



2005 – 2006 Proposed Budget --- Budget Summary Sewer Fund – Water Reclamation Facility

2005 – 2006 Water Reclamation Facility Budget Highlights

➤ **Professional Services** --- The Oregon Department of Environmental Quality (DEQ) will conduct a second Total Daily Maximum Loading (TMDL) evaluation on the South Yamhill River during 2006. This TMDL will be focused on temperature, bacteria, iron, and also may include a review of the nutrient evaluation conducted during the first TMDL (ammonia and phosphorus). Much of this year's professional services budget will be to support a participatory approach with DEQ.

➤ **WRF Administrative Building Conservation Project** --- A study was conducted last fiscal year to identify energy conservation measures for the WRF Administrative Building. The analysis performed by EESI of Corvallis recommended a number of energy saving measures for the laboratory and the Administration Building. In part, the recommendation is to use a heat pump to replace the existing electric strip heat source in the main supply air fans. One advantage this system offers is the ability to use plant effluent (final treated water) as a source of heat. The direct cost to the WRF after tax credits and other utility incentives would be approximately \$80,000. Using a simple payback calculation it would take the WRF 4.1 years to recover its investment.

➤ **New Programs, Projects, or Equipment:**

- Privatize landscape maintenance and janitorial service.
- \$180,000 – Implement the results of the Administration Building energy conservation project.
- \$22,000 – Replacement vehicle for the Pretreatment Program.

Full-Time Equivalents

	<u>2004 - 2005</u>	<u>Change</u>	<u>2005 - 2006</u>
FTE Adopted Budget	14.68		
Facility Maint Specialist		- 1.00	
Extra Help - WRF		+ <u>0.73</u>	
FTE Proposed Budget		- 0.27	14.41

Short- and Long-Term Issues

WRF Operations:

➤ **Short-Term Issues**

- Implement changes to Supervisory Control and Data Acquisition (SCADA) system, including radio telemetry system.

➤ **Long-Term Issues**

- Test and evaluate replacement aeration equipment for the solids digestion process.
- Evaluate the impacts to the WRF of the proposed Total Daily Maximum Load (TMDL) process for the South Yamhill River.



3,453,690 pounds of pollutants were removed from the wastewater prior to being discharged into the South Yamhill River.

2005 – 2006 Proposed Budget --- Budget Summary

Sewer Fund – Water Reclamation Facility

Short- and Long-Term Issues - Continued

WRF Maintenance:

↻ Short-Term Issues

- Contract both landscape and janitorial services to private contractors.

↻ Long-Term Issues

- Ensure all future motor and gearbox replacements are with energy efficient models.
- Assess all older pump station control systems for upgrades to improve control and reliability.

Pretreatment Program:

↻ Short-Term Issues

- Respond to recommendations/requirements resulting from the March 2005 DEQ Pretreatment Program Audit.

↻ Long-Term Issues

- Conduct a review of Local Discharge Limitations for conventional and toxic pollutants (Local Limits) as required by the WRF's new NPDES Permit.
- Develop a Fats, Oils, and Grease (FOG) control program to reduce sanitary blockages and sewer cleaning frequency.
- Expand Pretreatment Program Industrial User computer data management system.

Laboratory

↻ Short-Term Issues

- Develop an ambient sampling plan to correspond to the upcoming TMDL for the South Yamhill River.

↻ Long-Term Issues

- Continue to develop laboratory protocol that meets the National Laboratory Accreditation Program requirements.

Core Services

↻ Operations

- Provide cost effective and efficient operation of the WRF necessary to achieve NPDES permit requirements.
- Provide 24-hour per day alarm monitoring response for WRF and pump stations.

↻ Maintenance

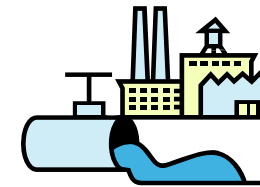
- Perform predictive, preventative, and corrective maintenance required to keep equipment operational and minimize down time.
- Perform equipment repairs and upgrades that will extend the useful life of the WRF and pump station equipment.

↻ Pretreatment

- Provide source control for the collection system and WRF to protect against illicit discharges and harmful wastes that impact the treatment processes or may be harmful to employees working in the collection system.
- Prepare and issue permits to industrial dischargers and enforce the sewer user ordinance as required.

↻ Laboratory

- Perform required laboratory analysis per the NPDES permit.
- Maintain precision through extensive quality assurance and quality control measures.



In 2004, the pretreatment staff spent 2,700 hours inspecting, sampling, and monitoring industries.



Sewer Fund – Water Rec. Facility --- Historical Highlights

1953 McMinnville's first wastewater treatment facility begins operation on May 4, 1953. The construction cost totaled \$396,456.40 and was designed to serve a population of 8,000. The residential user fee was \$0.75 per month.

1964 First sewage treatment plant upgrade was completed in March adding a new 35' digester with mechanical mixing and upgraded digester heating system.

1971 Major expansion of the original trickling filter plant to an activated sludge treatment system to meet a growing population and changing water quality standards.

1989 Department of Environmental Quality (DEQ) conducts first Total Maximum Daily Loading (TMDL) evaluation on the South Yamhill River. River is water quality limited for phosphorus and ammonia.

1992 City's Pretreatment Program is approved by DEQ on October 25, 1992.

1993 City breaks ground on new Water Reclamation Facility (WRF).

1995 City explores outsourcing WRF operations and management. City Council decides to retain direct operating control of WRF after considering cost analysis.

1996 The \$28 million Water Reclamation Facility (WRF) begins operating on January 24, 1996, in response to new water quality standards and the City's growing population.

1998 WRF receives two awards from The Pacific Northwest Pollution Control Association ---. Municipal Water Protection Award for WRFs contribution to clean water and George W. Burke Facility Safety award.

1999 The Oregon Association of Clean Water Agencies (ACWA) presents WRF with Outstanding Member Agency Award for its contribution to improving water quality.

2005 WRF begins tenth year of operation in January. A second TMDL evaluation for the South Yamhill River will begin in 2006.



The WRF recycled 3.9 million gallons of biosolids (fertilizer) to agricultural land.



WRF Laboratory received 1,838 samples and performed over 12,500 analyses last year.

The WRF treated 1.6 billion gallons of wastewater in 2004.



WATER RECLAMATION FACILITY

2005-06

10-May-05

55	10	ACTUAL 2002-03	ACTUAL 2003-04	BUDGET 2004-05		NUMBER OF EMPLOYEES	PROPOSED 2005-06	APPROVED 2005-06	ADOPTED 2005-06	
REQUIREMENTS										
<u>PERSONAL SERVICES</u>										
		75,372	75,372	77,033	80245-00	WRF OPERATIONS MANAGER	1.00	79,478	0	0
					Ron Bittler					
		64,901	64,901	65,868	80257-00	WRF OPERATIONS SUPERINTENDENT	1.00	67,624	0	0
					Ernie Strahm					
		62,760	34,268	0	80295-00	WRF ENVIRONMENTAL SVCS SUPVR	0.00	0	0	0
		60,714	7,680	46,774	80298-00	WRF LABORATORY TECH - SENIOR	1.00	46,867	0	0
					Steve Covey					
		43,788	37,321	44,441	80304-00	WRF LABORATORY TECHNICIAN	1.00	46,093	0	0
					Lora Lyons					
		0	10,449	39,889	80304-05	WRF SR ENVIRONMENTAL TECH	1.00	46,324	0	0
					Cindy Esterle					
		0	20,267	39,677	80305-00	WRF ENVIRONMENTAL TECH II	1.00	40,253	0	0
					Larry Morse					
		50,436	50,436	51,181	80307-00	WRF OPERATOR - SENIOR	1.00	52,540	0	0
					Dave Gehring					
		127,143	127,584	130,885	80308-00	WRF PLANT OPERATOR II	3.00	137,147	0	0
					Tim Munro					
					Rick Williams					
					Matthew Young					
		90,718	91,992	93,382	80323-00	WRF MECHANIC	2.00	96,056	0	0
					David Allen					
					Leland Koester					
		36,276	37,776	38,664	80341-00	FACILITIES MAINT SPECIALIST II	0.00	0	0	0
					Budget Note: This vacant position was eliminated and the position duties allocated between contractual landscape maintenance, Account #55-10-80631-00; contractual janitorial services, Account #55-10-80609-00; and extra help, Account #55-10-80385-00.					
		30,246	30,984	31,452	80371-00	OFFICE SPECIALIST II	1.00	32,302	0	0
					Patti Buffett					
		9,841	15,981	12,000	80385-00	EXTRA HELP - WRF	1.41	25,000	0	0
					Budget Note: Budget amount increased to cover some duties of the Facilities Maintenance Specialist II position, Account #55-10-80341-00, that was eliminated from the 2005 - 2006 Proposed Budget.					
		8,589	9,999	15,000	80386-00	OVERTIME	0.00	15,000	0	0

WATER RECLAMATION FACILITY

2005-06

10-May-05

55	10	ACTUAL 2002-03	ACTUAL 2003-04	BUDGET 2004-05		NUMBER OF EMPLOYEES	PROPOSED 2005-06	APPROVED 2005-06	ADOPTED 2005-06
		0	0	0	80388-00 FRINGE BENEFITS:	0.00	0	0	0
		48,852	44,815	52,498	80389-00 FICA	0.00	52,376	0	0
		133,543	108,892	127,633	80390-00 PERS, OPSRP & IAP	0.00	159,576	0	0
		59,984	63,653	95,268	80391-00 HEALTH INSURANCE	0.00	93,900	0	0
		1,163	1,074	1,260	80392-00 LIFE INSURANCE	0.00	897	0	0
		13,125	12,634	15,261	80393-00 WORKERS' COMPENSATION INS	0.00	18,751	0	0
		0	0	1,000	80394-00 UNEMPLOYMENT	0.00	2,500	0	0
		3,577	3,246	3,757	80395-00 DISABILITY INSURANCE	0.00	3,673	0	0
		921,028	849,324	982,923	TOTAL PERSONAL SERVICES	14.41	1,016,357	0	0
					<u>MATERIALS & SERVICES</u>				
		363	325	1,000	80418-00 SAFETY TRAINING/OSHA Expenditures required to conduct safety meetings, training films, posters, and handouts, etc.	0.00	1,000	0	0
		574	1,029	850	80420-00 EMPLOYEE DEVELOPMENT "In-house" presentations, seminars, and workshops providing continuing development for City employees.	0.00	900	0	0
		5,054	8,969	10,000	80421-00 TRAVEL & EDUCATION Memberships and registrations to professional organizations, attendance at the Water Environment Federation National Conference; and reimbursements to employees for approved education programs and travel expenses incurred. Includes continuing education credits required for employee state	0.00	12,000	0	0
		4,385	4,806	5,000	80431-00 GAS - OIL - GREASE Gas, oil, and grease used by vehicles, plant, and pump stations.	0.00	5,000	0	0
		343,930	319,259	317,400	80441-00 FUEL & POWER 225,400 Electrical and natural gas for WRF 52,100 Electrical and natural gas for Raw Sewage Pump Station 35,000 Electrical and natural gas for Cozine Pump Station 6,800 Electrical for all other pump stations	0.00	319,300	0	0
					Budget Note: Power and fuel costs do not include any future rate adjustment or change in demand charge calculations by McMinnville Water & Light or NW Natural Gas.				
		19,639	17,500	20,000	80451-00 TELECOMMUNICATIONS Telephone and fax usage, telemetry lease lines, pagers, and Nextel communication system charges. Maintenance costs for the fiber connection to WRF for computer services.	0.00	20,000	0	0
		8,422	15,871	9,500	80461-00 MATERIALS & SUPPLIES Employee protective clothing, general cleaning supplies, office supplies, garbage service, advertisement, postage, and shipping costs.	0.00	11,000	0	0

WATER RECLAMATION FACILITY

2005-06

10-May-05

55	10	ACTUAL 2002-03	ACTUAL 2003-04	BUDGET 2004-05		NUMBER OF EMPLOYEES	PROPOSED 2005-06	APPROVED 2005-06	ADOPTED 2005-06
		17,306	13,965	20,000	80463-00 LAB EXPENSE	0.00	29,400	0	0
				11,250	Materials and supplies				
				4,200	Laboratory instrument maintenance agreements and equipment calibration service				
				1,600	Water purification system filters and maintenance				
				12,000	Ambient Program; river sampling and data logger replacements				
				350	Quality Assurance and Quality Control (QA/QC) EPA study				
		22,833	23,683	25,520	80469-00 PERMIT & BASIN COUNCIL FEES	0.00	25,500	0	0
				8,040	National Pollutant Discharge Elimination System (NPDES) compliance determination annual fee				
				4,420	Pretreatment Program fee - includes population based fee				
				6,060	US Geological Survey river monitoring station annual fee				
				2,500	Yamhill Basin Council support				
				1,500	DEQ plan review fee				
				1,150	DEQ annual wastewater certification support fee				
				250	Yamhill County annual electrical inspection fee				
				750	DEQ hazardous substance possession fee				
				500	Oregon Department of Consumer Services - compressor permits				
				330	DEQ Stormwater fee				
		0	0	0	80472-99 REPAIRS & MAINTENANCE:	0.00	0	0	0
		91,674	155,143	163,500	80473-00 R&M - EQUIPMENT	0.00	162,500	0	0
				70,000	Routine mechanical and electrical at plant and pump station				
				33,000	ATAD #3 protective coating application - digester				
				35,000	Instrumentation and control repairs				
				10,000	HVAC control maintenance				
				8,000	UV system maintenance				
				1,500	Rental equipment				
				5,000	Irrigation system and in WRF water system maintenance				
		3,021	2,691	4,200	80477-00 R&M - VEHICLES	0.00	4,400	0	0
		21,425	19,978	21,500	80481-00 R&M - SUPPLIES	0.00	21,000	0	0
					Repair and maintenance supplies such as HVAC filters, fasteners, packing, electrical components, brackets, paint, and PVC pipe fittings.				
		2,715	3,457	4,200	80493-00 R&M - RENTAL PROPERTY	0.00	4,200	0	0
					Riverside Drive rental property repairs and routine maintenance. Property taxes and insurance expense is approximately 50% of total.				
		54,400	57,600	67,100	80511-00 INSURANCE-PROPERTY & LIABILITY	0.00	64,500	0	0
		62,747	51,799	59,000	80521-00 CHEMICALS	0.00	47,500	0	0
				20,000	Poly aluminum chlorohddrate (PAC)				
				4,000	Sodium hypochlorite				
				13,000	Polymer				
				6,500	Alum				
				4,000	Herbicides, molasses, and lime				

WATER RECLAMATION FACILITY

2005-06

10-May-05

55	10	ACTUAL 2002-03	ACTUAL 2003-04	BUDGET 2004-05	NUMBER OF EMPLOYEES	PROPOSED 2005-06	APPROVED 2005-06	ADOPTED 2005-06
		576	1,271	3,000	0.00	8,800	0	0
				80609-00 JANITORIAL SERVICES & SUPPLIES				
				Janitorial contract for administration and headworks building.				
				Budget Note: Janitorial duties were previously performed by the Facilities Maintenance Specialist II, Account #55-10-80341-00.				
		34,997	22,047	43,950	0.00	39,550	0	0
				80611-00 PROFESSIONAL SERVICES:				
				35,000 Engineering and technical support				
				3,600 Audit fee allocation				
				600 Water & Light Department sewer billing fee - annual				
				350 Section 125 employee accounts administration fee				
		980	1,410	1,100	0.00	2,600	0	0
		0	0	0	0.00	25,000	0	0
				80611-05 PS - HUMAN RESOURCES				
				80611-21 PS - ADMIN BLDG ENERGY CONSV				
				Design cost for upgrading heating and cooling system.				
				0	0.00	30,000	0	0
				80611-23 PS - OXIDATION DITCH UPGRADE				
				Engineering and electrical consultant services for design of oxidation ditch upgrade project.				
		0	20,548	15,000	0.00	0	0	0
				80611-53 PS - EQUIPMENT STORAGE BLDG				
		36,760	16,830	16,800	0.00	16,283	0	0
				80612-00 COMPUTER SERVICES - IS FUND				
				Shared network services cost - Network and PC support agreements, licenses, financial systems, internet connection etc.				
		0	0	0	0.00	0	0	0
				80615-00 CONTRACT SERVICES:				
		48,106	76,241	64,500	0.00	68,700	0	0
				80615-01 CS - BIOSOLIDS				
				Biosolids hauling from the WRF.				
		23,126	22,441	43,500	0.00	36,200	0	0
				80615-02 CS - LAB				
				Outside laboratory services - semi-annual metals using "ultra clean" sampling techniques and permit requirement to perform bioassay (toxicity test) on effluent.				
		7,280	5,794	8,550	0.00	23,750	0	0
				80631-00 MAINTENANCE & RENTAL CONTRACTS				
				1,800 Elevator maintenance contract				
				550 Fire alarm monitoring and service calls				
				2,000 Fire sprinkler maintenance, extinguishers, and backflow testing				
				3,000 Fire system inspections, testing, and repair twice per year				
				1,400 Photocopier lease and maintenance agreement				
				15,000 WRF landscape maintenance contract --- work previously performed by eliminated Facilities Maintenance Specialist II, Account #55-10-80341-00				
		8,736	5,470	8,500	0.00	6,600	0	0
				80633-00 SOFTWARE MAINTENANCE				
				WRF Control System Software:				
				2,000 MP2 support				
				3,000 RS - Rockwell support				
				1,600 Ops 32 support				

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2005-06

10-May-05

55	10	ACTUAL 2002-03	ACTUAL 2003-04	BUDGET 2004-05		NUMBER OF EMPLOYEES	PROPOSED 2005-06	APPROVED 2005-06	ADOPTED 2005-06
		0	0	0	80680-00 M&S ASSETS:	0.00	0	0	0
					Materials & Supplies Asset purchases, with values under \$4,999 and more than one-year useful life.				
		0	0	0	80681-00 M&S EQUIPMENT:	0.00	0	0	0
		2,411	0	0	80681-01 M&S EQUIP - PLANT	0.00	0	0	0
		2,105	0	0	80681-03 M&S EQUIP - PUMP STATIONS	0.00	0	0	0
		775	4,030	2,000	80681-05 M&S EQUIP - LAB	0.00	7,200	0	0
					2,300 Portable sampler (ambient program)				
					1,500 Boat trailer (ambient program)				
					2,250 Laboratory dry incubator				
					600 Field conductivity meter (ambient program)				
					550 Field dissolved oxygen probe w/50' cable				
		1,771	1,836	5,500	80681-07 M&S EQUIP - WRF COMPUTERS	0.00	17,000	0	0
					Replacement process computer, communication cards, and pretreatment database.				
					Budget Note: Increase due to purchase of new database for maintaining pretreatment records as required by Department of Environmental Quality (DEQ).				
		11,000	3,600	17,381	80683-00 M&S COMPUTERS - IS FUND	0.00	14,290	0	0
					6,029 Department computer equipment				
					3,200 Replacement computers - 2				
					2,500 InFocus projector				
					329 Software upgrade and PC extended warranty				
					1,556 M&S Equipment - IS Department				
					991 M&S Equipment - Network Software				
					5,880 M&S Equipment - Network Hardware				
					5,863 Capital Equipment - Network Hardware/Software				
					(6,029) Information Systems Fund - Designated Fund Balance utilized				
		837,111	877,593	958,551	TOTAL MATERIALS & SERVICES	0.00	1,024,173	0	0
					<u>CAPITAL OUTLAY</u>				
		33,423	33,334	23,000	80701-00 EQUIPMENT	0.00	0	0	0
		0	0	0	80704-00 EQUIPMENT - COMPUTER - IS FUND	0.00	0	0	0
		0	0	0	80704-99 EQUIPMENT - COMPUTER - WRF	0.00	0	0	0
		0	0	70,000	80731-00 VEHICLES	0.00	22,000	0	0
					Replace 1992 3/4 ton van with a small pickup truck to be used by the pretreatment section and laboratory for ambient sampling program.				
					Budget Note: The van will be re-deployed to the Information Services Department with the present IS van surplus.				
		0	0	15,000	80771-00 BUILDING IMPROVEMENTS:	0.00	0	0	0

WATER RECLAMATION FACILITY

2005-06

10-May-05

55	10	ACTUAL 2002-03	ACTUAL 2003-04	BUDGET 2004-05		NUMBER OF EMPLOYEES	PROPOSED 2005-06	APPROVED 2005-06	ADOPTED 2005-06
		0	0	0	80771-21 ADMIN BLDG ENERGY CONSERVATN	0.00	155,000	0	0
					Equipment and construction cost for upgrading administration building heating and cooling system.				
					Budget Note: Projected \$75,000 of energy conservation incentives, rebates, and cashing tax credits are anticipated from these WRF administration building renovations, Account #55-00-60167-00.				
		0	0	0	80771-23 OXIDATION DITCH UPGRADE	0.00	140,000	0	0
					Installation of new motors, gearboxes, and variable frequency drives (VFD's) on the oxidation ditches.				
					Budget Note: This project is being submitted as an energy conservation project to McMinnville Water & Light and the Bonneville Power Administration. Projected \$70,000 of energy conservation incentives, rebates, and cashing tax credits are anticipated from this oxidation ditch upgrade project, Account #55-00-60167-00.				
		0	2,160	260,000	80771-53 EQUIPMENT STORAGE BUILDING	0.00	0	0	0
		0	0	0	80773-00 LAND IMPROVEMENTS	0.00	0	0	0
		33,423	35,494	368,000	TOTAL CAPITAL OUTLAY	0.00	317,000	0	0
		1,791,562	1,762,411	2,309,474	TOTAL REQUIREMENTS	14.41	2,357,530	0	0