



2006 – 2007 Proposed Budget --- Budget Summary Wastewater Services Fund – Water Reclamation Facility

2006 – 2007 Water Reclamation Facility Budget Highlights

➤ The Oregon Department of Environmental Quality (DEQ) is in the process of conducting a second Total Maximum Daily Loading (TMDL) evaluation on the South Yamhill River. 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). It will be critical for the WRF staff to participate in the TMDL process as much as DEQ allows our involvement. To help facilitate this process, West Yost and Associates and CH2M Hill will develop a technical memorandum during the WRF facilities plan update to identify the regulatory challenges facing the WRF. This document will help us determine what will ultimately impact the operation of the WRF facility and how to plan for the future.

➤ In addition to the TMDL process the current National Pollutant Discharge Elimination System (NPDES) permit for the WRF expires on December 31, 2008. This budget year represents the beginning process to meet the permit renewal requirements that will span two budget cycles. Permit renewal requirements have changed since the WRF's last permit was issued. Application for a new permit now includes performing what is called a Reasonable Potential Analysis for Toxic Pollutants (RPA) prior to submitting application for a permit. The RPA involves testing the effluent (treated wastewater) from the WRF for 126 chemical compounds or "priority pollutants". Each pollutant is then measured against water quality standards for a potential violation. DEQ's internal management directive requires performing three priority pollutant scans prior to submitting a permit application. Permit applications are due 180 days prior to the permit expiration date.

- New Programs, Projects, or Equipment:
 - \$15,000 --- Phase II of the Mixing Zone Evaluation Study.
 - \$40,000 --- Outside laboratory expense for performing additional laboratory analysis including RPA, bioassay, semi-annual metals, and quarterly biosolids.

Full-Time Equivalents

	<u>2005 - 2006</u>	<u>Change</u>	<u>2006 - 2007</u>
FTE Adopted Budget	14.41		
Extra Help - WRF		-	<u>0.65</u>
FTE Proposed Budget			13.76

Short- and Long-Term Issues

WRF Operations:

➤ Short-Term Issues

- Participate in the on-going facilities plan update for the WRF.
- Complete operator training on the recent upgrades to the SCADA (supervisory control and data acquisition) control system.

➤ Long-Term Issues

- Participate in South Yamhill Total Maximum Daily Load (TMDL) process with DEQ.
- Evaluate the impacts to the WRF of the proposed TMDL process for the South Yamhill River.



In 2005, 4,986,140 pounds of pollutants were removed from wastewater prior to being discharged into the South Yamhill River.

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Wastewater Services Fund – Water Reclamation Facility

Short- and Long-Term Issues - Continued

WRF Maintenance:

↻ Short-Term Issues

- Evaluate performance of digester aeration equipment upgrade.
- Complete pump station control system upgrades for the older stations.

↻ Long-Term Issues

- Ensure all future motor and gearbox replacements are with energy efficient models.
- Continue to identify equipment replacement or major rehab requirements and develop appropriate maintenance schedule.

Pretreatment Program:

↻ Short-Term Issues

- Identify and survey all non-residential users to characterize their wastewater discharge.
- Complete review of local discharge limits. Includes relaxed upper pH limit being proposed (current 9.0 limit, increase to 11.0).

↻ Long-Term Issues

- Revise majority of pretreatment program procedures and documents, including Sewer Use Ordinance, Pretreatment Implementation Guide, and Enforcement Response Plan. Requirement of DEQ audit and Federal Streamlining regulation changes.
- Expand community outreach regarding stormwater management and fats, oils, and grease (FOG) control. Also offer pretreatment informational session and WRF tour for local industry.

Laboratory

↻ Short-Term Issues

- Complete objectives of 2006 Sampling and Analysis Plan necessary to develop a data set for calculating revised local limits and performing the Reasonable Potential Analysis as required for the WRF's next NPDES permit application.
- Formalize summer internship program with Linfield College Environmental and Chemistry Departments.

↻ Long-Term Issues

- Continue to develop laboratory protocol that meets the National Laboratory Accreditation Program requirements.
- Evaluate options for future data management requirements, including expansion of current operations database by adding a Laboratory Information Management module.

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.

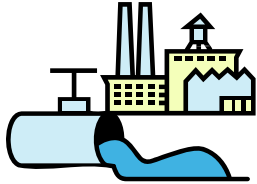
2006 – 2007 Proposed Budget --- Budget Summary

Wastewater Services Fund – Water Reclamation Facility

Core Services – Continued

➤ 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.



In 2005, the pretreatment program administered user charges for flow and extra strength wastewater totaling \$222,500.

➤ Laboratory

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



Wastewater Services 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 2005.



The WRF recycled 4.0 million gallons of biosolids (fertilizer) to agricultural land in 2005.



WRF Laboratory received 2,349 samples and performed over 16,400 analyses last year.

The WRF treated 1.7 billion gallons of wastewater in 2005.



WATER RECLAMATION FACILITY

2006-07

02-Aug-06

55	10	ACTUAL 2003-04	ACTUAL 2004-05	BUDGET 2005-06		NUMBER OF EMPLOYEES	PROPOSED 2006-07	APPROVED 2006-07	ADOPTED 2006-07	
REQUIREMENTS										
<u>PERSONAL SERVICES</u>										
		75,372	77,037	79,478	80245-00	WRF OPERATIONS MANAGER	1.00	81,674	81,674	81,674
					Ron Bittler					
		64,901	65,145	67,624	80257-00	WRF OPERATIONS SUPERINTENDENT	1.00	69,490	69,490	69,490
					Ernie Strahm					
		34,268	0	0	80295-00	WRF ENVIRONMENTAL SVCS SUPVR	0.00	0	0	0
		7,680	43,464	46,867	80298-00	WRF LABORATORY TECH - SENIOR	1.00	50,586	50,586	50,586
					Steve Covey					
		37,321	44,436	46,093	80304-00	WRF LABORATORY TECHNICIAN	1.00	49,036	49,036	49,036
					Lora Lyons					
		10,449	42,951	46,324	80304-05	WRF SR ENVIRONMENTAL TECH	1.00	46,097	46,097	46,097
					Larry Morse					
		20,267	35,074	40,253	80305-00	WRF ENVIRONMENTAL TECH II	1.00	38,465	38,465	38,465
					Laura Johnson					
		50,436	51,180	52,540	80307-00	WRF OPERATOR - SENIOR	1.00	53,984	53,984	53,984
					Dave Gehring					
		127,584	130,911	137,147	80308-00	WRF PLANT OPERATOR II	3.00	143,238	143,238	143,238
					Tim Munro					
					Rick Williams					
					Matthew Young					
		91,992	93,384	96,056	80323-00	WRF MECHANIC	2.00	99,488	99,488	99,488
					David Allen					
					Leland Koester					
		37,776	12,338	0	80341-00	FACILITIES MAINT SPECIALIST II	0.00	0	0	0
		30,984	31,452	32,302	80371-00	OFFICE SPECIALIST II	1.00	33,205	33,205	33,205
					Patti Buffett					
		15,981	10,637	25,000	80385-00	EXTRA HELP - WRF	0.76	13,500	13,500	13,500
		9,999	10,050	15,000	80386-00	OVERTIME	0.00	14,000	14,000	14,000
		0	0	0	80388-00	FRINGE BENEFITS:	0.00	0	0	0
		44,815	46,583	52,376	80389-00	FICA	0.00	52,997	52,997	52,997
		108,892	108,940	159,576	80390-00	PERS - OPSRP - IAP	0.00	167,578	167,578	167,578
		63,653	86,155	94,188	80391-00	MEDICAL INSURANCE	0.00	90,144	90,144	90,144

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55	10	ACTUAL 2003-04	ACTUAL 2004-05	BUDGET 2005-06		NUMBER OF EMPLOYEES	PROPOSED 2006-07	APPROVED 2006-07	ADOPTED 2006-07
		1,074	932	897	80392-00		897	897	897
		12,634	14,299	18,751	80393-00		28,488	28,488	26,649
		0	1,493	2,500	80394-00		2,000	2,000	2,000
		3,246	3,587	3,673	80395-00		3,792	3,792	3,792
		849,324	910,048	1,016,645	TOTAL PERSONAL SERVICES	13.76	1,038,659	1,038,659	1,036,820

MATERIALS & SERVICES

		325	1,195	1,000	80418-00		1,500	1,500	1,500
					Expenditures required to conduct safety meetings, training films, posters, and handouts, etc.				
		1,029	467	900	80420-00		800	800	800
					"In-house" presentations, seminars, and workshops providing continuing development for City				
		8,969	10,543	12,000	80421-00		14,000	14,000	14,000
					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				
		4,806	4,289	5,000	80431-00		5,000	5,000	5,000
					Gas, oil, and grease used by vehicles, plant, and pump stations.				
		319,259	306,315	319,300	80441-00		320,100	320,100	336,300
					223,500 Electrical and natural gas for WRF				
					48,600 Electrical and natural gas for Raw Sewage Pump Station				
					41,500 Electrical and natural gas for Cozine Pump Station				
					6,500 Electrical for all other pump stations				

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.

		17,500	17,687	20,000	80451-00		20,000	20,000	20,000
					Telephone and fax usage, telemetry lease lines, pagers, and Nextel communication system charges. Maintenance costs for the fiber connection to WRF for computer services.				

		15,871	14,996	11,000	80461-00		21,000	21,000	25,000
					Employee protective clothing, general cleaning supplies, office supplies, garbage service, advertisement, printing, postage, and shipping costs.				

Budget Note: With the shift of supervision of the Sanitary Sewer and Storm Drain Maintenance Division to the WRF Operations Manager, all material and supplies for both departments are covered by this account. Note - Material and Supplies Account #55-12-80461 dollars eliminated in Proposed

WATER RECLAMATION FACILITY

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55	10	ACTUAL 2003-04	ACTUAL 2004-05	BUDGET 2005-06		NUMBER OF EMPLOYEES	PROPOSED 2006-07	APPROVED 2006-07	ADOPTED 2006-07
		13,965	18,379	29,400	80463-00 LAB EXPENSE	0.00	20,000	20,000	20,000
					14,000 Materials and supplies				
					1,500 Laboratory instrument maintenance agreements and equipment calibration service				
					2,000 Water purification system filters and maintenance				
					2,100 Ambient Program; river sampling and data logger replacements				
					400 Quality Assurance and Quality Control (QA/QC) EPA study				
		23,683	22,810	25,500	80469-00 PERMIT & BASIN COUNCIL FEES	0.00	30,475	30,475	30,475
					10,344 National Pollutant Discharge Elimination System (NPDES) annual base fee				
					3,466 Population base fee				
					2,685 Pretreatment Program fee - includes significant industrial user fees				
					6,200 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				
					740 NPDES Permit re-opener fee - incorporates a stormwater 1200 Z permit				
					250 Yamhill County annual electrical inspection fee				
					750 DEQ hazardous substance possession fee				
					500 Oregon Department of Consumer Services - compressor permits				
					390 DEQ Stormwater Program fee				
		0	0	0	80472-99 REPAIRS & MAINTENANCE:	0.00	0	0	0
		155,143	188,787	162,500	80473-00 R&M - EQUIPMENT	0.00	192,000	192,000	192,000
					70,000 Routine mechanical and electrical at plant and pump stations				
					60,000 Oxidation ditch - gear box and motors				
					30,000 Instrumentation and control repairs				
					10,000 Administration building roof repair				
					5,000 HVAC control maintenance - Headworks & return building on WRF site; raw sewage pump station (RSPS); and Cozine pump station				
					10,000 Biofilter maintenance				
					2,000 Rental equipment				
					5,000 Irrigation system and in WRF water system maintenance				
		2,691	2,320	4,400	80477-00 R&M - VEHICLES	0.00	5,000	5,000	5,000
		19,978	20,506	21,000	80481-00 R&M - SUPPLIES	0.00	25,000	25,000	25,000
					Repair and maintenance supplies such as HVAC filters, fasteners, packing, electrical components, brackets, paint, and PVC pipe fittings.				
		3,457	2,878	4,200	80493-00 R&M - RENTAL PROPERTY	0.00	4,200	4,200	4,200
					Riverside Drive rental property repairs and routine maintenance. Property taxes and insurance expense is approximately 50% of total.				
		57,600	67,100	64,500	80511-00 INSURANCE-PROPERTY & LIABILITY	0.00	65,400	65,400	65,400

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55	10	ACTUAL 2003-04	ACTUAL 2004-05	BUDGET 2005-06		NUMBER OF EMPLOYEES	PROPOSED 2006-07	APPROVED 2006-07	ADOPTED 2006-07
		51,799	42,352	47,500	80521-00 CHEMICALS	0.00	55,000	55,000	55,000
				35,000	Aluminum chlorohydrate (ACH) and alum				
				3,500	Sodium hypochlorite				
				10,000	Polymer				
				6,500	Herbicides, molasses, and lime				
		1,271	5,738	8,800	80609-00 JANITORIAL SERVICES & SUPPLIES	0.00	8,800	8,800	8,800
					Janitorial contract for administration and headworks building.				
		22,047	15,861	94,550	80611-00 PROFESSIONAL SERVICES:	0.00	59,150	59,150	70,000
				15,000	Mixing zone study - Part II --- Effluent discharge evaluation				
				30,000	Engineering and technical support --- Miscellaneous				
				10,000	Pretreatment program development				
				10,000	Environmental legal fees --- Pretreatment program				
				3,200	Audit fee allocation				
				600	Water & Light Department sewer billing fee - annual				
				350	Section 125 employee accounts administration fee				
				850	Miscellaneous				
					Budget Note: A "mixing zone" is a designated portion of the river to serve as a zone of dilution allowed to thoroughly mix wastewater with river water.				
		1,410	33	2,600	80611-05 PS - HUMAN RESOURCES	0.00	2,400	2,400	2,400
		0	0	25,000	80611-21 PS - ADMIN BLDG ENERGY CONSV	0.00	0	0	10,000
		0	0	30,000	80611-23 PS - OXIDATION DITCH UPGRADE	0.00	0	0	0
		20,548	5,511	0	80611-53 PS - EQUIPMENT STORAGE BLDG	0.00	0	0	0
		16,830	16,800	16,283	80612-00 COMPUTER SERVICES - IS FUND	0.00	18,790	18,790	18,790
					Shared network services cost - Network and PC support agreements, licenses, financial systems, internet connection etc.				
		0	0	0	80615-00 CONTRACT SERVICES:	0.00	0	0	0
		76,241	53,268	68,700	80615-01 CS - BIOSOLIDS	0.00	125,000	125,000	125,000
					Biosolids hauling from the WRF.				
		22,441	21,069	65,000	80615-02 CS - LAB	0.00	40,000	40,000	40,000
					Outside laboratory services - semi-annual metals testing using "ultra clean" sampling techniques and permit requirement to perform bioassay (toxicity test) on effluent. Quarterly biosolids analysis. Complete local limits analysis and priority pollutants for conducting the Reasonable Potential Analysis				
		5,794	8,581	23,750	80631-00 MAINTENANCE & RENTAL CONTRACTS	0.00	23,200	23,200	23,200
				1,800	Elevator maintenance contract				
				600	Fire alarm monitoring and service calls				
				2,800	Fire sprinkler maintenance, extinguishers, and backflow testing				
				3,000	Fire system inspections, testing, and repair twice per year				
				15,000	WRF landscape maintenance contract				

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2006-07

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55	10	ACTUAL 2003-04	ACTUAL 2004-05	BUDGET 2005-06		NUMBER OF EMPLOYEES	PROPOSED 2006-07	APPROVED 2006-07	ADOPTED 2006-07
		5,470	7,070	6,600	80633-00 SOFTWARE MAINTENANCE	0.00	6,100	6,100	6,100
					WRF Control System Software:				
					2,000 MP2 support				
					2,000 RS - Rockwell support				
					2,100 Ops 32 support				
		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
		0	0	0	80681-01 M&S EQUIP - PLANT	0.00	0	0	0
		0	0	0	80681-03 M&S EQUIP - PUMP STATIONS	0.00	0	0	0
		4,030	1,485	7,200	80681-05 M&S EQUIP - LAB	0.00	16,400	16,400	16,400
					5,000 Spectrophotometer - Measures pollutants by using light absorption to measure various chemical compounds				
					4,500 IDEXX Quantitray - bacteria analysis				
					4,800 Drying oven - total suspended solids (TSS) analysis				
					2,100 Muffle furnace - solids samples				
		1,836	452	17,000	80681-07 M&S EQUIP - WRF COMPUTERS	0.00	18,000	18,000	18,000
					11,000 Pretreatment database for regulatory compliance				
					5,000 Process computer maintenance and communication card replacements				
					2,000 ISCO flowlink software for field samplers				
					Budget Note: The new pretreatment database will replace an old EPA software that is no longer supported. New software will improve WRF's ability to maintain necessary records to ensure compliance with DEQ's Pretreatment Program requirements.				
		3,600	17,382	14,290	80683-00 M&S COMPUTERS - IS FUND	0.00	10,977	10,977	10,977
					1,600 Department Computer Equipment Replacement computer - 1				
					9,377 M&S Equipment - IS Department Network Hardware and Software				
					*Computer --- Headworks #2				
		877,593	873,874	1,107,973	TOTAL MATERIALS & SERVICES	0.00	1,108,292	1,108,292	1,149,342
					<u>CAPITAL OUTLAY</u>				
		33,334	14,368	16,500	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	107,000	80731-00 VEHICLES	0.00	0	0	99,565
					96,865 Service truck with crane - carryover from 2005-2006				
					2,700 Pick-up canopy - carryover from 2005-2006				

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2006-07

02-Aug-06

55	10	ACTUAL 2003-04	ACTUAL 2004-05	BUDGET 2005-06		NUMBER OF EMPLOYEES	PROPOSED 2006-07	APPROVED 2006-07	ADOPTED 2006-07
		0	0	0	80771-00	0.00	0	0	0
		0	0	155,000	80771-21	0.00	0	0	85,000
		0	0	140,000	80771-23	0.00	0	0	0
		2,160	329,974	0	80771-53	0.00	0	0	0
		0	0	0	80773-00	0.00	0	0	0
		35,494	344,342	418,500	TOTAL CAPITAL OUTLAY	0.00	0	0	184,565
		1,762,411	2,128,264	2,543,118	TOTAL REQUIREMENTS	13.76	2,146,951	2,146,951	2,370,727