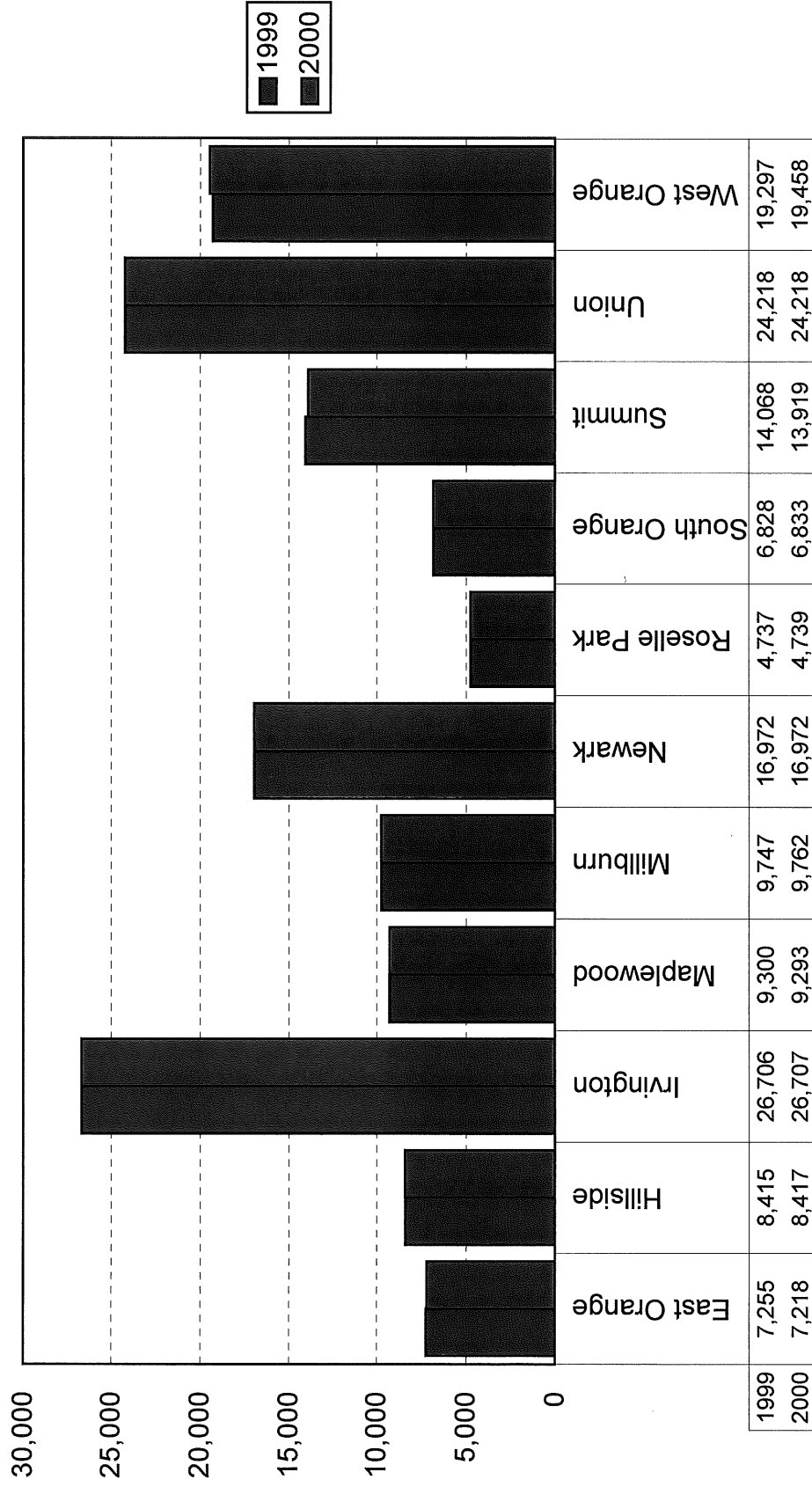
1999 vs 2000 Assessment by Municipality



Municipality

Joint Meeting of Essex & Union Counties

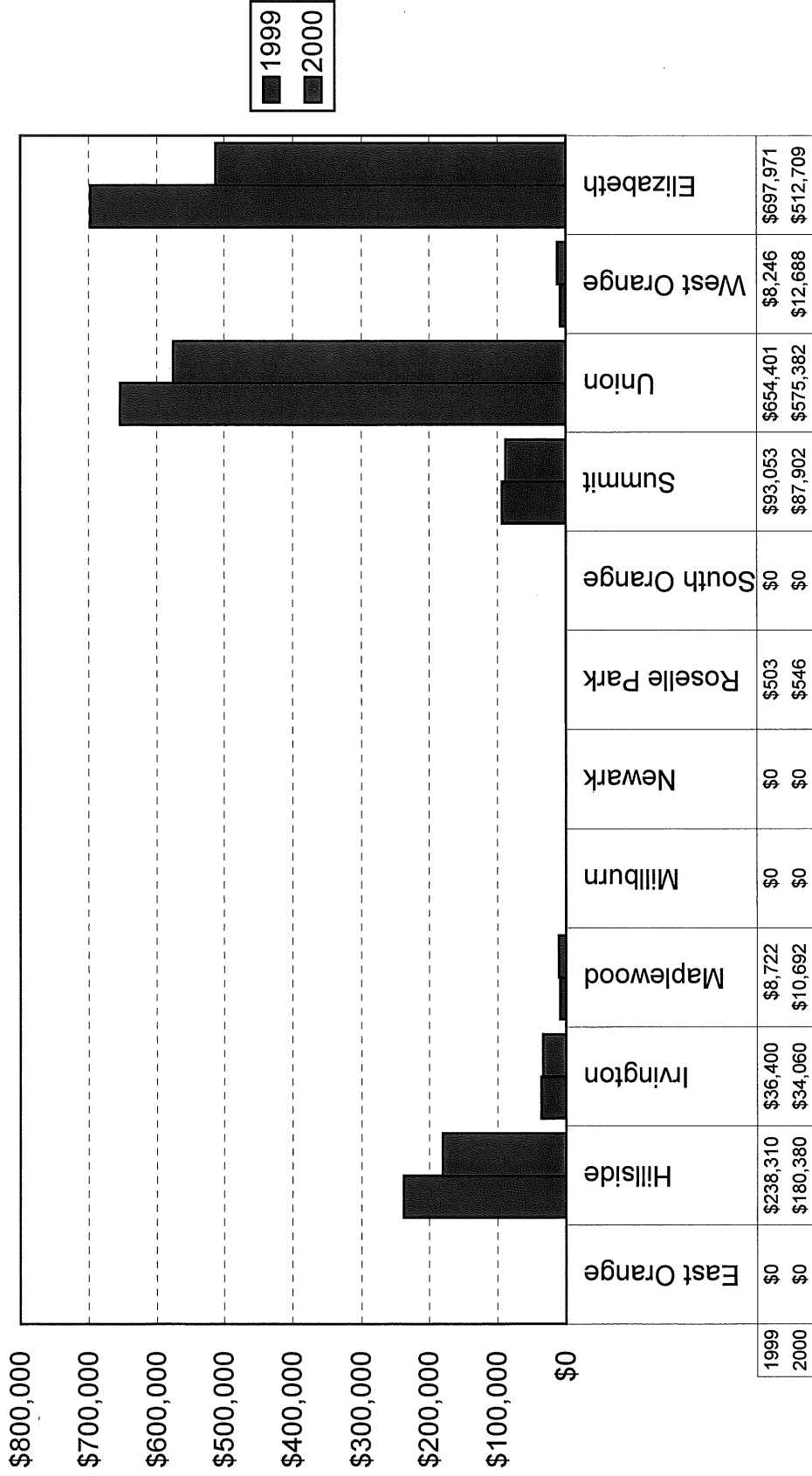
1999 vs 2000 Equivalent Dwelling Units



Municipality

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1999 vs 2000 Industrial User Charges



Municipality

Joint Meeting of Essex & Union Counties

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Municipality	Flow per MG	Cost Factors BOD per Ton	TSS per Ton
Elizabeth	206.0306510	419.8162656	278.3302495
Hillside	224.2888957	419.8162656	278.3302495
Irvington	224.2888957	419.8162656	278.3302495
Maplewood	224.2888957	419.8162656	278.3302495
Millburn	224.2888957	419.8162656	278.3302495
Murray Hill	224.2888957	419.8162656	278.3302495
Roselle Park	224.2888957	419.8162656	278.3302495
Summit	224.2888957	419.8162656	278.3302495
Union	224.2888957	419.8162656	278.3302495
West Orange	224.2888957	419.8162656	278.3302495

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Municipality: Elizabeth

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
206.0306510	419.8162656	278.3302495

IU #: 0025 Interbake Foods

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
3	747.000	303.273	24.4430	76.1397	30.9118	
Totals:			24.4430	76.1397	30.9118	
Cost Analysis:			5,036.0072	31,964.6845	8,603.6890	45,604.3807

IU #: 0030 Concord Beverage

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	3,977.000	97.600	21.3410	353.9211	8.6856	
Totals:			21.3410	353.9211	8.6856	
Cost Analysis:			4,396.9001	148,581.8345	2,417.4652	155,396.1999

IU #: 0037 Deb El Foods Corp

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	688.778	247.111	7.5410	21.6593	7.7706	
Totals:			7.5410	21.6593	7.7706	
Cost Analysis:			1,553.6771	9,092.9264	2,162.7930	12,809.3966

IU #: 0055 Emkay Chemical Company

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	203.200	56.800	0.6060	0.5135	0.1435	
Totals:			0.6060	0.5135	0.1435	
Cost Analysis:			124.8546	215.5757	39.9404	380.3706

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Municipality: Elizabeth

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
206.0306510	419.8162656	278.3302495

IU #: 0058 Exact Anodizing Corp.

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	7.267	144.778	4.6940	0.1422	2.8339	
Totals:			4.6940	0.1422	2.8339	
Cost Analysis:			967.1079	59.6979	788.7601	1,815.5658

IU #: 0062 Garcia Laundry

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	489.231	166.643	2.2850	4.6616	1.5878	
Totals:			2.2850	4.6616	1.5878	
Cost Analysis:			470.7800	1,957.0155	441.9328	2,869.7283

IU #: 0067 Purepac Pharmaceutical Co.

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	1,304.610	14.620	3.3020	17.9636	0.2013	
99	200.000	166.000	21.3360	17.7942	14.7692	
Totals:			24.6380	35.7578	14.9705	
Cost Analysis:			5,076.1832	15,011.7061	4,166.7430	24,254.6322

IU #: 0078 Magnolia Beef Company

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	1,543.800	279.900	0.2990	1.9249	0.3490	
Totals:			0.2990	1.9249	0.3490	
Cost Analysis:			61.6032	808.1043	97.1373	966.8448

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Municipality: Elizabeth

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
206.0306510	419.8162656	278.3302495

IU #: 0095 OK Towel & Uniform Supply Co

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
2	238.091	109.000	16.2780	16.1614	7.3988	
Totals:			16.2780	16.1614	7.3988	
Cost Analysis:			3,353.7669	6,784.8186	2,059.3099	12,197.8954

IU #: 0100 Papetti's Hygrade Egg Company

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
4	1,669.267	309.154	19.5990	136.4255	25.2665	
99	200.000	166.000	6.2020	5.1725	4.2931	
Totals:			25.8010	141.5980	29.5596	
Cost Analysis:			5,315.7968	59,445.1436	8,227.3308	72,988.2712

IU #: 0105 Jersey Pride Foods

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
2	3,028.800	488.600	25.4350	321.2465	51.8228	
2a	627.250	76.750	1.4050	3.6750	0.4497	
2b	389.250	33.500	0.8420	1.3667	0.1176	
Totals:			27.6820	326.2882	52.3901	
Cost Analysis:			5,703.3405	136,981.0936	14,581.7496	157,266.1837

IU #: 0120 Phelps Dodge Magnet Wire Co.

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	12.930	32.550	0.8620	0.0465	0.1170	
99	200.000	166.000	0.1590	0.1326	0.1101	
Totals:			1.0210	0.1791	0.2271	
Cost Analysis:			210.3573	75.1891	63.2088	348.7552

Joint Meeting of Essex & Union Counties

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Municipality: Elizabeth

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
206.0306510	419.8162656	278.3302495

IU #: 0148 Superior Powder Coating

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	89.136	60.818	0.8260	0.3070	0.2095	
99	200.000	166.000	0.4830	0.4028	0.3343	
Totals:			1.3090	0.7098	0.5438	
Cost Analysis:			269.6941	297.9856	151.3560	719.0357

IU #: 0155 S & G Packaging

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	71.129	63.714	6.7720	2.0086	1.7992	
2	130.243	140.214	1.5280	0.8299	0.8934	
99	200.000	166.000	0.3420	0.2852	0.2367	
Totals:			8.6420	3.1237	2.9293	
Cost Analysis:			1,780.5169	1,311.3801	815.3128	3,907.2098

IU #: 0165 Wakefern Food Corp.

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
2	232.667	182.500	1.5140	1.4689	1.1522	
3	881.333	645.333	7.7140	28.3502	20.7587	
4	193.833	374.500	0.0570	0.0461	0.0890	
7	200.000	166.000	0.8150	0.6797	0.5642	
Totals:			10.1000	30.5449	22.5641	
Cost Analysis:			2,080.9096	12,823.2459	6,280.2716	21,184.4270

Joint Meeting of Essex & Union Counties

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Municipality: Elizabeth

-----	Cost Factors	-----
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
206.0306510	419.8162656	278.3302495

	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
	----	-----	-----	-----
Elizabeth Totals:	176.6800	1,013.3252	182.8655	
Cost Analysis:	36,401.4954	425,410.4013	50,897.0002	512,708.8970

Joint Meeting of Essex & Union Counties

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Municipality: Hillside

-----	Cost Factors	-----
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
224.2888957	419.8162656	278.3302495

IU #: 1012 Atlantic Metal Products

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	20.273	81.250	6.0760	0.5136	2.0586	
2	54.833	43.714	6.7990	1.5546	1.2394	
99	200.000	166.000	0.9720	0.8106	0.6728	
Totals:			13.8470	2.8788	3.9708	
Cost Analysis:			3,105.7283	1,208.5671	1,105.1938	5,419.4892

IU #: 1015 Bristol-Myers Products R&D

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	316.917	202.909	4.8900	6.4623	4.1376	
Totals:			4.8900	6.4623	4.1376	
Cost Analysis:			1,096.7727	2,712.9787	1,151.6192	4,961.3706

IU #: 1020 Bristol-Myers Products - Pilot

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
5	143.333	29.333	0.2560	0.1530	0.0313	
Totals:			0.2560	0.1530	0.0313	
Cost Analysis:			57.4180	64.2319	8.7117	130.3616

IU #: 1025 Certified Processing

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	293.125	18.222	1.9340	2.3640	0.1470	
Totals:			1.9340	2.3640	0.1470	
Cost Analysis:			433.7747	992.4457	40.9145	1,467.1349

Joint Meeting of Essex & Union Counties

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Municipality: Hillside

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
224.2888957	419.8162656	278.3302495

IU #: 1032 McCain Citrus, Inc.

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
3	4,358.295	216.432	17.6540	320.8454	15.9331	
Totals:			17.6540	320.8454	15.9331	
Cost Analysis:			3,959.5962	134,696.1177	4,434.6637	143,090.3775

IU #: 1035 ECD, Inc.

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
2	4.911	11.523	19.7490	0.4044	0.9489	
99	200.000	166.000	0.4410	0.3678	0.3053	
Totals:			20.1900	0.7722	1.2542	
Cost Analysis:			4,528.3928	324.1821	349.0818	5,201.6567

IU #: 1045 Parkway Business Center

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	111.375	290.778	0.3930	0.1825	0.4765	
Totals:			0.3930	0.1825	0.4765	
Cost Analysis:			88.1455	76.6165	132.6244	297.3864

IU #: 1050 Manhattan Drug Company, Inc.

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
2	211.417	89.750	0.3510	0.3094	0.1314	
3	787.800	180.000	0.1300	0.4271	0.0976	
Totals:			0.4810	0.7365	0.2290	
Cost Analysis:			107.8830	309.1947	63.7376	480.8153

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Municipality: Hillside

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
224.2888957	419.8162656	278.3302495

LU #: 1054 Oasis Foods Company

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
3	2,990.000	1,037.125	2.8060	34.9860	12.1354	
99	200.000	166.000	0.8310	0.6931	0.5752	
Totals:			3.6370	35.6791	12.7106	
Cost Analysis:			815.7387	14,978.6665	3,537.7445	19,332.1497

	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
	----	-----	-----	-----
Hillside Totals:	63.2820	370.0738	38.8901	
Cost Analysis:	14,193.4499	155,363.0007	10,824.2912	180,380.7418

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Municipality: Irvington

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
224.2888957	419.8162656	278.3302495

IU #: 2008 Archon Vitamin Corporation

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
2	121.375	83.750	0.3430	0.1736	0.1198	
3	396.000	140.000	0.3170	0.5235	0.1851	
Totals:			0.6600	0.6971	0.3049	
Cost Analysis:			148.0307	292.6539	84.8629	525.5475

IU #: 2035 Industrial Retaining Ring

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
2	183.454	34.000	1.1750	0.8989	0.1666	
99	200.000	166.000	0.2080	0.1735	0.1440	
Totals:			1.3830	1.0724	0.3106	
Cost Analysis:			310.1915	450.2110	86.4494	846.8519

IU #: 2036 Intergel

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	631.000	181.375	1.8030	4.7442	1.3637	
Totals:			1.8030	4.7442	1.3637	
Cost Analysis:			404.3929	1,991.6923	379.5590	2,775.6442

IU #: 2040 Jabel, Incorporated

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	194.000	86.900	1.0220	0.8268	0.3703	
Totals:			1.0220	0.8268	0.3703	
Cost Analysis:			229.2233	347.1041	103.0657	679.3930

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Municipality: Irvington

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
224.2888957	419.8162656	278.3302495

IU #: 2050 Max Marx Color Corporation

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
2	189.167	50.182	8.2000	6.4684	1.7159	
Totals:			8.2000	6.4684	1.7159	
Cost Analysis:			1,839.1689	2,715.5395	477.5869	5,032.2954

IU #: 2055 Revlon, Incorporated

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
4	155.656	365.444	1.5970	1.0366	2.4337	
99	200.000	166.000	4.0620	3.3877	2.8118	
Totals:			5.6590	4.4243	5.2455	
Cost Analysis:			1,269.2509	1,857.3931	1,459.9813	4,586.6253

IU #: 2057 Sal's Cleaners

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	506.200	62.200	1.6710	3.5272	0.4334	
99	200.000	166.000	0.1060	0.0884	0.0734	
Totals:			1.7770	3.6156	0.5068	
Cost Analysis:			398.5614	1,517.8877	141.0578	2,057.5068

IU #: 2060 Cintas (Formerly Standard)

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	531.000	170.364	12.9890	28.7612	9.2276	
Totals:			12.9890	28.7612	9.2276	
Cost Analysis:			2,913.2885	12,074.4196	2,568.3202	17,556.0283

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Municipality: Irvington

-----	Cost Factors	-----
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
224.2888957	419.8162656	278.3302495

	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
	----	-----	-----	-----
Irvington Totals:	33.4930	50.6100	19.0453	
Cost Analysis:	7,512.1080	21,246.9012	5,300.8831	34,059.8923

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Municipality: Maplewood

-----	Cost Factors	-----
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
224.2888957	419.8162656	278.3302495

IU #: 3020 Gleason Cleaners

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	273.333	74.250	1.1770	1.3415	0.3644	
Totals:			1.1770	1.3415	0.3644	
Cost Analysis:			263.9880	563.1835	101.4235	928.5951

IU #: 3033 NJ Transit Bus Terminal

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
3	285.500	189.750	10.2910	12.2518	8.1428	
Totals:			10.2910	12.2518	8.1428	
Cost Analysis:			2,308.1570	5,143.5049	2,266.3876	9,718.0495

IU #: 3045 Carlton Chain Company

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
2	39.500	21.818	0.1420	0.0234	0.0129	
Totals:			0.1420	0.0234	0.0129	
Cost Analysis:			31.8490	9.8237	3.5905	45.2632

	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----
Maplewood Totals:	11.6100	13.6167	8.5201	
Cost Analysis:	2,603.9941	5,716.5121	2,371.4016	10,691.9078

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Municipality: Murray Hill

-----	Cost Factors	-----
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
224.2888957	419.8162656	278.3302495

IU #: 5010 Bell Labs (Formerly Lucent)

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	7.864	19.655	91.8790	3.0128	7.5304	
Totals:			91.8790	3.0128	7.5304	
Cost Analysis:			20,607.4394	1,264.8224	2,095.9381	23,968.2000

IU #: 5020 Fablok Mills, Incorporated

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	274.222	83.778	9.7730	11.1755	3.4142	
Totals:			9.7730	11.1755	3.4142	
Cost Analysis:			2,191.9754	4,691.6567	950.2751	7,833.9072

IU #: 5021 FRC-Electrical Industries

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	11.111	11.078	9.7550	0.4520	0.4506	
Totals:			9.7550	0.4520	0.4506	
Cost Analysis:			2,187.9382	189.7570	125.4156	2,503.1107

	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----
Murray Hill Totals:	111.4070	14.6403	11.3952	
Cost Analysis:	24,987.3530	6,146.2361	3,171.6289	34,305.2179

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Municipality: Roselle Park

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
224.2888957	419.8162656	278.3302495

CU #: 6005 Hexacon Electric Company

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	4.300	32.100	1.5260	0.0274	0.2043	
99	200.000	166.000	0.1760	0.1468	0.1218	
Totals:			1.7020	0.1742	0.3261	
Cost Analysis:			381.7397	73.1320	90.7635	545.6352

	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
	-----	-----	-----	-----
Roselle Park Totals:	1.7020	0.1742	0.3261	
Cost Analysis:	381.7397	73.1320	90.7635	545.6352

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Municipality: Summit

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
224.2888957	419.8162656	278.3302495

IU #: 5505 Ticona (formerly Celanese)

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	89.611	120.222	13.7550	5.1399	6.8957	
Totals:			13.7550	5.1399	6.8957	
Cost Analysis:			3,085.0938	2,157.8136	1,919.2819	7,162.1893

IU #: 5510 Novartis Pharmaceuticals Corp

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
3a	37.357	55.143	98.6330	15.3650	22.6802	
99	200.000	166.000	15.0560	12.5567	10.4221	
Totals:			113.6890	27.9217	33.1023	
Cost Analysis:			25,499.1803	11,721.9838	9,213.3714	46,434.5355

	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----
Summit Totals:	127.4440	33.0616	39.9980	
Cost Analysis:	28,584.2740	13,879.7974	11,132.6533	53,596.7248

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Municipality: Union

-----	Cost Factors	-----
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
224.2888957	419.8162656	278.3302495

IU #: 7015 ACuPowder International

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
3a	83.800	120.000	0.2480	0.0867	0.1241	
4a	102.400	89.667	2.1510	0.9185	0.8043	
Totals:			2.3990	1.0052	0.9284	
Cost Analysis:			538.0691	421.9993	258.4018	1,218.4702

IU #: 7025 Allied Processing Corp.

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	5.167	4.433	0.5300	0.0114	0.0098	
Totals:			0.5300	0.0114	0.0098	
Cost Analysis:			118.8731	4.7859	2.7276	126.3867

IU #: 7035 American Products Company

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	388.800	286.167	0.9030	1.4640	1.0776	
Totals:			0.9030	1.4640	1.0776	
Cost Analysis:			202.5329	614.6110	299.9287	1,117.0726

IU #: 7045 TransTechnology / Breeze

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	126.500	89.100	1.7410	0.9184	0.6469	
Totals:			1.7410	0.9184	0.6469	
Cost Analysis:			390.4870	385.5593	180.0518	956.0981

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Municipality: Union

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
224.2888957	419.8162656	278.3302495

IU #: 7060 National Envelope Corp. East

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	756.000	767.000	2.2750	7.1720	7.2763	
Totals:			2.2750	7.1720	7.2763	
Cost Analysis:			510.2572	3,010.9223	2,025.2144	5,546.3939

IU #: 7070 Durex, Incorporated

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	30.281	35.500	17.3050	2.1852	2.5617	
Totals:			17.3050	2.1852	2.5617	
Cost Analysis:			3,881.3193	917.3825	712.9986	5,511.7004

IU #: 7080 Foremost Manufacturing Co.

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
2	14.840	389.700	21.9230	1.3567	35.6259	
Totals:			21.9230	1.3567	35.6259	
Cost Analysis:			4,917.0855	569.5647	9,915.7656	15,402.4158

IU #: 7088 Hanovia

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----	-----	-----
1	49.125	24.813	1.5850	0.3247	0.1640	
Totals:			1.5850	0.3247	0.1640	
Cost Analysis:			355.4979	136.3143	45.6462	537.4584

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Municipality: Union

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
224.2888957	419.8162656	278.3302495

IU #: 7092 Interlux/Courtauld Coating

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
2	59.220	64.600	5.5390	1.3678	1.4921	
Totals:			5.5390	1.3678	1.4921	
Cost Analysis:			1,242.3362	574.2247	415.2966	2,231.8574

IU #: 7105 Stonco Lighting

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
2	68.500	107.400	3.1310	0.8944	1.4022	
Totals:			3.1310	0.8944	1.4022	
Cost Analysis:			702.2485	375.4837	390.2747	1,468.0069

IU #: 7110 NEI/DoAll

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	102.700	9.980	1.3680	0.5859	0.0569	
99	200.000	166.000	0.2180	0.1818	0.1509	
Totals:			1.5860	0.7677	0.2078	
Cost Analysis:			355.7222	322.2929	57.8370	735.8522

IU #: 7145 Schering Corporation

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
5	39.118	38.474	190.9010	31.1399	30.6273	
Totals:			190.9010	31.1399	30.6273	
Cost Analysis:			42,816.9745	13,073.0365	8,524.5041	64,414.5151

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Municipality: Union

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
224.2888957	419.8162656	278.3302495

IU #: 7150 SS Studios, Incorporated

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	388.800	179.300	0.2420	0.3924	0.1809	
Totals:			0.2420	0.3924	0.1809	
Cost Analysis:			54.2779	164.7359	50.3499	269.3638

IU #: 7155 Tessler & Weiss Inc.

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
20	272.625	82.625	1.9800	2.2510	0.6822	
Totals:			1.9800	2.2510	0.6822	
Cost Analysis:			444.0920	945.0064	189.8769	1,578.9753

IU #: 7167 Turbo Braze Corporation

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	692.111	103.556	1.4220	4.1040	0.6141	
Totals:			1.4220	4.1040	0.6141	
Cost Analysis:			318.9388	1,722.9260	170.9226	2,212.7874

IU #: 7170 Tuscan Dairy Farms, Incorp

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
2a	1,918.115	1,070.680	93.0890	744.5762	415.6178	
2b	633.667	428.583	12.5130	33.0642	22.3631	
Totals:			105.6020	777.6404	437.9809	
Cost Analysis:			23,685.3560	326,466.0887	121,903.3332	472,054.7778

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Municipality: West Orange

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
224.2888957	419.8162656	278.3302495

IU #: 8030 Organon, Incorporated

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	97.222	35.889	28.5830	11.5880	4.2776	
Totals:			28.5830	11.5880	4.2776	
Cost Analysis:			6,410.8495	4,864.8309	1,190.5855	12,466.2659

IU #: 8040 Turtle Back Zoo

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	15.625	12.588	0.8320	0.0542	0.0437	
Totals:			0.8320	0.0542	0.0437	
Cost Analysis:			186.6084	22.7540	12.1630	221.5254

	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----
West Orange Totals:	29.4150	11.6422	4.3213	
Cost Analysis:	6,597.4579	4,887.5849	1,202.7485	12,687.7913

	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
-----	-----	-----	-----	-----
Grand Totals:	914.0970	2,340.1392	826.8397	
Cost Analysis:	201,795.9400	982,428.4999	230,134.5000	1,414,358.9399