8.0 Financial Strategy

8.1 Introduction

This financial strategy presents MWMC's current financial status and policies, future financial needs, and discusses the strategy for meeting these needs.

8.2 Current Financial Status and Policies

Financial Status - In 2003, MWMC adopted an update of its financial plan. A financial consultant performed a review of MWMC's financial status as part of the plan update. The consultant used a variety of financial ratios to quantify MWMC's financial soundness. Examples of these financial ratios are:

- Operating ratio: Operating and maintenance expenses, divided by the total operating expenses,
- Net take-down ratio: Net revenues, divided by gross revenue and income,
- Interest coverage ratio: Net revenues, divided by interest requirements for the period,
- Debt service coverage ratio: Net revenues, divided by principal and interest requirements for the period, and
- Debt service safety margin ratio: Net revenues, less principal and interest requirements for the period, divided by gross revenue and income.

On the basis of this analysis, the consultant found:

- MWMC is positioned well financially.
- MWMC's current financial situation, with zero long-term debt, …. results in performance on the quantitative measures that exceeds (in a good sense) the national medians and the financing industry's guidelines.
- Qualitative measures assessed indicate that MWMC is in a strong position with respect to its credit-worthiness.
- MWMC's sound financial management, long-term financial forecasting and planning, stable operations and a host of other qualitative indicators all indicate that MWMC would perform extremely well in any assessment by a credit rating agency or other financial body.

Financial Management Policies - MWMC Financial Policies are grouped into the following categories:

- Financial Forecasting and Budgeting
- Capital Planning and Financing

- Sewer User Rates and System Development Charges
- Asset Management

Financial Forecasting and Budgeting - Financial forecasts and budget policies are intended to guide the Commission in prudent financial forecasting and budget planning, and are included to ensure the financial security and bonding capacity of the Regional Wastewater Program (RWP), as well as meeting minimum legal budget requirements. This set of policies also addresses the Commission's legal and contractual commitments regarding the use of sewer revenues to pay for sewer expenses.

1. The purpose of the RWP is to protect public health and safety and the environment by providing high-quality wastewater management services to the Eugene-Springfield metropolitan area. The MWMC and the regional partners are committed to providing these services in a manner that is effective, efficient, and meets customer service expectations. In order to achieve its purpose, the Commission shall establish and maintain key outcomes upon which RWP work plans and budgets will be focused.
2. The Commission shall maintain annual budgets that balance operating expenses with user fees and other current operating revenue.
3. The Commission will monitor revenues and expenditures, and maintain a balanced budget through an appropriate combination of cost-saving measures, budget transfers, supplemental budgets and/or user rate adjustments as needed.
4. The Commission shall maintain a multi-year financial forecast and cash-flow projection, which estimates service levels, operating expenses, capital needs, reserves, and debt service.
5. The Commission shall establish and maintain prudent minimum cash reserves, including but not limited to: Working Capital Reserve, Operating Reserve, Capital Reserve, Equipment Replacement Reserve, and Rate Stability Reserve.
    a. The Working Capital Reserve shall be sufficient to fulfill operating and capital cash flow needs.
    b. The Operating Reserve shall be maintained to minimize the impact of unanticipated revenue shortfalls.
    c. The Capital Reserve shall accumulate revenue to provide for future projects. The Capital Reserve shall be funded by annual contributions from user rates. A portion of the Capital Reserve shall be kept on hand and designated for contingency needs.
    d. The Equipment Replacement Reserve shall provide for the timely replacement or rehabilitation of equipment and may also be borrowed against to provide short-term financing of capital improvements.
    e. A Rate Stability Reserve shall be maintained as necessary to protect ratepayers from volatility in user rates and to enhance credit-worthiness.
6. MWMC funds are dedicated for the exclusive benefit of the RWP including operating expenses, debt service payments, and the associated capital program.

Capital Planning and Financing – Capital planning and financing policies direct that necessary future capital improvements be identified together with the financial resources needed to complete them. These policies also direct that major capital costs be spread over time to stabilize user rates and to provide equity among current and future ratepayers for long-lived capital improvements.

1. The Commission shall maintain a capital planning and financing system for use in preparing a multi-year capital improvement project (CIP) list for consideration and adoption by MWMC and ratification by the partner agencies' governing bodies as a part of the Commission's budget process.
2. The Commission shall establish and maintain a list of approved finance mechanisms.
3. The Commission shall utilize debt service professionals and Government Finance Officers Association (GFOA) guidance to structure bond covenants.
4. Commission debt should be structured to match the expected useful life of the assets to be funded, but in no case exceed 20 years.
5. Long-term bonding shall be structured to maximize its cost effectiveness.
6. Before seeking to incur new debt, all available grant programs shall be evaluated for their potential to offset targeted program costs.
7. Consideration shall be given to the overall level of debt financing that can be sustained over the long-term given the size of the future capital programs, potential impacts on credit ratings, and other relevant factors such as intergenerational rate equity, overlapping debt, and the types of projects appropriately financed with long-term debt.
8. Consideration shall be given to competing demands for use of the community's overall debt financing capacity.
9. Capital reserves and system development charge (SDC) reserves on hand shall generally be used for projects with a total cost of under $1 million. These reserves shall also be used in the early stages of a multi-year project so that bond issuance can be delayed and aggregated.
10. The Commission shall annually target 2 percent of the RWP asset value for capital reinvestment. This includes the amounts to be budgeted for major rehabilitation and equipment replacement.
11. The maximum bonded debt burden shall be determined by comparing the debt service to the user rate. Budgeted debt service shall not exceed 25 percent of budgeted user rate revenue

Sewer User Rates and System Development Charges – User rate and SDC policies are intended to guide the Commission in establishing annual rate structures and approving RWP capital improvement and operating budgets.

1. Monthly sewer user rates, which are the primary source of revenue for the RWP, are to be equitably allocated to all customers based on a cost of service assessment.

2. New customers to the RWP shall pay an SDC. The Commission shall maintain the SDC methodology within the constraints of state law.
3. Existing and new sewer customers shall equitably contribute to the cost of the RWP. To implement this policy, user rate and SDC methodologies will consider wastewater quantity, quality, and strength, consistent with state law.
4. MWMC rate structures shall be sufficient to fully fund reserves, comply with bond covenants, and cover the costs of constructing, operating, rehabilitating, maintaining, and improving the MWMC assets.
5. The Commission will attempt to adopt user rates that provide multi-year stability.
6. Costs of existing and future capacity for new customers shall be recovered by SDCs that are based on the cost of existing and required new capacity.
7. Costs of services (direct and indirect) provided to any public or private organizations by the RWP shall be recovered through appropriate fees or charges.

Asset Management - Asset management policies are intended to guide the Commission in protecting and safeguarding the investment in regional facilities and equipment. Capital assets shall be kept in sound working condition. Replacement, maintenance, and rehabilitation shall be provided for so that total system costs are minimized while reliable, high-quality service and high water quality standards are maintained.

1. MWMC assets shall be insured for replacement value so that, in the event of a loss, plant and equipment could be restored to working condition.
2. The Commission shall maintain a fully-funded Equipment Replacement Reserve so equipment can be replaced or rehabilitated when needed without creating volatility in the operating budget.
3. Equipment provided for by the Equipment Replacement Reserve shall include all rolling stock, all computer equipment, and all other equipment with a historical cost between $10,000 and $200,000, a projected replacement cost between $10,000 and $200,000, and with a useful life expectancy of between 1 and up to 20 years.
4. Major rehabilitation work shall be funded from the Capital Reserve and appropriated annually into a budget line item called Major Rehab.
5. The Major Rehab work shall be capitalized if it extends the useful life of the asset beyond the original estimate. If the Major Rehab work does not extend the life of the asset, but enables the asset to reach its originally estimated useful life, then it will be considered major maintenance work and not capitalized.

8.3 Future Costs and Revenues

8.3.1 Operation and Maintenance Costs

An estimate of O&M costs, including personnel, materials, and service costs, is presented in Table 8.3.1-1 and is based on the 20-year projections included in the MWMC FY2004/2005

budget. As new facilities are placed on-line throughout the 20-year planning period, these costs will be further refined.

The Personal Services category consists of labor cost for the operation, maintenance, and capital planning for MWMC's regional systems. The labor effort to operate and maintain the local cities collection systems is not included. The Materials & Services includes chemicals and utilities (electrical, potable water, natural gas, etc.). The Capital Outlay category consists of expenditures for items such as computer equipment and vehicles required by MWMC. These Capital Outlay costs are not included in the MWMC 20-year project list.

TABLE 8.3.1-1

MWMC Projected Personnel, Materials and Service Costs For Study Period
MWMC Facility Plan, Eugene-Springfield

Personal Services	$181,400,000
Materials & Services	$169,840,000
Capital Outlay	$700,000
Total	**$351,940,000**

8.3.2 Replacement Cost of Proposed System

Equipment replacement purchases were budgeted at $1,026,630 in FY 03-04; rehabilitation was budgeted at $182,000 in FY 03-04. Annual Equipment replacement purchases and rehabilitation expenditures are projected to average $1,100,000 and $400,000, respectively, over the study period.

8.3.3 Capital Project Needs

As recommended in Chapter 7.0, MWMC intends to proceed with implementation of the $144 million Alternative 5 – Parallel Primary/Secondary Treatment. If DEQ does not approve Alternative 5, then MWMC intends to proceed with implementation of the $157 million Alternative 4 – High-Rate Clarification (assuming that DEQ is willing to approve Alternative 4 as the next best alternative).

8.3.4 Sources of Revenue

In the past, MWMC has generated revenues from monthly sewer rates, SDCs, and special assessments on property taxes associated with the general obligation bonds that were issued for the construction of the original regional system in the 1980s. As was mentioned in section 8.2, the general obligation bonds have been paid off and the current sources of revenue are monthly sewer user fees and SDCs. It is assumed that these two methods will continue to be the primary sources of revenue through the study period.

Sewer user fee needs are assessed by MWMC on an annual basis as part of the budgetary process. MWMC policies regarding sewer user rates are described above. Table 8.3.4-1 describes current customer classes, numbers of accounts, annual discharges and projected revenue for FY 03-04. Because MWMC derives billing units from a combination of wastewater flow and wastewater strength, it is not straightforward to convert to the number of equivalent dwelling units (EDUs) and the cost per EDU. Therefore, this information has not been included in Table 8.3.4-1.

TABLE 8.3.4-1
MWMC Sewer User Rate Data
MWMC Facility Plan, Eugene-Springfield

Sewer User Fee Classifications (Strength based on total pounds BOD and TSS)	Accounts	Annual Discharge (1,000 gal)	Projected Revenue for FY 03-04
Residential	65,600	3,924,400	$7,145,000
Low Strength (0 to 400)	5,410	2,703,700	3,589,000
Medium Strength (400 to 800)	73	167,400	301,000
High Strength (800 to 1,200)	320	229,500	596,000
Very High Strength (1,200 to 1,600)	0	0	0
Super High Strength (>1,600)	16	34,400	139,000
Septage		4000	381,000

MWMC recently approved an SDC methodology to comply with state statutes that will go into effect June 1, 2004. MWMC policies regarding sewer user rates are described above. Table 8.3.4-2 describes projected SDC revenue for FY 04-05.

TABLE 8.3.4-2
Projected SDC Revenue for FY 2004 – 2005
MWMC Facility Plan, Eugene-Springfield

SDC Strength Based Development Classifications (Strength based on total pounds BOD and TSS)	Projected Revenue
Residential	$1,214,092
Low Strength (0 to 400)	629,079
Medium Strength (400 to 800)	68,104
High Strength (800 to 1,200)	145,514
Super High Strength (>1,600)	503
Total	**$2,057,292**

8.4 Evaluation of Local Funding Resources

MWMC will rely on monthly wastewater rates and SDCs for revenue. Financing for capital projects will most likely be provided by revenue bonds, although MWMC would like to retain the option to use the State Revolving Loan Fund (SRF) program administered by DEQ.

As stated in section 8.2, MWMC is in a strong position with respect to its credit-worthiness. MWMC's sound financial management, long-term financial forecasting and planning, stable operations, and a host of other qualitative indicators all show that MWMC would perform extremely well in any assessment by a credit rating agency or other financial body.

8.5 Evaluation of Federal and State Funding Resources

In previous financial evaluations, MWMC staff evaluated potential federal and state funding resources for which MWMC might qualify. The SRF program was identified as the only realistic alternative, but was determined to be less cost-effective than funding projects through revenue bonds. MWMC would like to retain the option of accessing the SRF program and has developed this comprehensive Facilities Plan to be eligible for SRF monies if that financing approach becomes more favorable than revenue bonds in the future.

8.6 Recommended Financing Strategy

8.6.1 System Development Charges

A thorough revision of the SDC methodology was recently completed for the MWMC regional wastewater system and was adopted by the Commission on April 1, 2004. The methodology was developed in accordance with Oregon SDC legislation (ORS 223.297-223.314), and with the guidance of a CAC appointed by MWMC. The MWMC SDC Methodology is based on a combined reimbursement and improvement fee structure. In order to calculate the improvement fee portion of the SDCs, it is necessary to allocate the costs of capital projects as follows:

- Step 1: Allocate projects to facility process components (e.g., primary treatment, secondary treatment, etc.)
- Step 2: Allocate costs by components to system capacity parameters (e.g., average flow, peak flow, etc.)
- Step 3: Allocate project costs to improvement type (capacity improvement, performance upgrade, or rehabilitation)
- Step 4: Allocate costs to user type (existing customers or projected growth)

These steps are applied to the $144 million 20-year project list (Alternative 5 – Parallel Primary/Secondary Treatment). Steps 1 and 3 have to be developed on a case-by-case basis for the 20-year project list in question. Step 2 and 4 are inherent in the methodology and occur automatically once the allocations associated with Step 1 and 3 are determined. The basis for allocating projects in the proposed MWMC 20-year project list to the facility

process components (Step 1) and to an improvement type (Step 3) is discussed later in this section and is summarized in Table 8.6.1-1 (located at the end of this chapter). Then, combining Steps 1 and 3 with the allocations determined by the methodology (Steps 2 and 4), the resulting breakdown between growth (SDCs) and existing user rates is presented in Table 8.6.1-2 (located at the end of this chapter). In summary, approximately 40 percent ($57.8 million) of the 20-year project list is projected to be funded by SDCs, with the remaining 60 percent ($86.2 million) funded by user rates.

In Step 1 each future project is allocated to the following 12 facility components (including 3 subcategories for biosolids):

- Collection system pipeline
- Collection system pump stations
- Preliminary treatment
- Primary treatment
- Secondary treatment
- Disinfection/outfall
- Biosolids
  - General
  - Dewatering
  - Biocycle Farm
- Tertiary filters
- Reuse facilities
- Odor Control
- Peak flow management
- Support Facilities (Indirects)

These facility process components are defined in the SDC Methodology as adopted by MWMC on April 1, 2004.

In addition, an allocation of the projects to project type is also presented. The three project types are **Capacity**, **Performance**, and **Rehabilitation**, which are defined in the SDC Methodology. The majority of the projects are allocated to one project type; however, some projects will be split between capacity and performance types. Projects that have identical allocations and basis for allocations may be grouped together. The basis for allocating projects in the proposed MWMC 20-year project list to the facility process components (Step 1) and to an improvement type (Step 3) is discussed in the following paragraphs.

8.6.2 Collection System/Influent Pumping

Glenwood Pump Station Upgrades, Willakenzie Pump Station Expansion, and Screw Pump Station Expansion

Facility Component Allocation

These projects expand the base pumping capacity of the respective pump stations. The peak flow capacity of MWMC's overall facilities is also increased as a result of these projects. The allocation is split equally between Collection System Pump Stations and Peak Flow Management.

Project Type Allocation

These projects expand influent pumping and peak flow capacity and are therefore allocated entirely to Capacity.

River Avenue Improvements

Facility Component Allocation

This project makes improvements to the roadway and is allocated entirely to Support Facilities.

Project Type Allocation

This project rehabilitates the roadway and is therefore allocated entirely to Rehabilitation.

8.6.3 Liquids Treatment

Headworks Expansion

Facility Component Allocation

This project expands both preliminary treatment and peak flow capacity so the allocation is split equally between Preliminary Treatment and Peak Flow Management.

Project Type Allocation

This project expands capacity and is allocated entirely to Capacity.

Primary Clarifier Enhancements and Primary Sludge Thickening Outside of Primary Clarifiers

Facility Component Allocation

These projects expand both the primary treatment and the overall peak flow capacity of the facility so the allocation is split equally between Primary Treatment and Peak Flow Management.

Project Type Allocation

These projects expand capacity and are allocated entirely to Capacity.

Additional Odorous Air Treatment

Facility Component Allocation

These improvements are allocated entirely to Odor Control.

Project Type Allocation

These improvements, which are driven by increased community performance standards, provide capacity/enhanced capability for both the growth increment and for existing users and are therefore allocated entirely to Performance.

Aeration Basin Modifications – South and North

Facility Component Allocation

The primary purpose of these modifications is to improve the capacity of the aeration basins and the performance of the overall secondary treatment system. A secondary benefit of these projects is to provide the WPCF with additional operational flexibility during peak flow events. These projects are allocated 90 percent to Secondary Treatment and 10 percent to Peak Flow Management.

Project Type Allocation

These projects expand capacity as well as improve the performance of the secondary treatment system to meet the new ammonia limit and more effectively and consistently meet the BOD and TSS limits moving forward. These projects are equally divided between Capacity and Performance.

Secondary Clarifier Enhancements

Facility Component Allocation

This project is allocated equally between Secondary Treatment and Peak Flow Management because both the base capacity of the secondary treatment process as well as the peak flow capacity of the facility are increased as a result of these improvements.

Project Type Allocation

This project is split equally between Capacity and Performance because the modifications to these existing units increases the liquids treatment capacity of the facility and also improves the consistency/reliability of the effluent performance.

9th and 10th Secondary Clarifiers

Facility Component Allocation

Construction of these two additional units increases the base capacity of the secondary treatment system and the peak flow capacity of the overall facility and therefore the allocation is split equally between Secondary Treatment and Peak Flow Management.

Project Type Allocation

This project expands capacity and is allocated entirely to Capacity.

Conversion to Sodium Hypochlorite Disinfection

Facility Component Allocation

Approximately half of the cost of this project will provide the facilities to convert disinfection from chlorine to sodium hypochlorite for the base secondary effluent flow. The remaining half of the costs of this project are for providing disinfection to the high-rate clarification effluent in the case of peak flow management Alternative 4, or to the primary effluent in the case of peak flow management Alternative 5. Therefore, 50 percent is allocated to Disinfection/Outfall and 50 percent to Peak Flow Management.

Project Type Allocation

Providing disinfection for the peak flow management flow stream is additional capacity; replacing the existing chlorine disinfection system is the result of community performance standards. Therefore, 50 percent is allocated to Capacity and 50 percent to Performance because this is the same breakdown between facility components Peak Flow Management and Disinfection/Outfall.

Filtration

Facility Component Allocation

Filtration is a new unit process and is allocated almost entirely to the new facility component, Tertiary Filters. It is anticipated that during peak flow events, a portion of the secondary effluent will be routed through the filters to assist with permit compliance so there will be some peak flow benefit. Therefore, 90 percent is allocated to Tertiary Filters and 10 percent to Peak Flow Management.

Project Type Allocation

The filters will provide for more consistent/reliable effluent performance in the dry season to all users – existing and future. A primary driver of the filters is to provide an increased level of performance to enable MWMC to comply with existing mass load limits as influent flows increase. Also, by removing loads from the final effluent the filters in essence free up or create additional dry season capacity. The allocation is assigned 25 percent to Capacity and 75 percent to Performance.

Peak Flow Management Alternative 5: Parallel Primary Secondary

Facility Component Allocation

This project is allocated entirely to Peak Flow Management. This allocation would not change if a different peak flow management alternative were ultimately implemented.

Project Type Allocation

This project will increase the peak flow capacity of the facility and is allocated entirely to Capacity.

It should be noted that if MWMC is required to implement the more costly peak flow management approach (Alternative 3 – Full Primary Treatment or Alternative 4 – High-Rate Clarification), other projects that have some peak flow management benefit such as primary clarifier enhancements, secondary clarifier enhancements, and the 9th and 10th secondary clarifiers will still be implemented.

New Bankside Outfall

Facility Component Allocation

This project provides additional base outfall capacity/performance and would also increase the peak flow capacity of the overall facility. The project is allocated equally between Disinfection/Outfall and Peak Flow Management.

Project Type Allocation

This project expands the capacity of the discharge outfall system to the Willamette River and is allocated entirely to Capacity.

8.6.4 Biosolids

Waste Activated Sludge Thickening

Facility Component Allocation
This project is allocated entirely to Biosolids-General.

Project Type Allocation
This project would expand the capacity of WAS thickening and potentially defer construction of additional digestion capacity. The allocation is assigned to Capacity.

Additional Digestion Capacity and Class A Capability

Facility Component Allocation
This project is allocated entirely to Biosolids-General.

Project Type Allocation
This project provides additional digestion capacity (approximately one-third of the cost) and would convert MWMC to a Class A biosolids program (remaining two-thirds of the cost), which would provide additional enhanced capability to address higher community performance standards. The allocation is split one-third/two-thirds between Capacity and Performance.

Digester Mixing Improvements

Facility Component Allocation
This project is allocated entirely to Biosolids-General.

Project Type Allocation
This project improves the performance of the existing three digesters. In doing so a larger portion of the existing tankage can actually be used for digestion and therefore construction of additional digestion capacity can be deferred. The project is allocated 50 percent to Capacity and 50 percent to Performance.

Biocycle Farm Phases 2 and 3

Facility Component Allocation
These projects are allocated to the Biosolids-Biocycle Farm.

Project Type Allocation
The Biocycle Farm provides enhanced capability and reliability to MWMC's overall biosolids management program and is therefore allocated to Performance.

Biocycle Farm Biosolids Distribution Equipment

Facility Component Allocation
This project is allocated to the Biosolids-Biocycle Farm component.

Project Type Allocation
The Biocycle Farm provides enhanced capability and reliability to MWMC's overall biosolids management program and is therefore allocated to Performance.

Composting Facility

Facility Component Allocation
Similar to the Biocycle Farm, this project would further develop MWMC's pilot composting program, which serves to enhance the capability and reliability of MWMC's overall biosolids management program. This project is allocated to Biosolids-Biocycle Farm.

Project Type Allocation
Composting serves a similar purpose as the Biocycle Farm and is therefore allocated to Performance.

Re-Line Lagoons Phases 1 through 4

Facility Component Allocation
This project is allocated entirely to Biosolids-General.

Project Type Allocation
This project replaces the existing liners in the biosolids storage lagoons at the Biosolids Management Facility and therefore is allocated to Rehabilitation.

Repairs/Partial Replacement of Biosolids Force Main

Facility Component Allocation
This project would repair and/or replace certain sections of the biosolids force main, which conveys treated biosolids from the WPCF to the BMF. The project is allocated entirely to Biosolids-General.

Project Type Allocation
This project would rehabilitate the existing biosolids force main and is allocated entirely to Rehabilitation.

8.6.5 Support Facilities

Maintenance Facility Improvements and Fiber Optic Wiring

Facility Component Allocation
These projects serve MWMC's overall efforts and are allocated to the Support Facilities (Indirects) component.

Project Type Allocation
These projects would benefit both the growth increment and existing users by enhancing staff's ability to operate and maintain MWMC's facilities. These projects are allocated to Performance.

8.6.6 Effluent Reuse

Effluent Reuse

Facility Component Allocation
This ongoing program to develop reuse to mitigate water quality impacts to the Willamette River is allocated entirely to Reuse Facilities.

Project Type Allocation

Effluent reuse takes WPCF effluent out of the Willamette River. Potential end uses include irrigation of landscaping and agricultural lands. Development of reuse will help MWMC comply with existing and future thermal load limits, which may become more stringent. Reuse will also assist with future compliance with mass load limits. As reuse is expanded and effluent is used for irrigation or other uses instead of discharged to the Willamette River, capacity is essentially freed up for new users. Effluent reuse benefits both existing users and growth proportionate to their average flow contribution and is therefore allocated to Performance.

8.6.7 Other Projects

Temporary Construction Management, Facility Plan Update Projects, Wet Weather Flow Management Plan Update, and Support Development of Private Lateral Program

Facility Component Allocation

These projects serve MWMC's overall efforts and are allocated to Support Facilities.

Project Type Allocation

These projects identify long-term planning approaches and/or enable MWMC to continue to operate the facilities in a manner that complies with local, state, and federal guidelines. It is assumed that these projects benefit both existing and the growth increment equally and are therefore allocated to Performance.

Mixing Zone Study Update

Facility Component Allocation

The purpose of this study is to determine the characteristics of the mixing zone of the outfall to the Willamette River and is therefore allocated to the Disinfection/Outfall facility component.

Project Type Allocation

For the same rationale as the other study projects, this project is allocated to Performance.

8.6.8 Monthly Sewer Rates

Assuming that the $144 million Alternative 5 is implemented, three rate scenarios were developed for the next 10 years. All three scenarios assume the approximate 40/60 split for funding the 20-year project list between SDCs and user rates so that roughly $86.2 million of the $144 million would be funded by rates. The rate scenario evaluation demonstrated that MWMC has various options available to phase in increased rates to provide revenue adequacy.

8.6.9 Impact of Implementing Alternative 4

If DEQ does not approve Alternative 5 – Parallel Primary/Secondary Treatment ($144 million), and Alternative 4 – High-Rate Clarification ($157 million) is implemented instead, an additional $13 million will have to be spent on capital investments. The allocation between growth impact fees (SDCs) and existing users (user rates) for this additional expenditure will be identical to the allocation for the Parallel Primary/Secondary Treatment project in the 20-year project list. Based on Table 8.6.1-2, 29 percent of this

additional expenditure or $3,770,000 will be funded by SDCs, with the remaining 71 percent or $9,230,000 being funded by user rates. This represents roughly a 6.5 percent increase ($57.8 million to $61.6 million) in the portion of the 20-year project list that would be funded by SDCs and roughly an 11 percent increase ($86.2 million to $95.4 million) in the portion of the 20-year project list that would be funded by rates. If MWMC implements Alternative 4 versus Alternative 5, an adjustment to the SDCs and user rates roughly in proportion to the 6.5 and 11 percent increases for SDCs and user rates, respectively, would have to be implemented. However, the overall financing strategy of issuing revenue bonds to fund the capital improvements would not change.

TABLE 8.6.1-1
Improvement Fee Allocation of Projects to Facility Process Components and Project Type
MWMC Facility Plan, Eugene-Springfield

PROJECT	TOTAL	1 Collection System Pipe	2 Collection System Pump Stations	3 Preliminary Treatment	4 Primary Treatment	5 Secondary Treatment	6 Disinfection/ Outfall	7 Biosolids - General	Biosolids - Dewatering	Biosolids - Biocycle Farm	8 Tertiary Filters	9 Reuse Facilities	10 Odor Control	11 Peak Flow Management	12 Support Facilities (Indirects)		1 Collection System Pipe	2 Collection System Pump Stations	3 Preliminary Treatment	4 Primary Treatment	5 Secondary Treatment	6 Disinfection/Out fall	7 Biosolids - General	Biosolids - Dewatering	Biosolids - Biocycle Farm	8 Tertiary Filters	9 Reuse Facilities	10 Odor Control	11 Peak Flow Management/Disinfection Chamber	12 Indirect	Total	Improvement Type: Capacity	Performance	Rehabilitation
Collection System/Influent Pumping																															Capacity	Performance	Rehabilitation
Willakenzie Pump Station Expansion	$6,000,000		50.0%											50.0%			$0	$3,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,000,000	$0	$6,000,000	100%	0%	
Screw Pump Station Expansion	$1,700,000		50.0%											50.0%			$0	$850,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$850,000	$0	$1,700,000	100%	0%	
Glenwood Pump Station Upgrade	$500,000		50.0%											50.0%			$0	$250,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$250,000	$0	$500,000	100%		
River Avenue Improvements	$330,000														100.0%		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$330,000	$330,000	0%	0%	100%
Subtotal Collection System/Influent Pumping	**$8,530,000**																**$0**	**$4,100,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$4,100,000**	**$330,000**	**$8,530,000**			
Liquids Treatment																																	
Headworks Expansion	$12,800,000			50.0%										50.0%			$0	$0	$6,400,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,400,000	$0	$12,800,000	100%	0%	
Primary clarifier enhancements	$1,200,000				50.0%									50.0%			$0	$0	$0	$600,000	$0	$0	$0	$0	$0	$0	$0	$0	$600,000	$0	$1,200,000	100%		
Primary sludge thickening outside of primary clarifier	$3,800,000				50.0%									50.0%			$0	$0	$0	$1,800,000	$0	$0	$0	$0	$0	$0	$0	$0	$1,800,000	$0	$3,800,000	100%	0%	
Additional odorous air treatment	$6,900,000												100.0%				$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,900,000	$0	$0	$6,900,000		100%	
South aeration basin improvements	$6,900,000					90.0%								10.0%			$0	$0	$0	$0	$6,210,000	$0	$0	$0	$0	$0	$0	$0	$0	$690,000	$0	$6,900,000	50%	50%	
North aeration basin improvements	$6,200,000					90.0%								10.0%			$0	$0	$0	$0	$5,580,000	$0	$0	$0	$0	$0	$0	$0	$0	$620,000	$0	$6,200,000	50%	50%	
Secondary clarifier enhancements	$5,300,000					50.0%								50.0%			$0	$0	$0	$0	$2,650,000	$0	$0	$0	$0	$0	$0	$0	$0	$2,650,000	$0	$5,300,000	50%	50%	
9th and 10th secondary clarifiers	$6,300,000					50.0%								50.0%			$0	$0	$0	$0	$3,150,000	$0	$0	$0	$0	$0	$0	$0	$0	$3,150,000	$0	$6,300,000	100%	0%	
Conversion to sodium hypochlorite disinfection	$4,100,000						50.0%							50.0%			$0	$0	$0	$0	$0	$2,050,000	$0	$0	$0	$0	$0	$0	$0	$2,050,000	$0	$4,100,000	50%	50%	
Filtration	$20,200,000										90.0%			10.0%			$0	$0	$0	$0	$0	$0	$0	$0	$0	$18,180,000	$0	$0	$0	$2,020,000	$0	$20,200,000	25%	75%	
Parallel Primary Secondary	$11,000,000													100.0%			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$11,000,000	$0	$11,000,000	100%	0%	
New Bankside Outfall	$1,800,000						50.0%							50.0%			$0	$0	$0	$0	$0	$750,000	$0	$0	$0	$0	$0	$0	$0	$750,000	$0	$1,800,000	100%	0%	
Subtotal Liquids Treatment	**$86,000,000**																**$0**	**$0**	**$6,400,000**	**$2,400,000**	**$17,590,000**	**$2,800,000**	**$0**	**$0**	**$0**	**$18,180,000**	**$0**	**$6,900,000**	**$31,730,000**	**$0**	**$86,000,000**			
Treatment -- Biosolids																																	
Waste Activated Sludge Thickening	$2,800,000							100.0%									$0	$0	$0	$0	$0	$0	$2,500,000	$0	$0	$0	$0	$0	$0	$0	$2,800,000	100%	0%	
Digestion Expansion/Class A Capability	$13,800,000							100.0%									$0	$0	$0	$0	$0	$0	$13,800,000	$0	$0	$0	$0	$0	$0	$0	$13,800,000	33%	67%	
Digestion Mixing Improvements	$2,000,000							100.0%									$0	$0	$0	$0	$0	$0	$2,000,000	$0	$0	$0	$0	$0	$0	$0	$2,000,000	50%	50%	
Biocycle Farm Phase 2	$300,000									100.0%							$0	$0	$0	$0	$0	$0	$0	$0	$300,000	$0	$0	$0	$0	$0	$300,000		100%	
Biocycle Farm Phase 3	$300,000									100.0%							$0	$0	$0	$0	$0	$0	$0	$0	$300,000	$0	$0	$0	$0	$0	$300,000		100%	
Biocycle Farm Distribution Equipment	$260,000									100.0%							$0	$0	$0	$0	$0	$0	$0	$0	$260,000	$0	$0	$0	$0	$0	$260,000		100%	
Composting facility	$650,000									100.0%							$0	$0	$0	$0	$0	$0	$0	$0	$650,000	$0	$0	$0	$0	$0	$650,000		100%	
Biosolids Management Facility (BMF) - Line lagoons phase 1	$1,200,000							100.0%									$0	$0	$0	$0	$0	$0	$1,200,000	$0	$0	$0	$0	$0	$0	$0	$1,200,000			100%
BMF - Line lagoons phase 2	$1,100,000							100.0%									$0	$0	$0	$0	$0	$0	$1,100,000	$0	$0	$0	$0	$0	$0	$0	$1,100,000			100%
BMF - Line lagoons phase 3	$1,100,000							100.0%									$0	$0	$0	$0	$0	$0	$1,100,000	$0	$0	$0	$0	$0	$0	$0	$1,100,000			100%
BMF - Line lagoons phase 4	$1,100,000							100.0%									$0	$0	$0	$0	$0	$0	$1,100,000	$0	$0	$0	$0	$0	$0	$0	$1,100,000			100%
Repairs/Partial Replacement of Biosolids Forcemain	$1,000,000							100.0%									$0	$0	$0	$0	$0	$0	$1,000,000	$0	$0	$0	$0	$0	$0	$0	$1,000,000			100%
Subtotal Biosolids	**$25,310,000**																**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$23,800,000**	**$0**	**$1,510,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$25,310,000**			
Support Facilities																																	
Maintenance Facility Improvements	$1,500,000														100.0%		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,500,000	$1,500,000		100%	
Fiber Optic Wiring	$10,000														100.0%		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,000	$10,000		100%	
Subtotal Support	**$1,510,000**																**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$1,510,000**	**$1,510,000**			
Total Treatment	**$112,820,000**																**$0**	**$0**	**$6,400,000**	**$2,400,000**	**$17,590,000**	**$2,800,000**	**$23,800,000**	**$0**	**$1,510,000**	**$18,180,000**	**$0**	**$6,900,000**	**$31,730,000**	**$1,510,000**	**$112,820,000**			
Effluent Reuse	$20,000,000											100%					$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$20,000,000	$0	$0	$20,000,000		100%	
Other Projects																																	
Temporary Construction Management Facilities	$100,000														100.0%		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$100,000	$100,000		100%	
Mixing Zone Study update	$150,000						100.0%										$0	$0	$0	$0	$0	$150,000	$0	$0	$0	$0	$0	$0	$0	$0	$150,000		100%	
Partial facility plan update (2010)	$150,000														100.0%		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$150,000	$150,000		100%	
Comprehensive facility plan (2015)	$800,000														100.0%		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$800,000	$800,000		100%	
Partial facility plan update (2020)	$150,000														100.0%		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$150,000	$150,000		100%	
Comprehensive facility plan (2025)	$800,000														100.0%		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$800,000	$800,000		100%	
Wet Weather Flow Management Plan Update	$250,000													100.0%			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$250,000	$0	$250,000		100%	
Support development of private lateral program	$250,000													100.0%			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$250,000	$0	$250,000			100%
Subtotal Other Projects	**$2,650,000**																**$0**	**$0**	**$0**	**$0**	**$0**	**$150,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$500,000**	**$2,000,000**	**$2,650,000**			
TOTAL	**$144,000,000**																**$0**	**$4,100,000**	**$6,400,000**	**$2,400,000**	**$17,590,000**	**$2,950,000**	**$23,800,000**	**$0**	**$1,510,000**	**$18,180,000**	**$20,000,000**	**$6,900,000**	**$36330,000**	**$3,840,000**	**$144,000,000**			

TABLE 8.6.1-2
Summary of 20-Year Project List Allocations for Improvement Fee
MWMC Facility Plan, Eugene-Springfield

	Allocation Summary				
PROJECT	**Growth Portion (in 2004 dollars)**	**Growth %**	**Existing User Portion (in 2004 Dollars)**	**Existing Users %**	Total
Collection System/Influent Pumping					
Willakenzie Pump Station Expansion	$2,294,118	38%	$3,705,882	62%	$6,000,000
Screw Pump Station Expansion	$650,000	38%	$1,050,000	62%	$1,700,000
Terry Street Pump Station Upgrade			$0	#DIV/0!	$0
Glenwood Pump Station Upgrade	$191,176	38%	$308,824	62%	$500,000
River Avenue Improvements	$0	0%	$330,000	100%	$330,000
Subtotal Collection System/Influent Pumping	**$3,135,294**	**37%**	**$5,394,706**	63%	$8,530,000
Liquids Treatment					
Headworks Expansion	$4,894,118	38%	$7,905,882	62%	$12,800,000
Primary clarifier enhancements	$776,471	65%	$423,529	35%	$1,200,000
Primary sludge thickening outside of primary clarifiers	$2,329,412	65%	$1,270,588	35%	$3,600,000
Additional odorous air treatment	$1,797,019	26%	$5,102,981	74%	$6,900,000
South aeration basin improvements	$4,051,880	59%	$2,848,120	41%	$6,900,000
North aeration basin improvements	$3,640,820	59%	$2,559,180	41%	$6,200,000
Secondary clarifier enhancements	$2,203,026	42%	$3,096,974	58%	$5,300,000
9th and 10th secondary clarifiers	$4,076,471	65%	$2,223,529	35%	$6,300,000
Conversion to sodium hypochlorite disinfection	$1,044,878	25%	$3,055,122	75%	$4,100,000
Filtration	$8,412,649	42%	$11,787,351	58%	$20,200,000
Parallel Primary Secondary	$3,235,294	29.4%	$7,764,706	70.6%	$11,000,000
New Bankside Outfall	$573,529	38%	$926,471	62%	$1,500,000
Subtotal Liquids Treatment	**$37,035,566**	**43%**	**$48,964,434**	57%	$86,000,000
Treatment -- Biosolids					
Waste Activated Sludge Thickening	$2,500,000	100%	$0	0%	$2,500,000
Digestion Expansion/Class A Capability	$7,489,780	54%	$6,310,220	46%	$13,800,000
Digestion Mixing Improvements	$1,317,519	66%	$682,481	34%	$2,000,000
Biocycle Farm Phase 2	$66,528	22%	$233,472	78%	$300,000
Biocycle Farm Phase 3	$66,528	22%	$233,472	78%	$300,000
Biocycle Farm Distribution Equipment	$57,658	22%	$202,342	78%	$260,000
Composting facility	$144,145	22%	$505,855	78%	$650,000
Biosolids Management Facility (BMF) - Line lagoons phase 1	$0	0%	$1,200,000	100%	$1,200,000
BMF - Line lagoons phase 2	$0	0%	$1,100,000	100%	$1,100,000
BMF - Line lagoons phase 3	$0	0%	$1,100,000	100%	$1,100,000
BMF - Line lagoons phase 4	$0	0%	$1,100,000	100%	$1,100,000
Repairs/Partial Replacement of Biosolids Forcemain	$0	0%	$1,000,000	100%	$1,000,000
Subtotal Biosolids	**$11,642,158**	**46%**	**$13,667,842**	54%	$25,310,000
Support Facilities					
Maintenance Facility Improvements	$315,156	21%	$1,184,844	79%	$1,500,000
Fiber Optic Wiring	$2,101	21%	$7,899	79%	$10,000
Subtotal Support	**$317,257**	**21%**	**$1,192,743**	79%	$1,510,000

TABLE 8.6.1-2
Summary of 20-Year Project List Allocations for Improvement Fee
MWMC Facility Plan, Eugene-Springfield

	Allocation Summary				
PROJECT	**Growth Portion (in 2004 dollars)**	**Growth %**	**Existing User Portion (in 2004 Dollars)**	**Existing Users %**	Total
Total Treatment					
Effluent Reuse	**$5,212,512**	**26%**	$14,787,488	74%	$20,000,000
Other Projects					
Temporary Construction Management Facilities	$21,010	21%	$78,990	79%	$100,000
Mixing Zone Study update	$21,958	15%	$128,042	85%	$150,000
Partial facility plan update (2010)	$31,516	21%	$118,484	79%	$150,000
Comprehensive facility plan (2015)	$168,083	21%	$631,917	79%	$800,000
Partial facility plan update (2020)	$31,516	21%	$118,484	79%	$150,000
Comprehensive facility plan (2025)	$168,083	21%	$631,917	79%	$800,000
Wet Weather Flow Management Plan Update	$27,076	11%	$222,924	89%	$250,000
Support development of private lateral program	$0	0%	$250,000	100%	$250,000
Subtotal Other Projects	**$469,241**	**18%**	**$2,180,759**	82%	$2,650,000
TOTAL	$57,812,027	40%	$86,187,973	60%	$144,000,000