

May 31, 1995

Introduced By: Larry Phillips

Proposed No.: 95-360

ORDINANCE NO. **11837**

AN ORDINANCE determining the monetary requirements for the sewer program for the fiscal year beginning January 1, 1996 and ending December 31, 1996; and setting the sewer rates for the fiscal year beginning January 1, 1996 and ending December 31, 1996.

BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

SECTION 1. MONETARY REQUIREMENTS FOR THE DISPOSAL OF SEWAGE; ESTABLISHMENT OF THE SEWER RATE FOR THE FISCAL YEAR BEGINNING JANUARY 1, 1996 AND ENDING DECEMBER 31, 1996. The council hereby determines the monetary requirements for the sewer program as follows:

Administration, operating, maintenance repair and replacement (net of other income):

\$61,040,000

Establishment of maintenance of necessary working capital reserves:

(\$100,388)

Requirements of revenue bond resolutions (not included in above items and net of interest income):

\$90,670,000

TOTAL: \$151,609,612

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Having determined the monetary requirements of the sewer program, the council also hereby adopts a 1996 sewer rate of \$19.10. Prior to July 1, 1995, a copy of this ordinance shall be delivered to each component agency having an agreement for sewage disposal with King County component agencies.

INTRODUCED AND READ for the first time this 22nd day of May, 1995.

PASSED by a vote of 13 to 0 on this 26th day of June, 1995.

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON

Kent Pullen
Chair

ATTEST:

Gerald A. Peterson
Clerk of the Council

APPROVED this 28th day of June, 1995.

Doug Loch
King County Executive

Attachments: Water Quality Fund: 1995-2000 Financial Forecast
Response to Regional Water Quality Advisory Committee (RWQAC) request for financial policy clarification

Pricing Policy

The customers of the Metro sewer system shall pay their pro rata share of the cost of the system which serves them. To implement this policy:

1. Based on an analysis of residential consumption patterns, Metro currently uses a value of 750 cubic feet per month to convert water consumption of volume-based customers to residential customer equivalents for billing purposes. Metro will periodically review the appropriateness of this value to ensure that all accounts pay their fair share of the cost of the sewer system.
2. A capacity charge is levied against new connections, reconnections, or establishment of a new service. This charge is to pay for the capital cost of excess capacity that has already been built to serve future customers. The charge is currently set at the maximum amount permitted by state law.

Use of Funds Not Directly Related to Sanitary Sewerage Function

In 1988, the Culver subcommittee of the Metro Council found that: "The current level of water pollution abatement activities not directly related to the sanitary sewerage function (*approximately 3.0 percent of the operating budget*) is a reasonable base level for the future. Inasmuch as substantial rate increases will be required to support the capital facilities necessary for the sanitary sewerage function, it is anticipated that this level should not exceed 3.5 percent of the operating budget and not more than 2.5 percent of the total rate. This would be a reasonable level between now (1988) and 1995 at the completion of the Secondary/CSO Program. These increases would be considered as a function of the annual budget process requiring Council approval."

Consistent with the subcommittee's recommendations, Metro is reviewing the direction of the programs considered to fall under the umbrella of the Culver Report. The current focus is on each individual program rather than the percentage of the budget. Working with key stakeholders, the Executive and the Council, Metro will recommend new policies and guidelines for these programs at the end of the year in the context of the Regional Wastewater Services Plan.



King County
Department of Metropolitan Services

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Water Quality Fund

1995-2000

Financial Forecast



WATER QUALITY FUND 1995-2000 FINANCIAL FORECAST

Department of Metropolitan Services, King County

INTRODUCTION

This document presents a multi-year financial plan and cash flow forecast for the period from 1995 through 2000 as required by the Water Quality Program Financial Policies. It is intended that this Forecast will be reviewed and adopted by the Metropolitan King County Council (the Council) and used as the basis for policy decisions including the setting of the 1996 sewer rate and the preparation of the annual budget.

An initial draft of this Financial Forecast was circulated for review to members of the Metropolitan Water Pollution Abatement Advisory Committee (MWPAAC) and the Citizens' Water Quality Advisory Committee (CWQAC). The 1996 sewer rate proposal incorporates a number of the recommendations made by these committees.

POLICY REVIEW

The current Water Quality Program Financial Policies that govern key elements of this Forecast are presented in Appendix B of this document. No substantive revisions to these policies are proposed within this Forecast pending the outcome of the Regional Wastewater Services Plan (RWSP) policy review process later this year. In response to a request from the Regional Water Quality Advisory Committee (RWQAC), however, a clarification of certain existing Financial Policies is being presented for review under separate cover.

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Submitted by:

Gary Locke King County Executive

Prepared by the Department of Metropolitan Services:

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EXECUTIVE SUMMARY

Overview of Forecast

During the first two years of this forecast period, the start-up of Secondary Treatment at West Point is expected to put significant upward pressure on operating expenses which in turn contribute to large increases in sewer rates. Accordingly, a high near-term priority for management is to control overall costs in other areas of the program that will help offset some of this pressure on rates. Some of this pressure is expected to be relieved through savings made possible by the merger of Metro into King County. Although many consolidation issues remain unresolved, this Forecast does include a \$200,000 targeted level of merger-related savings for 1996.

Beyond 1996, however, operating expenses are forecast to simply keep pace with the inflation in resource costs as continuing consolidation savings and other productivity improvements offset growth in service levels.

Management's longer-term focus within this planning horizon is to select a preferred system configuration that will provide the additional capacity needed to meet projected growth in the next century and comply with regulatory mandates with regard to environmental standards. The selected configuration will determine needed capital expenditures beyond 1998 when most of the projects that comprise the current Comprehensive Plan are expected to be completed. Although the RWSP is not expected to finalize a recommendation for review until later in 1995, the capital expenditures presented in this Forecast for the period 1998-2000 do include estimated costs for certain projects that are key components of most of the configurations that have been identified. These include a Henderson Street CSO Control Project, an expansion of solids handling capacity at West Point, and the paralleling of the Eastside Interceptor.

1996 Sewer Rate Proposal

During the process of setting the 1995 sewer rate in June 1994, the Council established a ceiling for the 1996 rate of \$20.30, an increase of 13.1% above the current 1995 level of \$17.95. As a key element of this Forecast, Metro is now proposing that the Council adopt a significantly lower monthly sewer rate of \$19.10 for 1996 which represents an increase of just 6.4%.

There are two major drivers behind the proposed \$1.15 increase from the 1995 rate. First, a sharp increase in operating expenses over and above normal inflation is required for West Point to achieve full secondary treatment in 1996. Second, Metro anticipates the need for a continuing high level of capital expenditures. The increase in operating costs

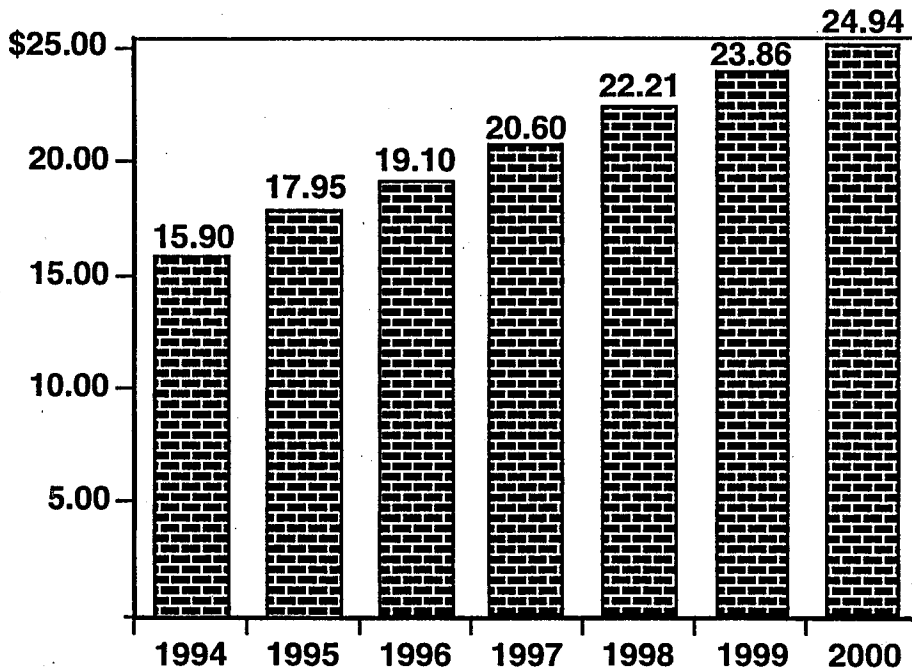
expenses (net of other operating income) accounts for 92 cents of the increase -- with 73 cents due to the West Point ramp-up alone. The financing requirements for the capital program push the rate up by another 49 cents. Offsetting these upward pressures, the projected rise in the customer base from the level that supported the 1995 rate request diminishes the needed increase by 26 cents.

1996 Proposed Sewer Rate Increase: Contributing Factors

1995 Adopted Rate	\$17.95	
Increase in RCEs (Customer Revenues)	(\$0.26)	
Operating Program	\$0.92	
Increase in Essential Requirements		\$0.37
Increase for Secondary Treatment		\$0.73
Other Recommended Requirements		(\$0.14)
Increase in Other Income		(\$0.04)
Capital Program Financing	\$0.49	
Increase in Interest Income		(\$0.06)
Increase in Debt Service (incl. Coverage)		\$0.55
1996 Proposed Rate	<u>\$19.10</u>	

The projected sewer rates for the full Forecast period are shown in the chart below. It shows that rates are expected to climb at an average annual rate of 6.9% between 1996 and 2000 to approximately \$25. The need for future increases that exceed projected inflation by more than 3% annually is driven by the continuing high levels of capital expenditures that are anticipated during this timeframe.

SEWER RATES
Actual and Forecast
1994 - 2000



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PLANNING ASSUMPTIONS: ECONOMIC, REVENUE, & FINANCIAL

Inflation

Several factors, including the recent vitality of the U.S. economy, higher commodity prices, and the continuing freefall of the US dollar, combine to suggest that the near-term outlook for inflation has deteriorated. The 1995-2000 Forecast is therefore based on an assumed acceleration in inflation as measured by the CPI to an annual rate of 3.5% in both 1995 and 1996 from the 2.7% rate seen in 1994. The assumption of a 3.5% inflation rate is also maintained for the full Forecast period beyond 1996.

These inflation projections replace the 2.8% assumption that was assumed in the cash flow for the entire period from 1995 to 2000 presented in the 1995 Budget.

Residential Customers and Residential Customer Equivalents (RCEs)

Metro bases its billings for sewer services to Component Agencies on the number of single-family households (residential customers) and on the water consumption of other users such as factories, offices, and apartment complexes (RCEs). Specifically, the billings for non single-family households are based on a four-quarter average of their water consumption and the single family household rate is levied for each 750 cubic feet of usage. Each such 750 cubic feet unit of water consumption therefore comprises one RCE.

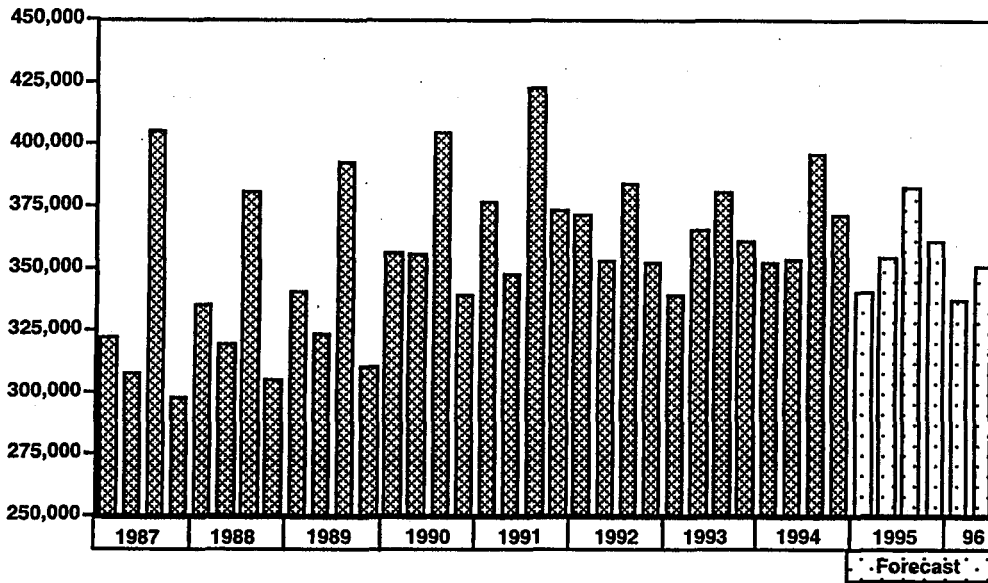
While the number of residential customers typically exhibits steady growth, Metro's RCEs actually declined quite markedly during the period 1991-1993 (see chart). Although it is difficult to quantify the importance of each factor, this decline in RCEs was considered to be attributable to a combination of drought conditions, reduced activity levels at many local companies -- especially those that are relatively heavy water users -- and the continuing introduction of cost-saving water conservation devices.

Another factor that may have contributed to the decline was a change made in Metro's billing methodology in 1993 that effectively shifted more of the system costs to these large users from households (the previous 900 cubic feet standard used for residential equivalency was revised to the current 750 cubic feet standard described above).

Although the data on water consumption for the last two quarters of 1994 have indicated a rebound in water consumption, it seems likely that much of this strength was simply due to favorable weather conditions. The downward trend in RCEs is therefore expected to reappear over the next few years, especially given that local economic conditions are likely to remain fragile and users will continue to modify their operations in response to higher water and sewer bills. The Forecast therefore assumes that RCEs will decline at an annual rate of 1% through 1996 (see chart). The information received to date for the first quarter of 1995 support this assumption.

METRO RCE'S Actual and Forecast

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This anticipated decline in RCEs will be largely offset by continuing growth in the number of residential customers in the Metro service area. Specifically, the Forecast assumes that the number of suburban residential customers will grow by 1% in these early years.

Furthermore, because the assumed decline will be applied to the higher-than-expected base RCE data for the last two quarters, the projected total residential customers and RCEs for both 1995 and 1996 are higher than those shown in the 1995 Budget. Specifically, the Forecast projects total residential customers and RCEs of 666,700 and 662,300 for 1995 and 1996 respectively. This compares to the estimate of 653,300 that was used for both of these years in the 1995 Budget.

Beyond 1996, Metro's total residential customers and RCEs are expected to remain flat in 1997 and then to grow by 1.5% annually over the period 1998-2000 as local economic conditions start to improve and increases in sewer bills moderate.

Capacity Charge

The law that authorizes Metro to levy a capacity charge permits an increase in the current maximum rate from \$7.00 per month to \$10.50 per month for all new hookups after January 1, 1996. Metro expects to bring a motion to Council in the Fall seeking adoption of this higher rate. Per state law, this \$10.50 rate is assumed to prevail through 2000.

Capital Grants

No additional capital grants beyond those already identified in the 1995 Budget are anticipated during the Forecast period.

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Financing Strategy

The Forecast projects the need to issue \$47 million of bonds during the second quarter of 1996 in order to provide funding for the Water Quality Capital Program. It is assumed that such debt will again be issued in the form of double-backed King County General Obligation (G.O.) bonds. The use of G.O. bonds reduces the sewer rate since the interest costs are 20 basis points lower than those on the traditional Metro sewer revenue bonds and there is no requirement to contribute money to a reserve fund.

Given that King County's G.O. debt capacity is finite, however, the financial plan assumes resumed reliance on Metro's traditional sewer revenue bonds beyond 1996. The choice between these two instruments represents a critical policy decision that will be revisited annually on the basis of the competing demands for use of such debt capacity.

In order to reduce the Agency's exposure to interest rate movements, Metro plans to establish a \$65 million Commercial Paper (CP) program during 1995 to provide a "semi-permanent" funding base for a portion of the capital program. This CP program is initially expected to remain in place through 1998. Thereafter, the Forecast assumes that the program will be extended for another three years and increased in size commensurate with management's goal of maintaining such semi-permanent short-term funding equal to approximately 5% of outstanding long-term debt. This target is lower than the 10% limit identified in the Water Quality Financial Policies because management considers it prudent to reserve some unused short-term borrowing capacity as a safeguard to cover any unforeseen funding shortfalls.

Interest Rates

Consistent with the likely acceleration in inflation identified earlier, interest rates are projected to rise steadily during 1995. The interest cost of Metro's long-term debt is assumed to increase from the 6.22% rate for the 1995 issue that was sold on May 8th to 6.80% in 1996. Beyond 1996, the interest cost for Metro's sewer revenue bond issues is assumed to be 7.00%.

The cost of Commercial Paper program is projected to be 5.50% (inclusive of remarketing and liquidity support fees) while the yield on short-term investments is assumed to average 6.00%.

PLANNING ASSUMPTIONS: EXPENSES**Format**

The 1996 operating expense projection presented in the Forecast identifies two different levels of decisions:

A. The **Essential Requirements** represent the cost of maintaining the service levels from the 1995 Budget. Beyond adjustments for inflation and other price changes, any partial-year costs are annualized while one-time expenses included in the 1995 Budget are eliminated.

B. The **Recommended Requirements** represent substantive changes from the 1995 Budget. This category includes the effect of policy decisions, service adjustments, prudent business decisions, costs associated with new capital facilities, and new legal mandates.

Treatment of King County-Metro Consolidation

Due to the contractual requirement with the Component Agencies to set a 1996 Water Quality sewer rate by June 30, 1995, this Forecast is being developed prior to the outcome of many important decisions regarding key consolidation issues that will impact 1996 operating costs. These include the number of employees, compensation, benefit packages, and general government overhead. Because of this timing, the essential requirements presented in this document are based on the assumption that the status quo will be maintained, and one adjustment is included in the Recommended Requirements to represent the savings expected to be generated by the consolidation, including the targeted staff reductions in 1995.

Inflation

Consistent with the earlier discussion, the Forecast is based on an assumed acceleration in inflation as measured by the CPI-W to an annual rate of 3.5% from the 2.7% rate seen in 1994. This inflation rate is used as the basis for COLA pay adjustments and for adjusting the costs of all non-salary ("target") items in the 1995 Budget that do not warrant separate price projections. Furthermore, the recent relative strength exhibited by the Seattle CPI-W, which is used as the basis for COLA adjustments under certain union contracts, is not assumed to continue.

Salaries

Under current Metro pay practices, COLA increases are calculated as 80% of appropriate year-over-year inflation measures. The Forecast also assumes that normal merit and longevity increases will be granted to non-represented employees in November 1995. Without consideration of the maximum wage for a job class, it is assumed that these merit and longevity increases will average 3.38%. However, when wages are limited to the maximum for a job class, the average increase for non-represented employees is actually estimated to be only 2.0%.

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Medical Benefits

Mounting evidence suggests that the rapid rise in employer healthcare benefit costs experienced during the late-1980s and early-1990s has now largely run its course. For planning purposes, there no longer seems to be any persuasive rationale for expecting that medical benefit costs will continue to outpace general inflation. The Forecast embodies this assumption.

General Government Overhead

The estimate for general government overhead for the period 1996 through 2000 is unchanged from that included in the 1995 Budget except for an adjustment to reflect the higher inflation projections.

Electricity

Projections of future electricity rates for 1995 and 1996 were based on information obtained from Seattle City Light and Puget Power. For those schedules that are applicable to Metro's operations, the 1996 projected increases for City Light range from 4.4% to 6.6% and those for Puget Power range from 6.5% to 8.2%. Beyond 1996, the rate of increase of electricity prices is assumed to exceed that of the CPI by 75 basis points (three-quarters of one percent).

Chemicals

Chemicals are typically purchased at fixed prices under long-term contracts. Information regarding projected price changes for any new contracts expected to commence during 1996 was obtained from discussions with manufacturers and suppliers.

Service Growth

An important driver for the Essential Requirements is the growth in the volumes handled by the treatment plants since this directly influences expenditures for many items, including most importantly chemicals, electricity, and biosolids recycling. For the 1996 Forecast, growth rates of 1.0% and 1.5% are assumed for the West Point Treatment Plant and the East Division Reclamation Plant at Renton respectively. These are consistent with recent experience.

WATER QUALITY PROGRAM SUMMARY

(\$s in Thousands)

	1994 Actual	1995 Projected	1996 Proposed
Revenues:			
Customers (000s)	659.10	666.70	662.30
Monthly Rate	\$15.90	\$17.95	\$19.10
Customer Charges	\$125,365	\$143,607	\$151,799
Other Operating Income:			
Capacity Charge	2,623	2,750	3,000
City of Seattle CC Charge		787	656
Hazardous Waste Fees	2,360	2,610	2,700
Industrial Surcharge Fees	2,146	2,244	2,400
Septic Tank Disposal Fees	1,996	1,700	2,000
Sale of By-Products	609	605	541
Contracts & Grants	515	940	985
Misc. Operating Income	<u>536</u>	<u>442</u>	<u>325</u>
Subtotal	10,785	12,078	12,607
Interest Income	10,300	10,738	8,355
Capital Funds:			
Capital Grants & Loans	28,891	39,758	39,540
Proceeds from Bond Sales	170,000	90,000	47,000
Short-Term Borrowing		65,000	65,000
Other Capital Revenues	64	1,395	1,301
TOTAL PROGRAM REVENUE	<u>\$345,405</u>	<u>\$362,576</u>	<u>\$325,602</u>
Expenditures:			
Operating Expense	55,474	66,167	73,647
Capital Expenditures	159,768	196,211	156,206
Debt Service -- Bonds	69,751	75,171	79,220
Other Financing Costs	5,150	53,000	73,728
TOTAL EXPENDITURES	<u>\$290,143</u>	<u>\$390,549</u>	<u>\$382,801</u>
Reserves & Adjustments	(1,426)	(218)	(535)
BALANCE FORWARD	\$37,018	\$90,854	\$62,663
BALANCE END OF YEAR	\$90,854	\$62,663	\$4,929
DEBT SERVICE COVERAGE	1.30	1.33	1.25

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WATER QUALITY OPERATING FUND 1996 Projected Operating Expense Cross-Walk

	<u>Expense</u>
K.C. Adopted 1995 Budget	\$66,082,952
Proposed Budget Amendments	83,796
K.C. Corrected 1995 Budget	\$66,166,748
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1996 Essential Requirements	\$69,072,381
<u>Recommended Requirements:</u>	
1. Secondary Treatment	5,700,000
2. Puget Power grant	(375,000)
3. Renegotiated Biosolids Haul contract	(175,000)
4. Reduction in Contract Workers	(165,000)
5. Mountains-to-Sound Greenway	(75,000)
6. Gainsharing savings	(73,000)
7. Water Reuse (net)	(40,000)
8. IBIS savings	(22,000)
9. Consolidation savings	(200,000)
1996 Recommended Operating Requirements	<u>\$73,647,381</u>

Policy Comments

1. Secondary Treatment

This represents the annualization of the costs needed for the first full-year of mandated secondary treatment at the West Point Treatment Plant. The \$5.7 million total is comprised of the estimated additional operating expenditures needed for electricity, chemicals, and biosolids recycling as well as some major maintenance materials as much of the new equipment comes off warranty. It does not, however, include any additional staffing costs. While the New Facility Staffing Plan projected that employment at the plants would increase to a peak of 321 in 1996, management now considers it possible to move more quickly to achieve the steady-state target of 302 FTEs. This decision to limit staffing has reduced projected 1996 operating expenses by approximately \$1 million from that shown in the 1995 Budget.

2. Puget Power Grant

Metro has secured a \$1.8 million grant from Puget Power for energy-efficient measures installed as part of the expansion of the East Division Reclamation Plant at Renton. This grant will take the form of a credit of approximately \$31,000 against the Renton plant's electricity bills each month for five years.

3. Renegotiated Biosolids Haul Contract

As part of contract extension negotiations, staff has successfully achieved an 8% reduction in the rate charged for the haulage of biosolids to Eastern Washington.

4. Reduction in Contract Workers

Past direction from the Council has mandated a cut in the usage of contract workers.

5. Mountain-to-Sound Greenway

In addition to increased revenue, Metro expects to realize significant reductions in annual biosolids recycling costs as a result of its newly-established partnership with the Mountain-to-Sound Greenway Trust since more of such product will be utilized on the west side of the Cascades, thereby reducing haul costs.

6. Gainsharing Savings

An additional amount will be removed from the 1996 Budget to reflect the continuing success of the Gainsharing Program. Together with the sum that was already removed from the 1995 Budget, the Gainsharing Program is responsible for reducing projected operating expenses in 1996 by \$400,000.

7. Water Reuse

The expected completion of a reclaimed water facility at the East Division Reclamation Plant will make possible significant savings in water bills during the second half of 1996. (The figure shown represents the net of such savings over and above the additional O&M costs associated with the facility.)

8. Integrated Business Information System (IBIS) Savings

This represents additional projected savings resulting from the introduction of IBIS, over and above the \$54,000 that was removed from the 1995 Budget.

9. Consolidation Savings

As described in the Planning Assumptions section, this figure represents the assumed savings for the Water Quality Program that will be generated by the various Metro-King County consolidation activities in 1996. These savings include those stemming from the Executive's mandated FTE reductions in 1995.

WATER QUALITY CAPITAL FINANCIAL PLAN

<i>(\$s in Thousands)</i>	Actuals 1987-93	1994 Actual	1995 Plan	1996 Plan	1997 Plan	1998 Plan	1999 Plan	2000 Plan	1996 Forecast Lifetime	1995 Budget Lifetime	Change
Alki Stormweather/Transfer	16,881	18,208	34,322	30,009	16,946	6,951	2,683		126,000	126,000	0
North Creek Connection	213	343	3,632	3,790	17,000	17,000			41,978	41,978	0
Renton Enlargement III	44,056	16,535	48,853	44,589	22,744	25,325	24,365	9,680	236,147	236,147	0
University Regulator	15,121	1,026	845	1,981	669				19,642	19,642	0
West Point	389,120	97,646	62,319	30,756	24,222				604,063	604,063	0
Denny Way CSO	124	152	6,224	8,000	24,500	40,000	28,000	13,000	120,000	120,000	0
Other Secondary/CSO Projects	99,799	3,553	1,446	15	176	505	505	505	106,504	106,665	(161)
Capital Assets Management	12,312	7,945	8,501	4,839	4,219	11,830	7,309	9,581	66,536	58,105	8,431
Biosolids Management Plan	2,736	2,174	1,388	1,344	987	223	405	777	10,034	9,933	101
Facilities Improvements	16,524	9,957	25,495	17,874	23,065	11,010	9,671	22,510	135,957	114,584	21,373
Transmission Improvements	8,816	1,613	7,171	9,023	3,491	10,378	7,673	15,500	63,665	79,150	(15,485)
South Interceptor	6,154	615	6,342	679		20,454	7,394	2,311	43,949	44,070	(121)
RWSP				1,200	4,200	76,004	98,094	50,200	229,698	229,698	0
Total Capital Program	611,856	159,768	206,538	154,100	142,219	219,680	185,949	124,064	1,804,174	1,790,035	14,138
Prior Year Carryover				10,327	8,221						
Accomplishment Assumption			(10,327)	(8,221)							
Total Financial Plan	611,856	159,768	196,211	156,206	150,440	219,680	185,949	124,064	1,804,174	1,790,035	14,138

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CHANGES IN THE CAPITAL FINANCIAL PLAN

The capital program costs for the period 1987-2000 presented in this Forecast have not changed significantly from those in the 1995 Budget. The capital plan now shows a total lifetime cost of \$1.804 billion, an increase of \$14 million from the 1995 Budget.

Highlights of these lifetime program changes are as follows:

Capital Assets Management

Program costs have increased due to a planned \$6 million primary sediment tank rehabilitation at Renton and a \$3 million increase in miscellaneous major rehabilitation projects in the year 2000.

Facilities Improvements

Program lifetimes have been decreased by \$4.2 million for discontinuation of the Zoo Pilot Reuse Project. Program lifetimes have been increased by \$19.4 million for new projects. These include \$12 million to install a centrifry process at Renton, \$2.5 million for lab facilities improvements associated with regulatory requirements, and \$2.4 million for an upgrade of the York Pump Station to provide improved power reliability and additional capacity for the North Creek diversion.

Program lifetime increases due to revised project estimates include \$1.3 million for Lake Hills administration and \$4.9 million to support the RWSP planning process. This planning process will identify the new system facilities needed to provide additional capacity to meet projected growth in the next century and comply with regulatory mandates relating to environmental standards.

Transmission Improvements

Program lifetimes have been reduced by \$21.3 million in the Eastside Interceptor Lining Program in the year 2000. Program lifetimes have been increased \$1.5 million for new projects. Additionally, increases in lifetime have occurred due to revised project estimates including \$1.8 million for the May Creek Interceptor and \$0.9 million for the Cedar River Trunk.

Accomplishment Rate Assumption

For rate-setting purposes, the Forecast assumes that Metro will only be able to accomplish 95% of the planned capital program expenditures identified for both 1995 and 1996. The resultant expenditure shortfalls in each of these years are in turn assumed to be carried over into 1996 and 1997 respectively.

The basis for this reduced accomplishment rate assumption is that unanticipated factors such as bid protests have historically caused Metro's annual capital expenditures to fall short of the projections used during the rate-setting process. The Council used this 95% accomplishment rate assumption to limit the increase in the 1995 sewer rate.

WATER QUALITY PROGRAM CASH FLOW

(\$s in Thousands)	1994 Actual	1995 Adopted	1995 Projected	1996 "Adopted"	1996 Proposed	1997	1998	1999	2000	TOTAL 1995-2000
CUSTOMER EQUIVALENTS RATE	659.10 \$15.90	653.30 \$17.95	666.70 \$17.95	653.30 \$20.30	662.30 \$19.10	662.30 \$20.60	672.23 \$22.21	682.32 \$23.86	692.55 \$24.94	
OPERATING REVENUE:										
Customer Charges	125,365	140,721	143,607	159,144	151,799	163,691	179,139	195,378	207,243	1,040,857
Investment Income	10,300	7,887	10,738	6,940	8,355	9,855	12,168	12,981	11,812	65,909
Capacity Charge	2,623	3,000	2,750	3,500	3,000	3,300	3,600	4,000	4,500	21,150
City of Seattle CC Benefit		787	787	625	656	688	750	825	900	4,605
Other Income	8,163	8,541	8,541	8,734	8,951	9,264	9,589	9,924	10,271	56,540
TOTAL OPERATING REVENUES	146,451	160,935	166,422	178,943	172,761	186,799	205,246	223,108	234,726	1,189,061
OPERATING EXPENSE	(55,474)	(66,167)	(66,167)	(75,593)	(73,647)	(75,697)	(78,519)	(81,447)	(84,487)	(459,964)
DEBT SERVICE REQUIREMENT	(69,751)	(75,665)	(75,171)	(83,011)	(79,220)	(88,899)	(101,319)	(113,284)	(120,248)	(578,141)
DEBT SERVICE COVERAGE RATIO	1.30	1.25	1.33	1.25	1.25	1.25	1.25	1.25	1.25	
OPERATING RESERVE	(161)	(305)	(218)	(448)	(535)	(374)	(102)	(141)	(146)	(1,517)
BALANCE ON OPERATIONS	21,065	18,799	24,867	19,892	19,359	21,829	25,305	28,235	29,845	149,439
FUNDS AVAILABLE FOR CAPITAL										
BEGINNING FUND BALANCE	37,018	64,946	90,854	4,954	62,663	4,929	4,983	4,817	4,834	
REVENUES:										
Bond Proceeds	170,000	75,000	90,000	95,000	47,000	117,914	165,959	159,345	93,669	673,887
Short Term Borrowing	0	65,000	65,000	65,000	65,000	65,000	75,000	75,000	75,000	420,000
Grants	28,891	41,990	39,758	29,685	39,540	24,400	32,478	12,500	12,500	161,176
Other	64	1,395	1,395	1,301	1,301	5,342	9,377	9,413	5,450	32,279
Balance on Operations	21,065	18,799	24,867	19,892	19,359	21,829	25,305	28,235	29,845	149,439
TOTAL REVENUES	220,020	202,184	221,020	210,877	172,200	234,485	308,119	284,493	216,464	1,436,781
CAPITAL EXPENDITURES	(159,768)	(209,151)	(196,211)	(136,022)	(156,206)	(150,440)	(219,680)	(185,949)	(124,064)	(1,032,550)
SUBORD. DEBT RETIREMENT	(1,750)	(50,875)	(50,875)	(72,138)	(72,463)	(72,463)	(72,463)	(83,013)	(83,013)	(434,290)
BOND ISSUE COSTS	(3,400)	(2,150)	(2,125)	(2,550)	(1,265)	(2,683)	(3,694)	(3,562)	(2,248)	(15,578)
ADJUSTMENTS	(1,265)	0	0	0	0	0	0	0	0	0
CONTRIBUTION TO BOND RESERVE	0	0	0	0	0	(8,845)	(12,448)	(11,952)	(7,026)	(40,271)
ENDING FUND BALANCE	90,854	4,954	62,663	5,121	4,929	4,983	4,817	4,834	4,946	

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OPTIONS FOR 1996 RATE REDUCTION

The Recommended Requirements presented earlier demonstrate that the proposed 1996 sewer rate of \$19.10 already reflects the reductions in operating expenses made possible by the consolidation as well as various other initiatives taken by management over the past year. Furthermore, the consolidation has also yielded benefits on the financing front since Metro's ability to utilize G.O. bonds backed by the County has allowed significant savings in overall debt service costs associated with the funding of the capital program. As a result of these combined savings and other favorable external developments, the 1996 rate is more than \$2.00 lower than that projected in the final Metro budget issued prior to the merger.

While already substantially reduced, however, there are still some possible strategies that could be used to further lower and postpone the 1996 sewer rate increase. Two that are frequently suggested are to reduce the assumed accomplishment rate for capital expenditures and to use more short-term borrowing. The merits of these options are discussed below.

Reduction of Capital Expenditure Accomplishment Rate Assumptions

One option would be to further reduce the assumed rate of capital expenditure accomplishment to 90% from the 95% used as the basis for the current proposal. This would permit a reduction of another 10 cents in the 1996 monthly sewer rate.

The proposal to further reduce the accomplishment rate assumption is based on the fact that Metro's actual accomplishment rate has averaged just 85% over the past four years. In spite of such recent historical underperformance, however, it does not seem prudent to further reduce the accomplishment rate beyond the 95% assumption used as the basis for the 1996 rate proposal. It seems likely that Metro will exceed this recent average over the next two years since the West Point project is fast nearing completion and the resolution of various contractor protests should allow work on the Alki and Renton projects to progress quite rapidly.

Note that the assumption of a lower rate of capital expenditure accomplishment would not formally require Metro to reduce planned construction activity or defer any projects. This assumption would instead simply be used to reduce the amount of long-term bonds to be issued, thereby lowering the 1996 sewer rate. Once a lower rate is adopted, Metro's long-term debt issuance in 1996 would be effectively constrained. The Agency could still rely on additional short-term borrowing beyond that already anticipated, however, if the assumed accomplishment rate proves incorrect and Metro were to achieve its planned 1996 expenditures. As such, use of a lower accomplishment assumption would not result in any actual disruption to the Water Quality capital program.

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Use of Additional Short-Term Financing

Another option would be for Metro to rely even more heavily on short-term debt to fund its capital program in 1996. Full utilization of the short-term debt capacity defined in the Financial Policies would permit Metro to issue approximately \$105 million of such debt rather than the \$65 million proposed in the budget. Issuance of this additional \$40 million would lower the sewer rate by approximately 35 cents to \$18.75.

This option is not recommended, however, since retention of some unused borrowing capacity provides a very important element of funding flexibility in the event that adverse financial conditions limit the ability to raise long-term debt. The Agency faced exactly such a situation in 1993 when the dropoff in RCEs caused a decline in revenues forcing Metro to issue \$50 million of Bond Anticipation Notes in lieu of additional parity bonds. The proposed budget recommendation suggests that it is prudent to retain this flexibility by planning to borrow less than the full 10 percent limit. As described above, note that preservation of some unused short-term borrowing capacity would be especially critical if a lower rate of capital expenditure accomplishment is assumed for rate-setting purposes.

Appendix A

1996 SEWER RATE AND CASH FLOW EXPLANATION

This report is prepared to satisfy the requirements of the Water Quality Program Financial Policies which mandate that a detailed explanation be prepared in support of proposed sewer rates.

The 1996 proposed monthly sewer rate of \$19.10 and the projected rates for the period 1997-2000 are generated by a detailed cash flow and rate model. This model embodies key assumptions regarding economic and financial conditions as well as specific projections relating to future revenues and expenditures.

Economic and Financial Assumptions

The principal assumptions underlying the cash flow in 1996 are as follows:

- Metro's customer base is expected to decline slightly as the weakness of the local economy and on-going conservation efforts cause further reductions in water usage. Specifically, Metro's RCEs are assumed to decline at an annualized rate of 1.00% during both 1995 and 1996. This will be partially offset by continuing growth in single family residential customers.
- General inflation is projected at 3.50% for the whole Forecast period.
- The interest cost for the 1996 issue of King County General Obligation bonds is assumed to be 6.80%, while the subsequent sewer revenue bond issues are expected to be sold at a 7.00% rate. The assumed interest cost for the short-term Commercial Paper debt program is 5.50%.
- The interest rate for new investments is assumed to be 6.00%.

Revenue Sources

The considerations underlying the projections of operating revenues shown in the cash flow for the period 1995 -1996 are as follows:

- Customer Charges represent the revenues produced by the basic monthly sewer charge levied on all Metro customers. The determination of the proposed 1996 monthly sewer rate is described in detail below.
- Investment Income represents the interest earnings derived from the investments held in Metro's various reserve, revenue, and construction accounts.

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- Capacity Charge is a fee levied for all new sewer hookups. Currently this fee is set at \$7 per month. Per statutory authority, this charge is assumed to be increased by the Council to \$10.50 per month for all new hookups after January 1, 1996.
- City of Seattle Capacity Charge (CC) Benefit represents payments to be made by the City of Seattle to compensate Metro for the capital cost of its CSO control projects. These payments are based by formula upon earlier capacity charge receipts.

The category labeled "Other Income" is comprised of the following elements:

- Hazardous Waste Fees represent reimbursement for operating expenses incurred by Metro to meet its share of the Local Hazardous Waste Management Program. These costs are projected to rise along with allowable ceilings for such reimbursement.
- Industrial Surcharge Fees are primarily comprised of fees levied on system customers that generate high-strength wastes to compensate Metro for increased treatment costs. These fees are calculated by reference to Metro's overall operating expenses.
- Septic Tank Disposal Fees over the next few years are projected to fall short of the levels seen in 1993 and early 1994 when the pace of recent disposal activity was boosted significantly by the heavy volume of mortgage refinancings, a requirement for which is that residential septic tanks must be pumped.
- Sales of By-Products are expected to generate reduced revenues in 1995 and 1996 as a result of both construction-related interruptions to the delivery of such products and the lower price that will be received for methane gas generated at Renton.
- Contract and Grant Revenues represents the payments that Metro receives as reimbursement for contract work performed at the Environmental Laboratory and elsewhere for various external parties, including King County, and various operating grants, the largest of which currently is that from the Department of Ecology for the Education Consortium Program for which Metro acts as lead.
- Miscellaneous Operating Revenues are primarily comprised of the payments received from the City of Edmonds associated with the transfer of flows between the two agencies. These revenues are projected to decline from 1995 to 1996 as certain costs associated with the early start-up of the Ballinger pump station will no longer be included in the billings.

Sewer Rate Determination

The elements described above combine to generate the proposed sewer rate.

Metro essentially sets its monthly sewer rate at a level that, together with various other sources of operating revenues, will generate just sufficient funds annually to meet all operating and maintenance expenditures (excluding depreciation) and to provide 1.25 times coverage for the debt service payments coming due on its outstanding bonds which are known as the "monetary requirements".

Specifically, the 1996 rate of \$19.10 is derived as follows. Operating expenses for 1995 are projected to rise to \$73.6 million while capital expenditures are projected to total \$156.2 million. Metro anticipates the need to issue \$47 million of long-term G.O. bonds in 1996 to fund these capital expenditures which will increase total debt service requirements to \$79.2 million. Because of Metro's pledge to maintain a minimum 1.25 coverage ratio against the debt service payments, these projections result in the need to generate operating revenues totaling \$172.6 million in 1996 ($=73.6 + (79.2 * 1.25)$).

Given that interest earnings (\$8.4 million) and the proceeds from the various other revenue sources described earlier are projected to generate a total of \$21.0 million, Metro therefore needs to set its monthly sewer rate at a level that generates \$151.6 million. Spreading this amount across the estimated 1996 customer base of 662,300 RCEs produces a rate of approximately \$19.10 ($=151.6 * 1,000 / 12 / 662.3$).

As such, the sewer rate is comprised of two major elements, namely operating costs and debt service payments. For 1996, approximately 43 percent is attributable to operating expense (net of operating revenues) and 57 percent is needed to meet debt service coverage requirements (net of interest earnings). With regard to the \$1.15 increase in the proposed 1996 rate, 92 cents is attributable to the rise in operating expenses (net of other operating income) while the financing requirements for the capital program push the rate up by another 49 cents. Offsetting these upward pressures, the projected rise in the customer base from the level that supported the 1995 rate request diminishes the needed increase by 26 cents.

Options for the 1996 Sewer Rate

As required by the Water Quality Financial Policies, Metro staff has analyzed the viability and impact of certain alternative options for reducing the 1996 sewer rate. Discussion of such options is presented within the main Forecast document. (See "Options for 1996 Rate Reduction".)

Water Quality Program Financial Goals and Policies

Introduction and Purpose

The mission of the Water Quality Program is to support an improved quality of life by protecting the public health and enhancing the quality of the aquatic environment. This is accomplished through programs that plan, operate and maintain wastewater treatment facilities, provide education and technical assistance regarding action leading to clean water, reduce generation and disposal of hazardous materials into collection systems, manage reuse of wastewater treatment products and provide regional environmental laboratory services.

The financial policies for the Water Quality Program provide a Council policy framework for financial planning of operating and capital programs. The purpose of these policies is to assure long term service integrity and stability by sound and prudent management of Metro's financial resources.

Financial Policies

- **Multi-year Planning.** The Water Quality Program will maintain a multi-year financial plan and cash-flow projection of six years or more, estimating service growth, operating expenses, capital requirements, reserves and debt service. The financial plan will be reviewed and adopted by the Council and used as a policy basis for budget and related financial planning.
- **Prudent Budget Standards.** Bond covenants set requirements that ensure a prudent budget standard. Net operating income (operating income minus operating expense) must exceed parity bond debt service requirements by at least 15 percent. The resulting balance on operations is available along with bond proceeds to cover annual capital expenditures. Staff will advise Council if either operating or capital expenditures are expected to exceed adopted.
- **Alternative Financial Plan.** If the operations and maintenance component of the proposed annual budget increases by more than a reasonable cost of the addition of new facilities, increased flows, new programs authorized by the Council, and inflation, a feasible alternative spending plan shall be presented, identifying steps to reduce cost growth. An alternative spending plan shall also be available in the event that actual revenues drop below prudent estimates. A program of reviewing business practices for savings and efficiency potential shall be ongoing.
- **Future Claims and Liabilities.** Reserves needed for future liabilities, claims, and replacement will be reported in budget planning.
- **Minimum Fund Balance.** To maintain sufficient funds to meet bond covenants for betterment reserves, requirements for cash flow and potential future liabilities,

the water quality program will maintain a minimum cash balance of \$5 million each year. This amount may be changed in budget planning and will be included in the annual Sewer Rate Explanation Report.

- **Sewer Rates.** Sewer rates will be set at a level sufficient to meet the following financial policies:
 1. **Debt Service Coverage.** Bond covenants require the ratio of net operating income to debt service to be 1.15. For rate-setting purposes, the policy is to target the ratio at a minimum of 1.25. Budgets will be planned and monitored against this 1.25 standard. This policy assures budgets are planned with a margin of error so that bond covenant agreements are met.
 2. **Emergency Reserves.** Bond covenants require three emergency funds. The Operating Reserve is required to have a balance the greater of \$300,000 or five percent of total operating and maintenance costs and may be used for operating costs if sufficient revenues are not available. The Contingency Reserve is required to have a minimum balance of \$2,000,000 and may be used for emergency repairs or unforeseen capital improvements. The Betterment Reserve is required to have a minimum deposit each year of \$750,000 and may be used for emergency repairs, capital improvements in the Comprehensive Water Pollution Abatement Plan, replenishment of other reserves, and payment of outstanding parity bonds. Council approval shall be sought for any use of these funds.
 3. **Maintenance of the System.** Revenues will be sufficient to maintain capital assets in sound working condition, providing for maintenance and rehabilitation of facilities at a level intended to minimize total cost while continuing to provide reliable, high quality service and maintain high water quality standards.
 4. **Sewer Bond Covenant Provisions.** Sewer Bond Covenant Provisions. Covenants contained in Resolution No. 90 and subsequent resolutions authorizing issuance of bonds are hereby affirmed.
- **Capital Funding.** Metro will attempt to structure the term of its borrowings to match the expected useful life of the assets to be funded. The Water Quality capital program will be financed predominantly by annual staged issues of long-term general obligation or parity bonds backed by sewer revenues, provided that:
 1. All available sources of grants are utilized;
 2. The balance on operations available after reserve requirements are met will be used for the capital program; any excess reserves may also be used for capital;
 3. Consideration is given to competing demands for use of Metro's overall general obligation debt capacity; and
 4. Consideration is given to the overall level of debt financing that can be

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sustained over the long term given the size of future capital expenditures, potential impacts credit ratings, and other relevant factors.

- **Short-term Borrowing.** To achieve a better maturity matching of assets and liabilities, thereby reducing Interest rate risk, short-term borrowing will be used to fund a portion of the capital program, provided that:
 1. Short-term debt outstanding comprises no more than 10 percent of total outstanding parity and general obligation bonds;
 2. Appropriate liquidity is in place to protect the day-to-day operations of the agency.
- **Sewer Rate Explanation.** A report shall be prepared in support of the proposed annual sewer rates, including the following information:
 1. **Key Assumptions.** Key financial assumptions such as inflation, bond interest rates, investment income, size and timing of bond issues, and the considerations underlying the projection of future growth in residential customer equivalents;
 2. **Significant Financial Projections.** All key projections, including the annual projection of operating and capital costs, debt service coverage, cash balances, revenue requirements, revenue projections, and a discussion of significant factors that impact the degree of uncertainty associated with the projections;
 3. **Historical Data.** A discussion of consistent over or under projections of costs and revenues from previous recent budgets; and
 4. **Policy Options.** Calculations and/or analyses of the effect of certain policy options on the overall revenue requirement. These options should include (1) alternative capital improvement accomplishment percentages (including a 90 percent, a 95 percent, and a 100 percent accomplishment rate); and (2) alternative financing of the capital improvement programs, including variable rate debt.
- **Fees and Reimbursement.** Water Quality services performed for a fee for other public or private organizations will be reimbursed to recover all direct and indirect costs of the service unless otherwise directed by Council. The Executive Director may waive this policy in specific circumstances where recovery of all direct and indirect expenses may interfere in the Water Quality Program goals or mission.

Other Policies

King County should request the state legislature to revise state statutes to specifically allow refunding of revenue bonds with general obligation bonds at the option of the local legislative authority.

King County should periodically review the sewage treatment capacity charge to ensure that the true costs of system expansion are reflected in the assessed charge. All reasonable steps should be taken to coordinate fee assessments and accounting with local sewer service providers to reduce redundant program overhead costs.

Selective monitoring should be increased for inflow and infiltration system flows of component agencies. While this may not have an immediate financial impact, it could better identify long-term system operating and capital needs, and could aid in the equitable distribution of costs.

As a program policy, Metro should continue its long standing commitment to research and development funding at least at current functional levels.

King County should develop and implement a program within the Water Quality budget to address failing septic systems, particularly within urbanized areas.

King County should attempt to adopt a multi-year sewer rate to provide stable costs to Metro customers.

Metro should prepare explicit policies for the setting of customer rates, in consultation with the Regional Water Quality Committee, for adoption into future budget policies by the Metropolitan King County Council.

*Approved by Regional Water Quality Committee
June 9, 1994
Motion No. RWQ 94-1*

*Approved by Metropolitan King County Council
August 29, 1994
Motion No. 9359*