

December 17, 1998

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 1999)

I present herewith the 64th 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, 1997 through October 31, 1998. 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 1999. 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 1998, 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 11, 1997.

During 1998, 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 (1999) dwelling unit figures formulated by each municipality in 1998.

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, 1997, through October 31, 1998 and projected for a twelve (12) month period in 1999. 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 1999, 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, 1997, through October 31, 1998, and projected for 1999 and are based upon actual 1997-1998 operating statistics as well as a recent upgraded 1998 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	24,521.6490 MG/Year	67.1826 MGD
2.	BOD	15,710.2315 Tons/Year	86,083.4603 Lbs/Day
	TSS	13,209.9261 Tons/Year	72,383.1567 Lbs/Day
3.	Estimated Industrial Flow	945.5610 MG/Year	2.5906 MGD
4.	Estimated Industrial BOD	2,640.3654 Tons/Year	14,467.7556 Lbs/Day
5.	Estimated Industrial TSS	886.9944 Tons/Year	4,860.2433 Lbs/Day
6.	Estimated Total Operating Expenses in 1999		
			\$10,728,579 STP
			4,498,186 SDWF
			982,105 SDF
			335,710 Sewers
			<hr/> \$16,544,580 Total
7.	Estimated Total Dwelling Units in System		
			147,543 JM Members
			47,181 Elizabeth
			<hr/> 194,724 Total

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

Flow	27.6310748%
BOD	46.6655079%
Suspended Solids	25.7034173%

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 1999 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 1999

Treatment Plant

	<u>Total for 1999</u>	<u>Domestic & Commercial</u>	<u>Industrial</u>
Flow	24,521.6490 MG/Yr. ¹	23,576.0880 MG/Yr.	945.5610 MG/Yr.
BOD	15,710.2315 Tons/Yr. ¹	13,069.8661 Tons/Yr.	2,640.3654 Tons/Yr.
Suspended Solid	13,209.9261 Tons/Yr. ¹	12,322.9317 Tons/Yr.	886.9944 Tons/Yr.

(1) Based upon data from November 1, 1997 thru October 31, 1998 (365 days)

Cost Allocation

	<u>Total for 1999</u>	<u>Domestic & Commercial</u>	<u>Industrial</u>
Flow	\$4,478,685.00	\$4,305,986.00	\$172,699.00
BOD	7,563,951.50	6,292,704.00	1,271,247.50
Suspended Solid	4,166,233.50	3,886,487.00	279,746.50
	<u>\$16,208,870.00</u>	<u>\$14,485,177.00</u>	<u>\$1,723,693.00</u>
	100.000000%	89.36574230%	10.63425770%

Elizabeth Contribution

Flow	-	6,042.2290 MG/Yr.
BOD	-	7,521.8631 Tons/Yr.
TSS	-	3,595.3495 Tons/Yr.

Trunk Sewer Flow ¹

	<u>Total for 1999</u>	<u>Domestic & Commercial</u>	<u>Industrial</u>
	18,479.4200 MG/Yr. ²	17,713.5640 MG/Yr.	765.856 MG/Yr.

(1) Based upon data from November 1, 1997 thru October 31, 1998 (365 days)

(2) (24,521.649 - 6,042.2290)

COST ALLOCATION

\$335,710.00	\$321,796.93	\$13,913.07
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Member municipalities will be assessed \$2.18 (\$321,796.93/147,543) for trunk sewer O&M per equivalent dwelling unit.

The estimated cost for treating industrial wastes has been determined to be \$200.81 per MG for flow, \$481.47 per ton of BOD, and \$315.39 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	\$172,699.00	/	945.5610	=	\$182.6418391	/MG
BOD	\$1,271,247.50	/	2,640.3654	=	\$481.4665046	/Ton
Suspended Solids	\$279,746.50	/	886.9944	=	\$315.3869968	/Ton

All industries within the member municipalities (excluding Elizabeth) will be required to pay an additional \$18.17/MG of flow for trunk sewer use ($\$13,913.07/765.856 = \$18.167/\text{MG}$). This brings the total flow cost to \$200.81/MG ($\$182.642 + \18.167) for the indicated industries of member municipalities.

Based upon the user charges for 1999, 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 1998 industrial waste survey of the service area. These are estimates for 1999 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 \$16,544,580.00 for 1999. 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 37.7811905% 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
1999

<u>Municipality</u>	<u>Dwelling Units ¹</u>	<u>User Charges Industrial</u>
East Orange	7,255	\$ -
Hillside	8,415	238,311
Irvington	26,706	36,400
Maplewood	9,300	8,722
Millburn	9,747 ⁴	-
Newark	16,972	-
Roselle Park	4,737	502
South Orange	6,828	-
Summit	14,068 ²	93,054 ³
Union	24,218	654,401
West Orange	19,297	8,246
Elizabeth	47,181	697,971
	<u>194,724</u>	<u>\$ 1,737,607</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 (3727)

(3) Includes Murray Hill

(4) Includes Livingston (431)

Table III
Joint Meeting of Essex and Union Counties
Computation of Estimated Percent
Contribution By City of Elizabeth
For Period 11/1/97-10/31/98 and Projected Contribution for 1999

Flow:	Treatment Plant	Elizabeth Pumping Station		Joint Meeting	
	24,521.649 MG	6,042.229 MG		18,479.42 MG	
		Industrial	D&C	Industrial	D&C
		155.888	5,886.341	765.856	17,713.564
		\$ 28,471.67	\$ 1,075,092.15	\$ 153,790.42	\$ 3,557,034.77
Unit Charge \$ 182.6418391 Per MG for Elizabeth					
Unit Charge \$ 200.8085310 Per MG for Joint Meeting					
BOD:	15710.2315 Tons	7,521.8631 Tons		8,188.3684 Tons	
		Industrial	D&C	Industrial	D&C
		1,192.8577	6,329.0054	1,412.1906	6,776.1778
Unit Charge	481.4665046 Per Ton	\$ 574,321.03	\$ 3,047,204.11	\$ 679,922.47	
TSS:	13,209.9261 Tons	3,595.3495 Tons		9,614.5766 Tons	
		Industrial	D&C	Industrial	D&C
		222.1378	3,373.2117	652.9192	8,961.6574
Unit Charge	315.3869968 Per Ton	\$ 70,059.37	\$ 1,063,867.11	\$ 205,922.23	
			\$ 5,859,015.44	\$ 1,039,635.12	

City of Elizabeth (Contribution from Pumping Station) \$ 5,859,015.44

City of Elizabeth (Industry Tributary to Joint Meeting Trunk)

Flow:	23.8170 MG/Year at	\$ 182.6418391	4,349.98
BOD:	35.3171 Tons/Year at	481.4665046	17,004.00
TSS:	11.9374 Tons/Year at	315.3869968	3,764.90

Joint Meeting Industrial	1,039,635.12
Subtotal	\$ 6,923,769.44

Total 1999 Budget	\$ 16,544,580.00
Subtotal (above)	(6,923,769.44)
Subtotal (EDU's)	\$ 9,620,810.56

Joint Meeting EDU's (X + Y) + Elmora EDU's (X) = \$ 9,620,811
 (Y = Additional Assessment to Member Municipalities for Trunk Sewer O&M)
 147,543 (X + \$2.181038274) + 3905 (X) = \$ 9,620,811

Equivalent Units-Member Municipalities 147,543

Elmora EDU's = 3,905 \$ 61.4007027490 Per Unit = X
 \$ 63.5817410230 Per Unit = X+Y

Joint Meeting EDU Assessment \$ 9,381,040.82
 Elmora Area Assessment \$ 239,769.74

Total Anticipated Payment from the City of Elizabeth

Pumping Station \$ 5,859,015.44

Elmora EDU's 239,769.74

Elmora Industrial 25,118.88

\$ 6,123,904.06

Total Anticipated Payment from Member Municipalities

EDU's 9,381,040.82

Industrial 1,039,635.12

\$ 10,420,675.94

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

\$ 6,123,904.06 / \$ 16,208,870.00 = 37.7811905%

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

Municipality	Capacity By Contract (MGD)	Capacity By Contract (Percent)	Base Year - 1982		Base Year - 1982		Inflow (GPD)	(Percent)	SSES - November 1998 (GPD) ⁵	(Percent)
			Phase IIB - SSES ¹		Phase IIB - SSES ²					
			(GPD) ³	(Percent)	(GPD) ⁴	(Percent)				
East Orange	5.50	4.88%	70,747	2.11%	54,327	2.61%	3,007,440	5.79%	4,707,524	6.19%
Hillside	12.20	10.83%	79,012	2.36%	31,564	1.58%	1,185,120	2.28%	1,855,631	2.44%
Irvington	18.61	16.52%	1,115,672	33.31%	764,530	38.27%	8,612,640	16.57%	12,190,889	16.03%
Maplewood	7.08	6.29%	389,078	11.62%	191,382	9.58%	5,449,680	10.48%	8,525,257	11.21%
Millburn	6.00	5.33%	191,609	5.72%	146,034	7.31%	2,729,520	5.25%	3,734,078	4.91%
Newark	15.50	13.76%	234,484	7.00%	207,364	10.38%	1,959,540	3.77%	3,064,834	4.03%
Roselle Park	9.44	8.38%	106,187	3.17%	62,529	3.13%	1,576,080	3.03%	2,464,035	3.24%
South Orange	7.00	6.22%	410,876	12.27%	80,508	4.03%	2,183,760	4.20%	3,407,061	4.48%
Summit	7.50	6.66%	171,657	5.13%	84,704	4.24%	3,651,120	7.02%	3,254,960	4.28%
Union	10.30	9.14%	329,127	9.83%	228,340	11.43%	14,534,640	27.96%	22,290,391	29.31%
West Orange	13.50	11.99%	250,811	7.48%	148,631	7.44%	7,097,040	13.65%	10,555,805	13.88%
	112.63	100.00%	3,349,260	100.00%	1,997,727	100.00%	51,986,580	100.00%	76,050,465	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) 1998 - Infiltration related to base year total = 2.083 MGD / 52.79 MGD = 3.94582307%

- Adjusted for period 11/1/97 - 10/31/98; (3.94582307% x 18,479,4200 = 729.17 MG / Year / 365 = 1,997,727 GPD)

(5) 1998 inflow adjusted for period 11/1/97 - 10/31/98 - (51.98" / 33.22") x (48,603,240) = 76,050,465 GPD

Table IV - A
Joint Meeting of Essex and Union Counties
Adjusted 1998 - Summary of Infiltration and Inflow

Municipality	Phase IIB		1998		Phase IIB		1998		1998	
	SSES	Infiltration (GPD)	1997	Infiltration Removed (GPD)	1998	Infiltration	1997	Infiltration Removed (GPD)	1998	Inflow (GPD)
East Orange	70,747		54,327	-	54,327	3,007,440	3,007,440	-	-	3,007,440
Hillside	79,012		32,980	-	32,980	1,185,120	1,185,120	-	-	1,185,120
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	-	-	2,384,640
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	-	83,906	2,183,760	2,178,000	-	-	2,178,000
Summit	171,657		88,296	-	88,296	3,651,120	2,348,640	269,280	-	2,079,360
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	-	2,082,515	51,986,580	48,872,520	269,280		48,603,240

Joint Meeting of Essex and Union Counties

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Table VI
Joint Meeting of Essex and Union Counties
Estimated Annual Operation Expenses To Member Municipalities
1999

Domestic & Commercial									
Municipality	Dwelling Units	User Charge		Infiltration		Inflow		Total Cost	Unit Cost
		\$	60.11286513 Per Unit	Percent ¹	Amount	Percent ²	Amount		
East Orange	7,255		\$436,118.84	2.61%	\$3,390.47	6.19%	\$23,639.94	\$463,149.25	\$63.8386
Hillside	8,415		505,849.76	1.58%	2,052.47	2.44%	9,318.49	517,220.72	61.4641
Irvington	26,706		1,605,374.18	38.27%	49,713.92	16.03%	61,219.41	1,716,307.51	64.2667
Maplewood	9,300		559,049.65	9.58%	12,444.72	11.21%	42,811.58	614,305.95	66.0544
Millburn	9,747 ³		585,920.10	7.31%	9,495.92	4.91%	18,751.55	614,167.57	63.0109
Newark	16,972		1,020,235.55	10.38%	13,483.94	4.03%	15,390.78	1,049,110.27	61.8142
Roselle Park	4,737		284,754.64	3.13%	4,065.97	3.24%	12,373.73	301,194.34	63.5834
South Orange	6,828		410,450.64	4.03%	5,235.09	4.48%	17,109.36	432,795.09	63.3853
Summit	14,068 ⁴		845,667.79	4.24%	5,507.89	4.28%	16,345.55	867,521.23	61.6663
Union	24,218		1,455,813.37	11.43%	14,847.92	29.31%	111,936.43	1,582,597.72	65.3480
West Orange	19,297		1,159,997.96	7.44%	9,664.79	13.88%	53,008.45	1,222,671.20	63.3607
	147,543		\$8,869,232.48	100.00%	\$129,903.10	100.00%	\$381,905.27	\$9,381,040.85	\$63.5817
									\$75.6967 1998
									\$73.9447 1997
									\$72.7161 1996
									\$79.2640 1995

(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 (431)

(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 (431)

(4) Includes New Providence (3727)

Table VI (Continued)
Joint Meeting of Essex and Union Counties
Estimated Annual Operation Expenses To Member Municipalities
1999

Municipality	Industrial									
	BOD (Tons / Year)	BOD ¹ (\$/Year)	TSS (Tons / Year)	TSS ² (\$/Year)	Flow (MG / Year)				Flow ³ (\$/Year)	Total Cost
					Dry Weather	Infiltration 3.945823%	Inflow 11.600472%	Total		
East Orange	0.0000	\$0.00	0.0000	\$0.00	0.00	0.00	0.00	0.00	\$0.00	\$0.00
Hillside	445.5569	214,520.72	36.9033	11,638.82	51.10	2.39	7.02	60.51	12,150.72	238,310.26
Irrington	45.3923	21,854.87	22.6571	7,145.75	31.12	1.45	4.27	36.85	7,399.19	36,399.81
Maplewood	8.8771	4,274.03	6.5291	2,059.19	10.05	0.47	1.38	11.90	2,389.22	8,722.44
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	0.1643	79.10	0.3232	101.93	1.35	0.06	0.19	1.60	321.49	502.52
South Orange	0.0000	0.00	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Summit ⁴	46.4590	22,368.45	47.1904	14,883.24	234.68	10.97	32.24	277.88	55,801.28	93,052.97
Union	860.0046	414,063.41	536.8074	169,302.07	298.75	13.96	41.04	353.75	71,035.82	654,401.30
West Orange	5.7364	2,761.88	2.5087	791.21	19.74	0.92	2.71	23.37	4,692.69	8,245.78
	1,412.1906	\$ 679,922.46	652.9192	\$205,922.21	646.79	30.22	88.84	765.86	\$153,790.42	\$1,039,635.09

- (1) At \$481.4665046/Ton
(2) At \$315.3869968/Ton
(3) At \$200.808531/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
1999

Municipality	Domestic & Commercial				
	Total Assessments ¹	User Charge Domestic Sewage 60.11286513	User Charges Industrial	Infiltration / Inflow Charges	Assessment Percentage
East Orange	\$463,149.25	\$436,118.84	\$0.00	\$27,030.41	4.4445%
Hillside	755,530.98	505,849.76	238,310.26	11,370.96	7.2503%
Irvington	1,752,707.32	1,605,374.18	36,399.81	110,933.33	16.8195%
Maplewood	623,028.39	559,049.65	8,722.44	55,256.30	5.9788%
Millburn	614,167.57	585,920.10	0.00	28,247.47	5.8937%
Newark	1,049,110.27	1,020,235.55	0.00	28,874.72	10.0676%
Roselle Park	301,696.86	284,754.64	502.52	16,439.70	2.8952%
South Orange	432,795.09	410,450.64	0.00	22,344.45	4.1532%
Summit	960,574.20	845,667.79	93,052.97	21,853.44	9.2180%
Union	2,236,999.02	1,455,813.37	654,401.30	126,784.35	21.4669%
West Orange	1,230,916.98	1,159,997.96	8,245.78	62,673.24	11.8123%
	<u>\$10,420,675.94</u>	<u>\$8,869,232.48</u>	<u>\$1,039,635.09</u>	<u>\$511,808.37</u>	<u>100.0000%</u>
Elizabeth	6,123,904.06				
Total	<u>\$ 16,544,580.00</u>				

(1) Reflects anticipated payment of \$6,123,904.06 from the City of Elizabeth which is 37.7811905% of allocation from Treatment Plant, Sludge Dewatering, and Sludge Drying budget. Exact 1999 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 1999 Assessment with 1998 Assessment

Municipality	1998	1999		Comparison	
				Amount	Percentage
East Orange	\$549,556.32	\$463,149.25	(-)	(\$86,407.07)	-15.72%
Hillside	717,856.97	755,530.98	(+)	37,674.01	5.25%
Irvington	2,081,108.04	1,752,707.32	(-)	(328,400.72)	-15.78%
Maplewood	721,173.39	623,028.39	(-)	(98,145.00)	-13.61%
Millburn	731,106.43	614,167.57	(-)	(116,938.86)	-15.99%
Newark	1,255,145.20	1,049,110.27	(-)	(206,034.93)	-16.42%
Roselle Park	358,786.77	301,696.86	(-)	(57,089.91)	-15.91%
South Orange	515,709.45	432,795.09	(-)	(82,914.36)	-16.08%
Summit	1,146,668.50	960,574.20	(-)	(186,094.30)	-16.23%
Union	2,808,254.08	2,236,999.02	(-)	(571,255.06)	-20.34%
West Orange	1,441,845.77	1,230,916.98	(-)	(210,928.79)	-14.63%
	<u>\$12,327,210.92</u>	<u>\$10,420,675.94</u>	(-)	<u>(\$1,906,534.98)</u>	<u>-15.47%</u>
Elizabeth	5,318,529.08	6,123,904.06	(+)	\$ 805,374.98	15.14%
Total	<u>\$17,645,740.00</u>	<u>\$16,544,580.00</u>	<u>(-)</u>	<u>(\$1,101,160.00)</u>	<u>-6.24%</u>

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

1995	33.09447430%
1996	37.06967270%
1997	34.89536790%
1998	31.17283950%
1999	37.78119050%

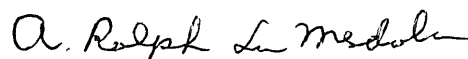
Table III, IV, V, VI, and VII, have been prepared to reflect the Domestic Sewer Usage and Industrial User assessment to each municipality for 1999 as a result of the Agreement with the City of Elizabeth which requires 37.7811905 of the 1999 Treatment Plant, Sludge Dewatering and Sludge Drying Budget to be paid in Quarterly assessments with adjustments made following the determination of the actual percentage of contribution for each quarter. The 37.7811905% 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 1998.

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 1999 are apportioned as follows:

	<u>1999</u>	<u>1998</u>		<u>1999</u>	<u>1998</u>
East Orange	4.4445%	4.4581%	Roselle Park	2.8952%	2.9105%
Hillside	7.2503%	5.8234%	South Orange	4.1532%	4.1835%
Irvington	16.8195%	16.8822%	Summit	9.2180%	9.3019%
Maplewood	5.9788%	5.8503%	Union	21.4669%	22.7809%
Millburn	5.8937%	5.9308%	West Orange	11.8123%	11.6964%
Newark	10.0676%	10.1819%	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
1999 Budget**

	Treatment Plant	Dewatering Facility	Drying Facility	Sewer	Total
Electric Service	\$ 1,305,000	\$ 116,000	\$ 29,000	\$ -	\$ 1,450,000
Gas Service	41,960	13,240	67,000	-	122,200
Fuel, Oil & Kerosene	120,800	60,200	-	-	181,000
Water Service	82,000	43,000	-	-	125,000
Chemicals	216,700	652,900	2,000	2,200	873,800
Sludge Disposal	-	1,970,000	-	-	1,970,000
Insurance	260,274	54,631	29,305	5,790	350,000
Administration	1,519,160	50,000	250,000	35,500	1,854,660
Labor	3,277,700	792,500	72,400	8,400	4,151,000
Benefits	1,092,985	205,715	24,200	11,320	1,334,220
Equipment	182,000	78,000	-	60,000	320,000
Printing & Stationery	17,000	4,000	-	1,000	22,000
Maintenance, Supplies & Spare Parts	930,000	332,500	-	176,000	1,438,500
Screening Disposal	130,000	-	-	-	130,000
Reserve Contingency	24,000	-	-	-	24,000
Miscellaneous Expenses	120,000	50,000	-	25,000	195,000
Technical & Professional Services	325,000	70,000	250,000	5,000	650,000
Replacement Fund	850,000	-	-	-	850,000
NJPDES & Miscellaneous Permit Fee	234,000	5,500	258,200	5,500	503,200
	\$ 10,728,579	\$ 4,498,186	\$ 982,105	\$ 335,710	\$ 16,544,580
	64.85%	27.19%	5.94%	2.02%	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	\$ 1,218,934	80%	\$ 975,147	10%	\$ 121,893	10%	\$ 121,894
Power	1,305,000	40%	\$ 522,000	5%	\$ 65,250	55%	\$ 717,750
Chlorine	53,000	40%	\$ 21,200			60%	\$ 31,800
Maintenance, Equipment, Supplies, Spare Parts, & Replacement Fund	1,986,000	28%	\$ 556,080	27%	\$ 536,220	45%	\$ 893,700
Fuel, Oil & Kerosene	120,800	40%	\$ 48,320	30%	\$ 36,240	30%	\$ 36,240
Administration, Labor & Benefits (Payroll Retirement)	5,889,845	40%	2,355,938	10%	\$ 588,985	50%	\$ 2,944,922
Sludge Processing ²	155,000			50%	\$ 77,500	50%	\$ 77,500
Total	\$10,728,579	100%	\$ 4,478,685		\$ 1,426,088		\$ 4,823,806
			41.7453700%		13.2924220%		44.9622080%

(1) General Expenditures
(From the Approved Budget)

(2) Sludge Processing

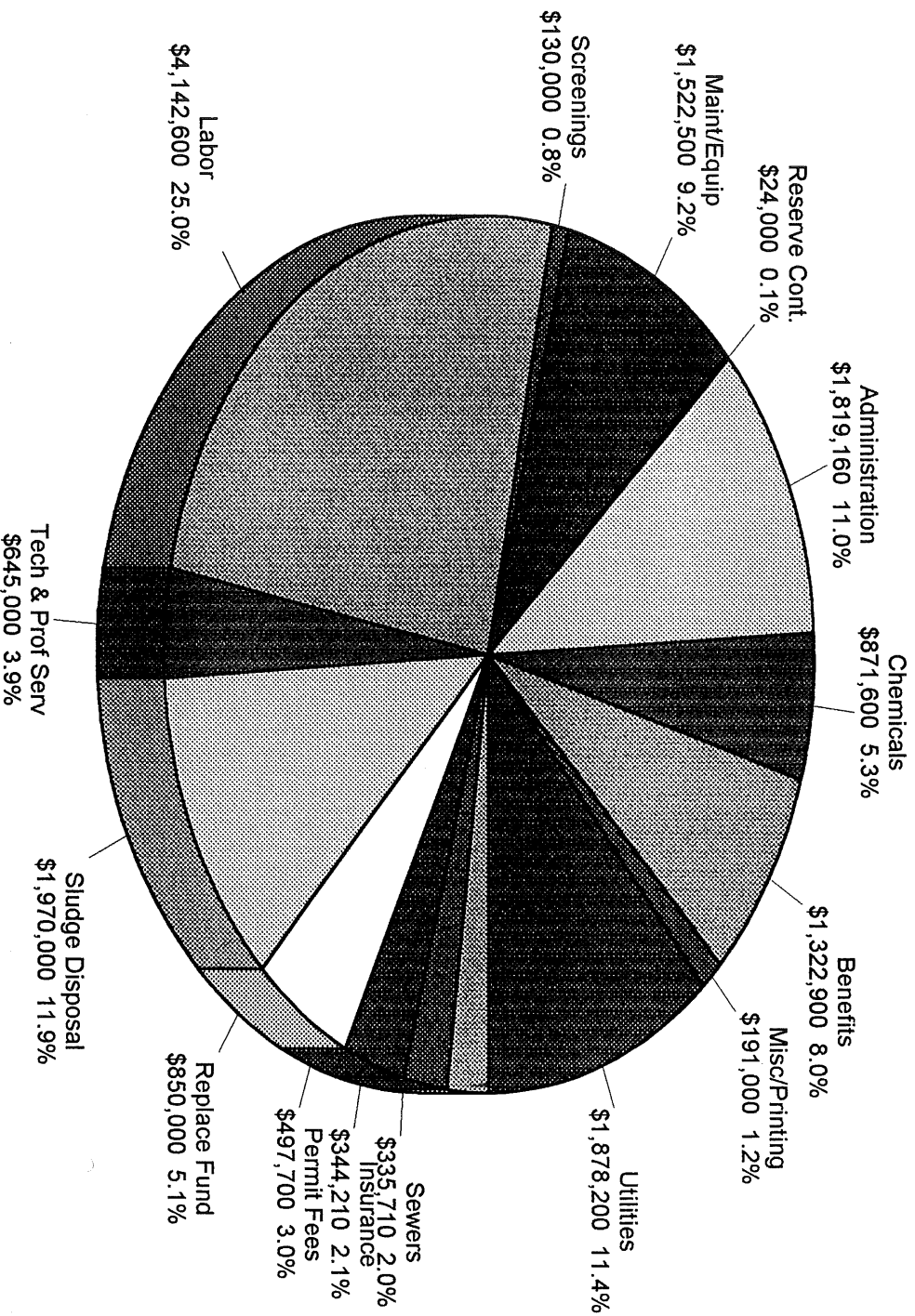
Insurance	\$ 260,274	Polymer	\$ 143,000
Technical & Professional Services	325,000	K2MnO4	12,000
Stationery & Printing	17,000		
Gas	41,960		
Water	82,000		
Miscellaneous	120,000		
Service Contracts	130,000		
Permit Fees	234,000		
Weed Killer, Bug Spray & Deodorant	8,700		
	<u>\$1,218,934</u>		<u>\$ 155,000</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	\$ 10,728,579	\$ 4,478,685	\$ 1,426,088	\$ 4,823,806
Dewatering Facility	4,498,186		2,249,093	2,249,093
Drying Facility	982,105		491,053	491,053
	<u>\$ 16,208,870</u>	<u>\$ 4,478,685</u>	<u>\$ 4,166,234</u>	<u>\$ 7,563,952</u>
Subtotal	100.00%	27.6310748%	25.7034173%	46.6655079%
Sewers ¹	\$ 335,710			
Total	<u>\$ 16,544,580</u>			

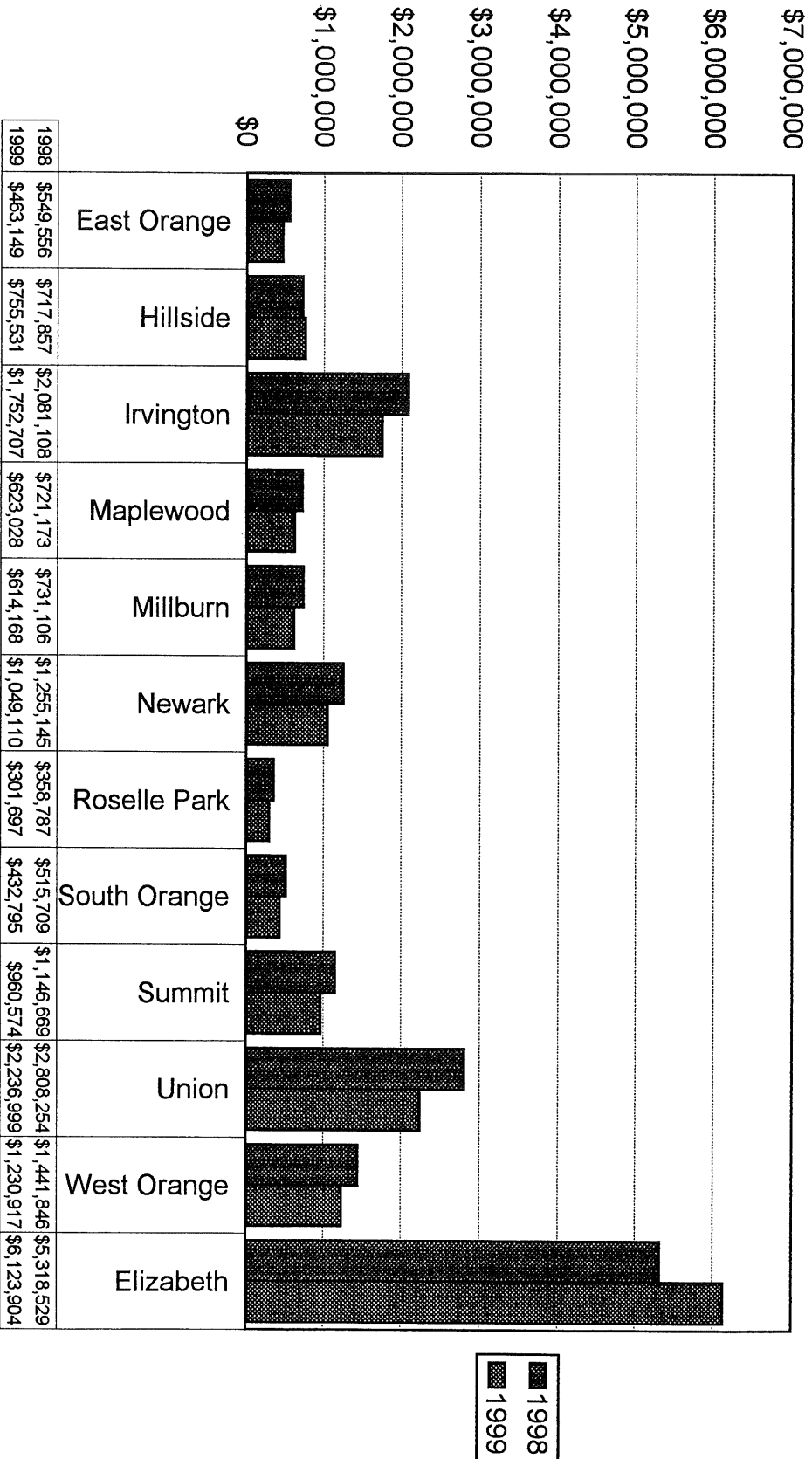
(1) Joint Meeting Members Only

Joint Meeting of Essex & Union Counties 1999 O&M Budget



Joint Meeting of Essex & Union Counties

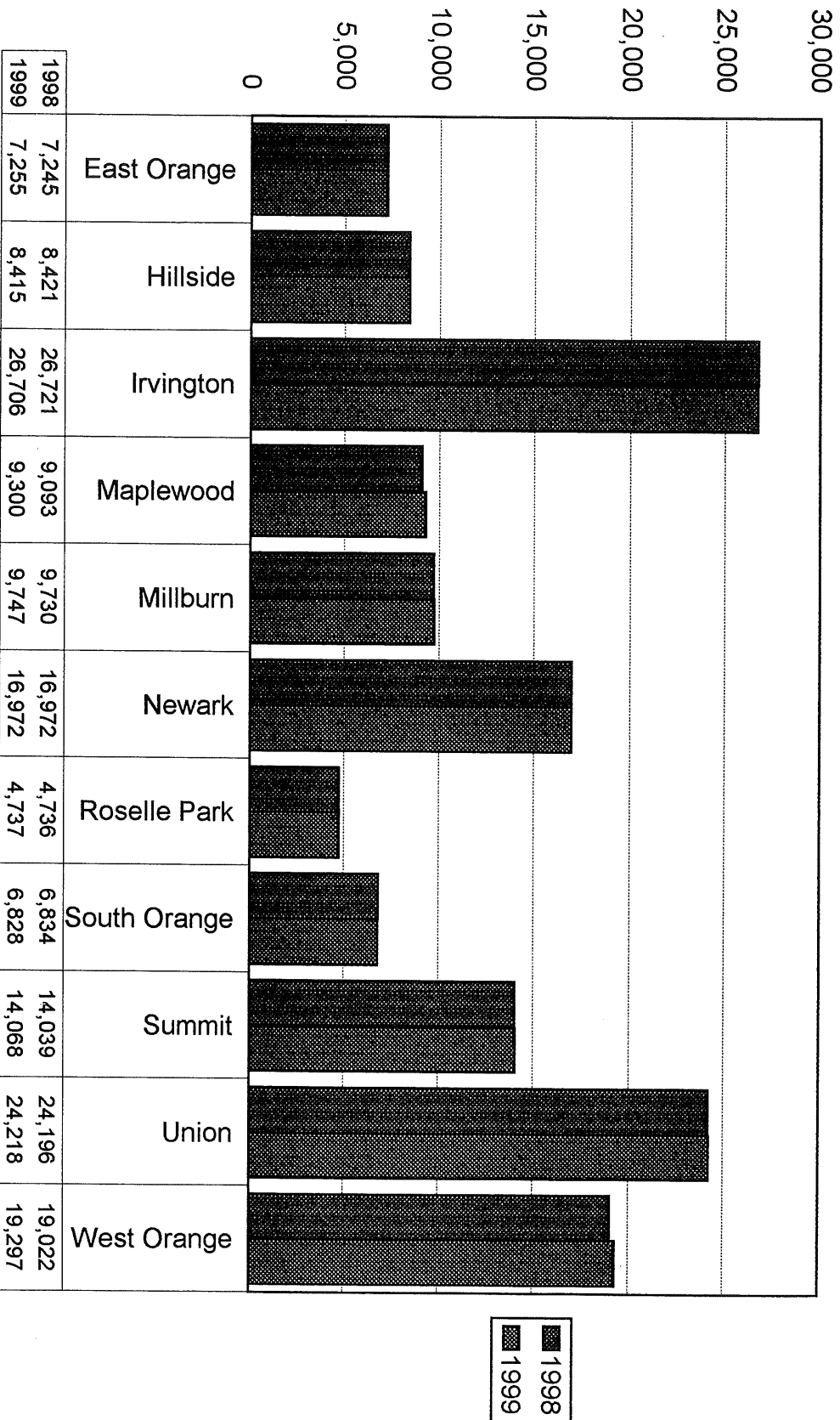
1998 vs 1999 Assessment by Municipality



Municipality

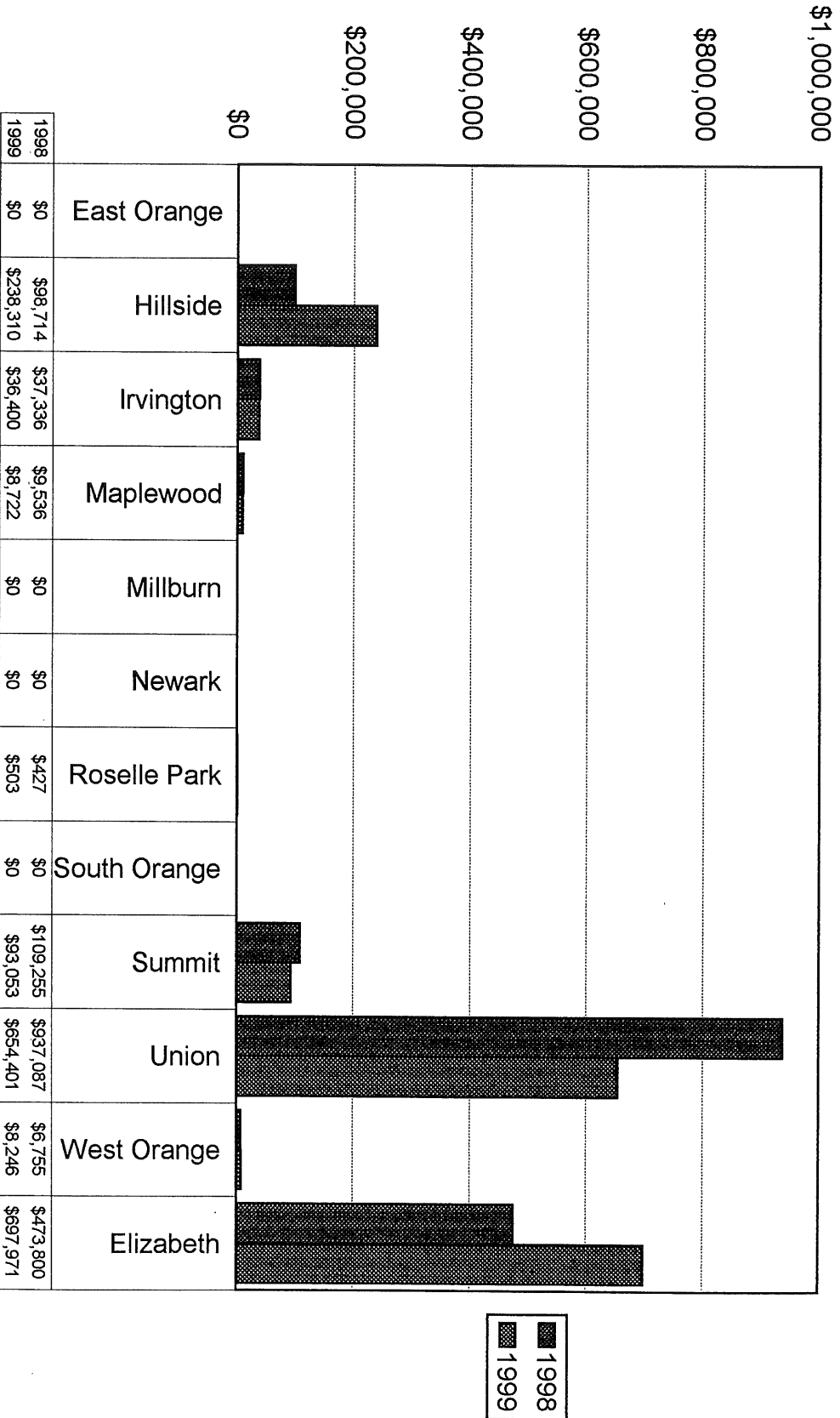
Joint Meeting of Essex & Union Counties

1998 vs 1999 Equivalent Dwelling Units



Joint Meeting of Essex & Union Counties

1998 vs 1999 Industrial User Charges



Joint Meeting of Essex & Union Counties

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Municipality	----- Cost Factors -----		
	Flow per MG	BOD per Ton	TSS per Ton
Elizabeth	182.6418391	481.4665046	315.3869968
Hillside	200.8085310	481.4665046	315.3869968
Irvington	200.8085310	481.4665046	315.3869968
Maplewood	200.8085310	481.4665046	315.3869968
Millburn	200.8085310	481.4665046	315.3869968
Murray Hill	200.8085310	481.4665046	315.3869968
Roselle Park	200.8085310	481.4665046	315.3869968
Summit	200.8085310	481.4665046	315.3869968
Union	200.8085310	481.4665046	315.3869968
West Orange	200.8085310	481.4665046	315.3869968

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User Charge Report

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Municipality: Elizabeth

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
182.6418391	481.4665046	315.3869968

IU #: 0010 Apex Chemical Corporation

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	57.040	35.310	0.1590	0.0378	0.0234	
Totals:			0.1590	0.0378	0.0234	
Cost Analysis:			29.0401	18.1994	7.3801	54.6195

IU #: 0025 Interbake Foods

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
3	1,406.100	509.500	29.0250	170.1863	61.6670	
Totals:			29.0250	170.1863	61.6670	
Cost Analysis:			5,301.1794	81,939.0030	19,448.9699	106,689.1523

IU #: 0030 Concord Beverage

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	4,725.714	73.400	22.0380	434.2859	6.7453	
Totals:			22.0380	434.2859	6.7453	
Cost Analysis:			4,025.0609	209,094.1143	2,127.3799	215,246.5550

IU #: 0037 Deb El Foods Corp

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	954.700	178.700	7.7770	30.9610	5.7953	
Totals:			7.7770	30.9610	5.7953	
Cost Analysis:			1,420.4056	14,906.6844	1,827.7623	18,154.8523

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Municipality: Elizabeth

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
182.6418391	481.4665046	315.3869968

IU #: 0055 Emkay Chemical Company

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	326.222	43.720	0.8810	1.1985	0.1606	
Totals:			0.8810	1.1985	0.1606	
Cost Analysis:			160.9075	577.0376	50.6512	788.5962

IU #: 0058 Exact Anodizing Corp.

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	8.844	139.889	6.0140	0.2218	3.5082	
Totals:			6.0140	0.2218	3.5082	
Cost Analysis:			1,098.4080	106.7893	1,106.4407	2,311.6380

IU #: 0062 Garcia Laundry

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	659.417	246.167	2.1060	5.7910	2.1618	
Totals:			2.1060	5.7910	2.1618	
Cost Analysis:			384.6437	2,788.1725	681.8036	3,854.6199

IU #: 0067 Purepac Pharmaceutical Co.

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	1,613.000	31.000	3.1920	21.4701	0.4126	
99	161.000	134.000	20.6250	13.8470	11.5248	
Totals:			23.8170	35.3171	11.9374	
Cost Analysis:			4,349.9807	17,004.0007	3,764.9007	25,118.8821

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Municipality: Elizabeth

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
182.6418391	481.4665046	315.3869968

IU #: 0078 Magnolia Beef Company

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	2,328.727	338.818	0.3260	3.1657	0.4606	
Totals:			0.3260	3.1657	0.4606	
Cost Analysis:			59.5412	1,524.1785	145.2673	1,728.9870

IU #: 0095 OK Towel & Uniform Supply Co

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
2	406.500	164.200	16.6070	28.1506	11.3710	
Totals:			16.6070	28.1506	11.3710	
Cost Analysis:			3,033.1330	13,553.5710	3,586.2655	20,172.9695

IU #: 0100 Papetti's Hygrade Egg Company

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
4	1,740.538	281.846	20.8080	151.0254	24.4556	
99	161.000	134.000	7.2670	4.8788	4.0607	
Totals:			28.0750	155.9042	28.5163	
Cost Analysis:			5,127.6696	75,062.6502	8,993.6702	89,183.9901

IU #: 0105 Jersey Pride Foods

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
2	3,843.000	911.818	21.0380	337.1405	79.9924	
Totals:			21.0380	337.1405	79.9924	
Cost Analysis:			3,842.4190	162,321.8581	25,228.5628	191,392.8399

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Municipality: Elizabeth

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
182.6418391	481.4665046	315.3869968

IU #: 0120 Phelps Dodge Magnet Wire Co.

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	13.940	15.300	0.8810	0.0512	0.0562	
99	161.000	134.000	0.6030	0.4048	0.3369	
Totals:			1.4840	0.4560	0.3931	
Cost Analysis:			271.0405	219.5487	123.9786	614.5678

IU #: 0148 Superior Powder Coating

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	67.518	25.263	0.8920	0.2511	0.0940	
99	161.000	134.000	0.3460	0.2323	0.1933	
Totals:			1.2380	0.4834	0.2873	
Cost Analysis:			226.1106	232.7409	90.6107	549.4622

IU #: 0155 S & G Packaging

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	66.111	127.818	7.0060	1.9314	3.7342	
2	129.000	135.636	1.5810	0.8505	0.8942	
Totals:			8.5870	2.7819	4.6284	
Cost Analysis:			1,568.3455	1,339.3917	1,459.7372	4,367.4743

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Municipality: Elizabeth

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
182.6418391	481.4665046	315.3869968

IU #: 0165 Wakefern Food Corp.

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
98	503.000	374.000	10.5330	22.0931	16.4271	
Totals:			10.5330	22.0931	16.4271	
Cost Analysis:			1,923.7665	10,637.0876	5,180.8937	17,741.7479

	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
	----	-----	-----	-----
Elizabeth Totals:	179.7050	1,228.1748	234.0752	
Cost Analysis:	32,821.6517	591,325.0280	73,824.2744	697,970.9540

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Municipality: Hillside

----- Cost Factors -----
 Flow per MG BOD per Ton TSS per Ton

 200.8085310 481.4665046 315.3869968

IU #: 1003 Accufleet

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	50.900	17.513	2.7150	0.5763	0.1983	
Totals:			2.7150	0.5763	0.1983	
Cost Analysis:			545.1952	277.4691	62.5412	885.2055

IU #: 1010 Ariston, Inc

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	373.000	453.375	0.0780	0.1213	0.1475	
Totals:			0.0780	0.1213	0.1475	
Cost Analysis:			15.6631	58.4019	46.5196	120.5845

IU #: 1012 Atlantic Metal Products

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	12.680	64.560	5.6820	0.3004	1.5297	
2	8.850	26.840	7.0130	0.2588	0.7849	
99	161.000	134.000	0.7350	0.4935	0.4107	
Totals:			13.4300	1.0527	2.7253	
Cost Analysis:			2,696.8586	506.8398	859.5242	4,063.2225

IU #: 1015 Bristol-Myers Products R&D

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	134.444	183.700	4.8090	2.6961	3.6838	
Totals:			4.8090	2.6961	3.6838	
Cost Analysis:			965.6882	1,298.0818	1,161.8226	3,425.5927

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Municipality: Hillside

----- Cost Factors -----
 Flow per MG BOD per Ton TSS per Ton

 200.8085310 481.4665046 315.3869968

IU #: 1020 Bristol-Myers Products - Pilot

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
5	178.143	128.375	0.1400	0.1040	0.0749	
Totals:			0.1400	0.1040	0.0749	
Cost Analysis:			28.1132	50.0725	23.6225	101.8082

IU #: 1025 Certified Processing

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	1,688.955	22.923	1.8270	12.8675	0.1746	
Totals:			1.8270	12.8675	0.1746	
Cost Analysis:			366.8772	6,195.2702	55.0666	6,617.2140

IU #: 1032 McCain Citrus, Inc.

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
3	7,341.807	335.768	12.6000	385.7532	17.6419	
Totals:			12.6000	385.7532	17.6419	
Cost Analysis:			2,530.1875	185,727.2448	5,564.0259	193,821.4582

IU #: 1035 ECD, Inc.

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
2	4.905	20.836	16.3960	0.3354	1.4246	
99	161.000	134.000	0.3780	0.2538	0.2112	
Totals:			16.7740	0.5892	1.6358	
Cost Analysis:			3,368.3623	283.6801	515.9100	4,167.9524

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Municipality: Hillside

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
200.8085310	481.4665046	315.3869968

IU #: 1037 Fabric Wash

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	564.000	53.667	1.7800	4.1863	0.3983	
Totals:			1.7800	4.1863	0.3983	
Cost Analysis:			357.4392	2,015.5632	125.6186	2,498.6211

IU #: 1045 Parkway Business Center

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	36.714	136.571	1.2500	0.1914	0.7119	
Totals:			1.2500	0.1914	0.7119	
Cost Analysis:			251.0107	92.1527	224.5240	567.6874

IU #: 1050 Manhattan Drug Company, Inc.

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
2	649.778	133.222	0.5160	1.3981	0.2867	
Totals:			0.5160	1.3981	0.2867	
Cost Analysis:			103.6172	673.1383	90.4215	867.1770

IU #: 1054 Oasis Foods Company

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
3	2,391.750	585.000	3.5410	35.3165	8.6381	
99	161.000	134.000	1.0490	0.7043	0.5862	
Totals:			4.5900	36.0208	9.2243	
Cost Analysis:			921.7112	17,342.8087	2,909.2243	21,173.7441

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Municipality: Hillside

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
200.8085310	481.4665046	315.3869968

	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
	----	-----	-----	-----
Hillside Totals:	60.5090	445.5569	36.9033	
Cost Analysis:	12,150.7234	214,520.7232	11,638.8210	238,310.2676

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Municipality: Irvington

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
200.8085310	481.4665046	315.3869968

IU #: 2008 Archon Vitamin Corporation

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
2	107.750	49.000	0.2730	0.1227	0.0558	
3	679.833	354.500	0.2730	0.7739	0.4036	
Totals:			0.5460	0.8966	0.4594	
Cost Analysis:			109.6415	431.6829	144.8888	686.2131

IU #: 2027 Golden Glow Cleaners

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	114.143	61.333	1.9090	0.9086	0.4882	
Totals:			1.9090	0.9086	0.4882	
Cost Analysis:			383.3435	437.4605	153.9719	974.7759

IU #: 2035 Industrial Retaining Ring

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
2	118.917	248.833	1.3540	0.6714	1.4050	
Totals:			1.3540	0.6714	1.4050	
Cost Analysis:			271.8948	323.2566	443.1187	1,038.2701

IU #: 2036 Intergel

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	531.571	79.500	2.4780	5.4929	0.8215	
Totals:			2.4780	5.4929	0.8215	
Cost Analysis:			497.6035	2,644.6474	259.0904	3,401.3413

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Municipality: Irvington

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
200.8085310	481.4665046	315.3869968

IU #: 2040 Jabel, Incorporated

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	184.200	82.700	0.8520	0.6544	0.2938	
Totals:			0.8520	0.6544	0.2938	
Cost Analysis:			171.0889	315.0717	92.6607	578.8212

IU #: 2050 Max Marx Color Corporation

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
2	167.636	121.636	9.5190	6.6542	4.8283	
Totals:			9.5190	6.6542	4.8283	
Cost Analysis:			1,911.4964	3,203.7744	1,522.7830	6,638.0539

IU #: 2055 Revlon, Incorporated

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
4	138.240	345.000	1.4280	0.8232	2.0544	
99	161.000	134.000	3.7860	2.5418	2.1155	
Totals:			5.2140	3.3650	4.1699	
Cost Analysis:			1,047.0157	1,620.1348	1,315.1322	3,982.2827

IU #: 2057 Sal's Cleaners

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	347.438	51.125	2.7670	4.0089	0.5899	
Totals:			2.7670	4.0089	0.5899	
Cost Analysis:			555.6372	1,930.1511	186.0468	2,671.8351

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Municipality: Irvington

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
200.8085310	481.4665046	315.3869968

IU #: 2060 Standard Uniform Service

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	446.700	188.600	12.2080	22.7403	9.6011	
Totals:			12.2080	22.7403	9.6011	
Cost Analysis:			2,451.4705	10,948.6928	3,028.0621	16,428.2254

	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
	----	-----	-----	-----
Irvington Totals:	36.8470	45.3923	22.6571	
Cost Analysis:	7,399.1919	21,854.8720	7,145.7547	36,399.8187

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Municipality: Maplewood

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
200.8085310	481.4665046	315.3869968

IU #: 3020 Gleason Cleaners

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	349.167	128.083	1.2660	1.8433	0.6762	
Totals:			1.2660	1.8433	0.6762	
Cost Analysis:			254.2236	887.4872	213.2647	1,354.9755

IU #: 3033 NJ Transit Bus Terminal

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
99	161.000	134.000	10.4470	7.0138	5.8376	
Totals:			10.4470	7.0138	5.8376	
Cost Analysis:			2,097.8467	3,376.9098	1,841.1031	7,315.8596

IU #: 3045 Carlton Chain Company

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
2	25.970	19.800	0.1850	0.0200	0.0153	
Totals:			0.1850	0.0200	0.0153	
Cost Analysis:			37.1496	9.6293	4.8254	51.6043

	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
	-----	-----	-----	-----
Maplewood Totals:	11.8980	8.8771	6.5291	
Cost Analysis:	2,389.2199	4,274.0263	2,059.1932	8,722.4395

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Municipality: Murray Hill

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
200.8085310	481.4665046	315.3869968

IU #: 5010 Lucent Technologies

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	15.364	20.750	78.7290	5.0439	6.8122	
Totals:			78.7290	5.0439	6.8122	
Cost Analysis:			15,809.4548	2,428.4689	2,148.4793	20,386.4030

IU #: 5020 Fablok Mills, Incorporated

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	214.500	127.400	9.9550	8.9044	5.2887	
Totals:			9.9550	8.9044	5.2887	
Cost Analysis:			1,999.0489	4,287.1703	1,667.9872	7,954.2065

IU #: 5021 FRC-Electrical Industries

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	25.330	37.580	11.8590	1.2526	1.8584	
Totals:			11.8590	1.2526	1.8584	
Cost Analysis:			2,381.3884	603.0849	586.1152	3,570.5885

	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
Murray Hill Totals:	100.5430	15.2009	13.9593	
Cost Analysis:	20,189.8921	7,318.7242	4,402.5817	31,911.1980

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Municipality: Roselle Park

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
200.8085310	481.4665046	315.3869968

IU #: 6005 Hexacon Electric Company

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	7.556	37.700	1.4230	0.0448	0.2237	
99	161.000	134.000	0.1780	0.1195	0.0995	
Totals:			1.6010	0.1643	0.3232	
Cost Analysis:			321.4945	79.1049	101.9331	502.5325

	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
	----	-----	-----	-----
Roselle Park Totals:	1.6010	0.1643	0.3232	
Cost Analysis:	321.4945	79.1049	101.9331	502.5325

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Municipality: Summit

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
200.8085310	481.4665046	315.3869968

IU #: 5505 Ticona (formerly Celanese)

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	87.500	121.350	18.1190	6.6112	9.1687	
Totals:			18.1190	6.6112	9.1687	
Cost Analysis:			3,638.4498	3,183.0714	2,891.6888	9,713.2099

IU #: 5510 Novartis Pharmaceuticals Corp

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
3a	24.184	26.032	144.1650	14.5388	15.6494	
99	161.000	134.000	15.0560	10.1081	8.4130	
Totals:			159.2210	24.6469	24.0624	
Cost Analysis:			31,972.9351	11,866.6568	7,588.9681	51,428.5600

	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
	----	-----	-----	-----
Summit Totals:	177.3400	31.2581	33.2311	
Cost Analysis:	35,611.3849	15,049.7281	10,480.6568	61,141.7699

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Municipality: Union

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
200.8085310	481.4665046	315.3869968

IU #: 7015 ACuPowder International

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
3a	83.727	103.333	0.2690	0.0939	0.1159	
4a	84.250	84.273	2.2140	0.7778	0.7780	
Totals:			2.4830	0.8717	0.8939	
Cost Analysis:			498.6076	419.6944	281.9244	1,200.2264

IU #: 7025 Allied Processing Corp.

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	6.282	2.900	0.4940	0.0129	0.0060	
Totals:			0.4940	0.0129	0.0060	
Cost Analysis:			99.1994	6.2109	1.8923	107.3027

IU #: 7035 American Products Company

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	345.714	426.857	1.4810	2.1351	2.6362	
Totals:			1.4810	2.1351	2.6362	
Cost Analysis:			297.3974	1,027.9791	831.4232	2,156.7998

IU #: 7045 TransTechnology / Breeze

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	140.111	110.111	1.0270	0.6000	0.4716	
Totals:			1.0270	0.6000	0.4716	
Cost Analysis:			206.2304	288.8799	148.7365	643.8468

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Municipality: Union

----- Cost Factors -----
 Flow per MG BOD per Ton TSS per Ton

 200.8085310 481.4665046 315.3869968

IU #: 7060 National Envelope Corp. East

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	674.300	494.250	2.1310	5.9920	4.3920	
Totals:			2.1310	5.9920	4.3920	
Cost Analysis:			427.9230	2,884.9473	1,385.1797	4,698.0500

IU #: 7065 Culligan Water Conditioning

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	6.364	17.600	3.9480	0.1048	0.2898	
Totals:			3.9480	0.1048	0.2898	
Cost Analysis:			792.7921	50.4577	91.3992	934.6489

IU #: 7070 Durex, Incorporated

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
1	50.700	92.000	18.8590	3.9872	7.2351	
Totals:			18.8590	3.9872	7.2351	
Cost Analysis:			3,787.0481	1,919.7032	2,281.8565	7,988.6078

IU #: 7080 Foremost Manufacturing Co.

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
2	14.271	383.286	19.5040	1.1607	31.1733	
Totals:			19.5040	1.1607	31.1733	
Cost Analysis:			3,916.5696	558.8382	9,831.6535	14,307.0612

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Municipality: Union

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
200.8085310	481.4665046	315.3869968

IU #: 7092 Interlux/Courtauld Coating

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
2	161.778	155.444	3.7660	2.5406	2.4411	
Totals:			3.7660	2.5406	2.4411	
Cost Analysis:			756.2449	1,223.2138	769.8912	2,749.3499

IU #: 7105 Stonco Lighting

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
2	81.700	148.300	2.9480	1.0044	1.8231	
Totals:			2.9480	1.0044	1.8231	
Cost Analysis:			591.9835	483.5850	574.9820	1,650.5505

IU #: 7110 NEI/DoAll

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	58.400	7.500	1.9130	0.4659	0.0598	
99	161.000	134.000	0.2060	0.1383	0.1151	
Totals:			2.1190	0.6042	0.1749	
Cost Analysis:			425.5133	290.9021	55.1612	771.5765

IU #: 7145 Schering Corporation

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
5	83.194	54.667	176.3790	61.1895	40.2074	
Totals:			176.3790	61.1895	40.2074	
Cost Analysis:			35,418.4079	29,460.6947	12,680.8911	77,559.9937

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Municipality: Union

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
200.8085310	481.4665046	315.3869968

IU #: 7150 SS Studios, Incorporated

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	450.222	101.111	0.2250	0.4224	0.0949	
Totals:			0.2250	0.4224	0.0949	
Cost Analysis:			45.1819	203.3715	29.9302	278.4836

IU #: 7167 Turbo Braze Corporation

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	266.250	74.250	1.5300	1.6987	0.4737	
Totals:			1.5300	1.6987	0.4737	
Cost Analysis:			307.2371	817.8672	149.3988	1,274.5030

IU #: 7170 Tuscan Dairy Farms, Incorp

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
2a	1,695.233	982.677	102.4710	724.3801	419.9021	
2b	888.615	410.000	14.3840	53.3003	24.5923	
Totals:			116.8550	777.6804	444.4944	
Cost Analysis:			23,465.4809	374,427.0639	140,187.7539	538,080.2987

	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
	-----	-----	-----	-----
Union Totals:	353.7490	860.0046	536.8074	
Cost Analysis:	71,035.8170	414,063.4087	169,302.0737	654,401.2995

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Municipality: West Orange

----- Cost Factors -----		
Flow per MG	BOD per Ton	TSS per Ton
-----	-----	-----
200.8085310	481.4665046	315.3869968

IU #: 8030 Organon, Incorporated

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	63.700	27.100	21.3670	5.6757	2.4146	
Totals:			21.3670	5.6757	2.4146	
Cost Analysis:			4,290.6759	2,732.6594	761.5334	7,784.8688

IU #: 8040 Turtle Back Zoo

Site	BOD (mg/L)	TSS (mg/L)	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
----	-----	-----	-----	-----	-----	-----
1	7.271	11.271	2.0020	0.0607	0.0941	
Totals:			2.0020	0.0607	0.0941	
Cost Analysis:			402.0187	29.2250	29.6779	460.9216

	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
	----	-----	-----	-----
West Orange Totals:	23.3690	5.7364	2.5087	
Cost Analysis:	4,692.6946	2,761.8845	791.2114	8,245.7904

	Flow (MG)	BOD (Tons)	TSS (Tons)	Annual Payment
	----	-----	-----	-----
Grand Totals:	945.5610	2,640.3654	886.9944	
Cost Analysis:	186,612.0700	1,271,247.5000	279,746.5000	1,737,606.0700