LEAGUE OF OREGON CITIES

WATER, WASTEWATER AND STORMWATER

UTILITY RATES AND CHARGES

2009 SURVEY

Survey conducted by the Environmental Finance Center and the League of Oregon Cities

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Water, Wastewater and Stormwater Utility Rates and Charges

2009 SURVEY

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Disclaimer: This is a voluntary survey conducted by the League of Oregon Cities. The responses do not constitute a statistically significant or scientifically valid data set. This survey is for informational purposes only. Based on this data, no legitimate conclusions can be drawn about any city that did not respond to this survey.

INTRODUCTION

In the summer of 2009, the League of Oregon Cities (LOC) surveyed its member cities to obtain information about utility rates and other system characteristics. This was the first survey of utility services since December 2004, and includes expanded questions relative to water, wastewater (sewer) and stormwater utility operations. The League contracted with the Environmental Finance Center at Boise State University to conduct the survey.

A couple of important disclaimers are in order. First, this is a voluntary survey conducted by the League of Oregon Cities. The responses do not constitute a statistically significant or scientifically valid data set. This survey is for informational purposes only. Based on this data, no legitimate conclusions can be drawn about any city that did not respond to the survey. Second, even among systems that seem similar because of population served, physical design, or even rates and charges assessed, there are multiple characteristics of each that limit valid comparisons. Issues of full-cost pricing, asset management and local economic conditions can flavor the context of the data shown here and further limit comparisons among seemingly similar utilities.

For the 241 surveys sent, 51 percent were returned. This response rate is consistent with other municipal league surveys (Oklahoma, 2008) and is reasonable given the complexity of the survey instrument. Among the survey respondents, the city of Detroit, Oregon with 92 permanent residents was the smallest and the city of Portland—with a population of approximately 550,000—was the largest. The table below shows the distribution of responses by population size.

Surveys Returned by Population (241 Issued)	
0-1,000	35
1,001-5,000	42
5,001-10,000	18
10,001-25,000	15
25,001 and up	13
Surveys Returned	**123**

Of the 123 surveys received, 112 member cities directly provide drinking water services, 107 provide wastewater utility services, and 61 have distinct stormwater utilities. Stormwater utility service operations are more prevalent in the communities with populations of 5,000 and more. A small number of communities provide utility services in cooperation with special districts.

Population	Water	Wastewater	Stormwater	None	Provide services jointly with special districts
0-1,000	33	26	9	2	2
1,001-5,000	37	38	18	1	0
5,001-10,000	16	18	13	0	0
10,001-25,000	13	13	11	1	2
25,001 and up	11	11	9	0	1
Total	112	107	61	5	5

It is not unusual for cities in Oregon to provide utility services to customers outside of municipal boundaries. In fact, this practice, which is akin to system consolidation, is encouraged by national policy (Safe Drinking Water Act) and creates an economy of scale—especially for small communities. For the surveys received, communities that have the highest incidence of providing utility services to customers outside of municipal limits (19.3 percent) had a population range of 10,001 to 25,000.

The following table shows populations served by at least one utility service within and adjacent to municipalities.

Population	Avg. Inside Population	Avg. Outside Population	Avg. Inside Connections	Avg. Outside Connections	% Outside Connections
0-1,000	553	148	296	24	8.1
1,001-5,000	2117	492	1014	80	7.9
5,001-10,000	7826	838	2457	463	18.8
10,001-25,000	18370	5648	6448	1245	19.3
25,001 and up	97442	61380	32906	3328	10.1

Asset Management. The 2009 survey examines asset management, a key aspect of utility management. Asset management is a policy issue in which regulatory agencies, such as the U.S. Environmental Protection Agency, are devoting programmatic and

capital resources to assist communities and provide incentives for systematic management of capital facilities. Asset replacement funding is a key factor in setting optimal utility rates and charges. In fact, those communities that pursue strategic funding programs for the replacement of capital facilities over time are providing the least cost method for service delivery. The following tables provide responses as to whether communities, either by size or by utility, have asset management programs and whether those programs are sufficiently funded.

Please note that of the number of responses associated with each question *in each population category*. In some cases the percentages noted in the following paragraphs are associated with a small number of survey responses.

The survey responses indicate that for communities with less than 10,000 population—especially for water and wastewater systems—a greater percentage of systems do not have asset management plans. In addition, for those systems having plans, at least half of the respondents in each population category less than 10,000 population do not have asset management plans that are adequately funded. A similar pattern exists for wastewater systems. The one variant is that wastewater systems have a higher percentage of systems that are inadequately funded.

Communities between 10,000 and 25,000 population have the highest percentage of systems with asset management plans, yet the greater majority of those systems are deemed to be inadequately funded. The largest communities, those with greater than 25,000 population, have the highest response rates for having asset management plans that are adequately funded for water and wastewater systems (41.7 percent adequately funded in both water and wastewater). Yet it is important to note that for water systems serving greater than 25,000 population, 41.7 percent of the respondents do not have water utility asset management plans and about one-third of the respondents do not have wastewater utility asset management plans.

Wastewater Asset Management Plans						
Population	**Yes (%)** Adequately funded	Survey Responses	**Yes (%)** Inadequately funded	Survey Responses	**No (%)**	Survey Responses
0-1,000	23.1	6	30.8	8	46.2	12
1,001-5,000	17.6	6	29.4	10	52.9	18
5,001-10,000	11.1	2	27.8	5	61.1	11
10,001-25,000	15.4	2	69.2	9	15.4	2
25,001 and up	41.7	5	25.0	5	33.3	4

Water Utility Asset Management Plans						
Population	**Yes (%)** Adequately funded	Survey Responses	**Yes (%)** Inadequately funded	Survey Responses	**No (%)**	Survey Responses
0-1,000	23.3	7	23.3	7	53.3	16
1,001-5,000	24.2	8	24.2	8	51.5	17
5,001-10,000	6.25	1	37.5	6	56.3	9
10,001-25,000	38.5	5	46.2	6	15.4	2
25,001 and up	41.7	5	16.7	2	41.7	5

It is also interesting to note that for stormwater utilities the responses show that asset management planning is more significantly lacking. Although the sample size was much smaller, the greatest percentage of responses reveal that asset management plans either do not exist or are inadequately funded. More than 87 percent of the smallest systems (0 to 1,000 population) and 81 percent of systems with populations in the 5,001 to 10,000 range do not have stormwater asset management plans. The highest percentage of systems having stormwater asset management plans are those serving populations of between 10,000 and 25,000. Unfortunately, 80 percent of the plans are considered to be inadequately funded.

Stormwater Asset Management Plans						
Population	**Yes (%)** Adequately funded	Survey Responses	**Yes (%)** Inadequately funded	Survey Responses	**No (%)**	Survey Responses
0-1,000	0.0	0	12.5	1	87.5	7
1,001-5,000	20.0	2	10.0	1	70.0	7
5,001-10,000	0.0	0	18.2	2	81.8	9
10,001-25,000	10.0	1	80.0	8	10.0	1
25,001 and up	20.0	2	20.0	2	60.0	6

The challenges of properly implementing asset management plans and financing capital facility replacement will likely increase in the future as the cost of capital increases, regulatory standards for construction and operation of capital facilities become more stringent, and the availability of grant funding declines. The era of federal domestic spending for infrastructure rejuvenation could decline due to pressures to reduce Congressional earmarks, and to address the growing federal deficit. Communities reporting that they have adequately funded asset management plans will be in a better position, and more resilient in the face of external risks, in providing water, wastewater and stormwater utility services in the future

WATER SYSTEM RATE SURVEY: HIGHLIGHTS

The 2009 Water System Rate Survey provides a wealth of information about the state of the municipal water operations in Oregon. One important indicator of good financial management is the recent history of adjustments to fees and service charges shown by the survey respondents. Only a small number of the very smallest systems (0 to 1,000 population) stated that rates have not been adjusted in more than ten years. This means that customers generally receive appropriate pricing signals that condition them to the fact that the cost of water does increase over time. No water systems reduced their user charges or water rates since their last rate adjustment.

However, there are a range of reasons why water rates changed. The most popular reasons for water rate increases are to meet the costs of inflation and to finance capitalization. Increased labor costs and treatment cost were also catalysts for increasing water rates. The following table shows the breakdown of why water rates increased according to population ranges. The number of responses in the table below reflect how survey respondents were able to select more than one catalyst for increasing water rates.

Catalysts for Increasing Water Rates							
Population	State/Federal Mandate	Treatment Costs	Labor Costs	Inflation/CPI	Capital Improvement	Reason Unknown	Other
0-1,000	6	7	11	18	14	0	7
1,001-5,000	7	14	13	20	15	3	5
5,001-10,000	4	8	5	7	11	0	2
10,001-25,000	1	4	5	10	11	0	4
25,001 and up	3	6	7	11	10	0	0
Total	21	39	41	67	61	3	19

Among the smallest systems responding to the survey, the increasing financial burden of capital improvements is further demonstrated in the percentage of the of the rate base that supports debt payments. Smaller systems; 0 to 1,000; 1001 to 5,000; and 5,001 to 10,000 population use significant percentages of their water rates to finance debt (36 percent, 26 percent and 22 percent, respectively on average).

Rate Structures. Oregon cities demonstrate excellent performance in adjusting user charges. This gives their customers the expectation that the cost of water service will increase over time. Regarding charges relative to water usage by customers, cities favor rate structures designed to charge customers at a higher rate as water usage increases. Of

the three most popular pricing methodologies (flat rate, inclining block rate and declining block rate) the **inclining block rate** is most often implemented.

The table below also shows a significant incident of the "Other" response in describing the predominant pricing structure used. The survey instrument allowed the respondent to select more than one rate methodology. Many communities use different pricing methodologies for their various customer groups. In future surveys it will be beneficial to ask questions that help explain how pricing structures are used for different classes of customers.

Type of Predominant Pricing Structure Used by Water Systems				
Population	Flat Rate	Inclining Block Rate	Declining Block Rate	Other
0-1,000	13	13	0	11
1,001-5,000	6	21	1	8
5,001-10,000	6	2	0	8
10,001-25,000	3	4	2	6
25,001 and up	6	5	1	3
Total	35	45	4	38

Treatment Facilities and Water Sources. The smallest cities tend to have the newest water treatment facilities. The average age of all water treatment plants is just over 20 years. Cities of 1,000 population or less have treatment facilities that average 17 years of age, while larger systems have a higher average age of 26.5 years. The average size of water systems (by number of miles of water lines of all sizes) ranges from 8.4 miles of lines in communities of less than 1,000 population, to over 500 miles of lines for communities of greater than 25,000 population (on average).

More than 48 percent of the water provided in the respondent cities is derived from surface water sources. This is significant because the costs of treating and distributing surface water to customers is generally more expensive than providing water derived from groundwater sources.

WASTEWATER SYSTEM RATE SURVEY: HIGHLIGHTS

Respondents to the wastewater system rate survey range in size from Rufus, which maintains and operates 1.6 miles of sewer lines, to the city of Portland that operates 1,882 miles of sewer lines of all sizes. The average ages of the wastewater treatment plants are surprisingly related to the size of communities. Systems in cities with less than 1,000 population have treatment facilities that are an average of 19.5 years old, while the largest communities (25,001 and more) have treatment facilities that are more than twice as old on average—40 years old.

The level of sewage treatment is not surprising. Smaller communities have a greater percentage of treatment facilities in the primary and secondary category, while larger cities (more than 5,000 population) have a greater percentage of advanced wastewater treatment facilities. Based on survey responses, larger cities tend to require additional nitrogen and phosphorous removal.

As with drinking water fees and charges, cities responding to the survey keep their wastewater user fees up-to-date. The table below indicates that the average year of the last change in rates is either 2007 for cities less than 10,000 population, or 2008 for communities greater than 10,000 population. Only 13 cities (of 104 cities responding to this survey question) have rates that change as the consumer price index or customer income changes. As might be expected, the average cost per 5,000 gallons treated tends to decrease as cities increase in population, most likely due to the economy of scale for larger wastewater treatment operations.

Wastewater Rate Characteristics

Population	Avg. Year of Last Rate Change	Cost per 5,000 gallons	Rate Auto-Adjusts for CPI or Income (Number of Cities)
0-1,000	2007	$34.62	1
1,001-5,000	2007	$39.12	8
5,001-10,000	2007	$36.17	2
10,001-25,000	2008	$31.26	1
25,001 and up	2008	$30.36	1

Looking at how rates were modified for wastewater systems, 76 percent of the respondent cities increased their rates, three percent decreased their fees and charges and another three percent changed their rate structures.

Finally, survey participants were asked: “Are the wastewater plants releasing stream water that is quality limited or under special regulation?” Forty-four percent of systems

are challenged by Total Daily Maximum Loading (TMDL) requirements for wastewater discharge limitations— or need to address other water quality limited standards. The largest communities as a group (greater than 25,000 population) have the highest percentage of systems facing such challenges (61 percent).

STORMWATER SYSTEM RATE SURVEY: HIGHLIGHTS

In addition to the 2009 Utility Rate Survey, a review of stormwater utility characteristics is included. Of the 127 respondents, 30 cities maintained separate utility fees and charges for stormwater control, two cities had fee structures that reflected joint district operations with their county governments, and eight cities included stormwater fees within the current wastewater utility structure.

Twenty communities imposed no customer charges for stormwater control activities and six cities indicated that they provided no stormwater services. Larger communities, those with greater than 5,000 population, reported that they were more likely to provide stormwater fee reductions to encourage onsite stormwater management.

Stormwater utility fee structures tend to trail water and wastewater system charges as far as being relatively up-to-date. Only three of the cities had not adjusted their stormwater fees within the past 10 years. Three other cities last adjusted their stormwater fees in 2002. Five communities have fees that automatically adjust to the Consumer Price Index or to customer incomes. Stormwater control fees range from a low of $0.75 per month (in city) in Philomath, to a monthly high of $11.77 in Sherwood.

APPENDIX A-1

DRINKING WATER SOURCE, DISTRIBUTION AND TREATMENT

Summary Information										
		Water Source (number of responses)				Water Source is: (number of responses)				
Responses by Population	Number of Responses	Surface	Ground	Wholesale	Other	Gravity Fed	Pumped	Other	Average Total Miles of Lines (all sizes)	Average Age of Water Plant(s) (Years)
0-1,000	37	12	22	2	1	18	24	2	8.37	17.24
1,001-5,000	43	22	23	3	1	20	34	1	17.62	18.72
5,001-10,000	18	9	10	1	0	9	12	0	48.48	20.92
10,001-25,000	16	9	7	2	1	6	12	0	118.90	26.11
25,001 and up	13	9	3	3	0	8	9	0	504.36	26.50
Total Responses	127	61	65	11	3	61	91	3	80.88	20.12

		Water Source				Water Source is:				
City	Population	Surface	Ground	Wholesale	Other	Gravity Fed	Pumped	Other	Total Miles of Lines (all sizes)	Age or Average Age of Water Plant(s) (Years)
Albany	48,770	✓				✓	✓		270	46.5
Amity	1,480	✓					✓		17	8
Arlington	650		✓				✓		15	6
Ashland	21,800	✓				✓			124	13
Astoria	9,851	✓				✓			80	20
Bandon	3,300	✓				✓	✓		30	16
Banks	1,435	✓	✓			✓	✓			15
Bay City	1,265		✓				✓		9.28	29
Beaverton	60,000	✓				✓			268	20
Brookings	6,465		✓				✓		47	33
Brownsville	1,755	✓	✓				✓		11.44	13
Burns	2,664		✓				✓		22.34	
Butte Falls	450		✓			✓				10
Cannon Beach	1,650	✓	✓			✓	✓		21.5	15
Carlton	1,755	✓				✓				16
Cave Junction	1,730	✓	✓				✓		12	10
Columbia City	1,975		✓	✓		✓	✓		15.37	1
Condon	795	✓	✓			✓	✓		1	
Coos Bay	16,670									
Cornelius	11,464	✓		✓			✓			
Corvallis	54,880	✓							256	54
Creswell	5,058	✓	✓				✓		60	1
Culver	1,325									

DRINKING WATER SOURCE, DISTRIBUTION AND TREATMENT

City	Population	Water Source				Water Source is:			Total Miles of Lines (all sizes)	Age or Average Age of Water Plant(s) (Years)
		Surface	Ground	Wholesale	Other	Gravity Fed	Pumped	Other		
Dallas	15,360	✓			✓	✓	✓		61	37
Damascus	12,851									
Dayton	2,500		✓			✓	✓		18.5	5
Dayville	175		✓			✓	✓		2	1
Detroit	92	✓				✓	✓		11.8	19
Dunes City	1,467									
Echo	715		✓			✓	✓		5	29
Elgin	1,730		✓			✓	✓	✓	23	20
Fairview	8,000		✓				✓		23	
Falls City	965	✓				✓			16	10
Florence	9,410		✓				✓		80	5
Garibaldi	881		✓				✓		13	12
Gaston	610			✓		✓	✓		3	
Gervais	2,406		✓				✓		4.5	17
Glendale	955	✓						✓	6.8	8
Gold Hill	1,100	✓					✓		10	28
Grants Pass	33,217	✓					✓		165	25
Gresham	101,221		✓	✓		✓	✓		262	4
Haines	435		✓				✓		20	30
Halfway	355		✓			✓			9.5	
Halsey	840		✓				✓		5.39	11
Happy Valley	12,643									
Heppner	1,420		✓			✓	✓		28	
Hermiston	15,297	✓					✓		79	21
Hillsboro	66,226	✓				✓	✓		298	25.5
Idanha	227	✓				✓	✓		4	12
Imbler	283		✓				✓		20	20
Independence	9,375		✓				✓			20
Ione	314		✓			✓	✓		6.2	
Island City	995		✓				✓		1.5	13
Jefferson	3,085	✓					✓		8	21
John Day	1,845		✓		✓	✓	✓		23	
Johnson City	600			✓				✓	10	
Jordan Valley	240		✓				✓		4.3	30
Joseph	1,105	✓	✓			✓	✓		12.5	17
Junction City	5,345		✓				✓		32	na
Klamath Falls	19,462		✓			✓	✓		250	26
La Grande	12,682		✓			✓	✓			

DRINKING WATER SOURCE, DISTRIBUTION AND TREATMENT

City	Population	Water Source				Water Source is:			Total Miles of Lines (all sizes)	Age or Average Age of Water Plant(s) (Years)
		Surface	Ground	Wholesale	Other	Gravity Fed	Pumped	Other		
Lafayette	3,925		✓			✓	✓		10	6
Lake Oswego	33,800	✓					✓			40
Lakeside	1,560									
Lexington	260		✓			✓			5	37
Lincoln City	17,260	✓					✓		135	26
Lowell	950	✓					✓		5.5	8
Lyons	1,150									
Madras	6,640		✓	✓		✓	✓		45	
Malin	805		✓				✓		6	10
Medford	76,300	✓	✓			✓	✓		520	28
Merrill	869		✓			✓			5	61
Mill City	1,680		✓			✓	✓		12.73	4
Molalla	7,590	✓				✓			85.97	11
Monmouth	9,565		✓				✓		37	50
Myrtle Creek	3,665	✓					✓		22	5
Myrtle Point	2,541	✓					✓		16	50
Newberg	22,953		✓				✓		102	
North Bend	9,636									
North Plains	1,905			✓		✓			11.6	
Oakland	954	✓					✓		9	7
Ontario	10,991	✓	✓				✓			22
Philomath	4,610	✓	✓	✓			✓		20.22	25
Port Orford	1,275	✓					✓		15	35
Portland	550,000	✓	✓			✓	✓		2100	
Powers	730	✓					✓		9.5	14
Redmond	25,000		✓				✓		145	20
Reedsport	4,593	✓					✓		30.9	13
Richland	150	✓			✓	✓			7.5	22
Rivergrove	345									
Rockaway Beach	1,350	✓	✓				✓		35	28
Rogue River	2,185	✓	✓			✓	✓		15	15
Roseburg	21,235	✓					✓		155	20
Rufus	214		✓			✓	✓		2.4	24
Salem	154,510	✓				✓	✓		1180	10
Sandy	8,823	✓	✓			✓	✓		28	9
Scio	783		✓			✓	✓		7.1	15
Seaside	6,100	✓				✓			43.4	13
Seneca	183		✓				✓		3	

DRINKING WATER SOURCE, DISTRIBUTION AND TREATMENT

City	Population	Water Source				Water Source is:			Total Miles of Lines (all sizes)	Age or Average Age of Water Plant(s) (Years)
		Surface	Ground	Wholesale	Other	Gravity Fed	Pumped	Other		
Shady Cove	2,850									
Sheridan	6,020	✓	✓			✓	✓		17.75	28
Sherwood	16,450	✓	✓	✓		✓	✓		69	
Silverton	9,649	✓				✓	✓		47.35	43
Sisters	1,875		✓				✓			18
Spray	140		✓				✓		5	12
Springfield	57,320									
Stanfield	2,100		✓				✓		6	
Stayton	7,800	✓				✓			45	38
Sublimity	2,285		✓			✓	✓		13.2	30
Sweet Home	9,045	✓				✓	✓		55.7	1
The Dalles	11,500	✓	✓			✓	✓		69	50
Toledo	3,612	✓				✓	✓		24	33
Tualatin	26,040			✓		✓			109	
Turner	1,730	✓				✓	✓			
Ukiah	249		✓				✓		10	4
Union	1,954		✓			✓	✓			30
Vale	2,000		✓				✓		40	30
Waldport	2,145	✓					✓		25	25
Warrenton	4,448	✓				✓			12	7
Waterloo	239									
West Linn	25,236			✓			✓		120	12
Westfir	325	✓				✓			6	25
Weston	745		✓				✓		5	25
Winston	5,800									
Yachats	780	✓				✓			20	17
Yamhill	965	✓				✓			24	8
Yoncalla	1,115	✓				✓			6.4	14

DRINKING WATER CAPACITY, PLANNING AND LOSS

Summary Information

Responses by Population	Number of Responses	Average Current Operating Capacity of Water System (%)	Average Year When Water System is Projected to be at Maximum Capacity	Average Approved Water Conservation and Management Plan		If Measured, Annual Average Measured or Estimated Water Loss (%)
				City has an Approved Water Conservation and Management Plan	If so, Year Approved (dates provided by OWR Dept.)	
0-1,000	37	56.46	2024	12	2004	14.24
1,001-5,000	43	65.21	2020	16	2004	12.39
5,001-10,000	18	65.46	2022	9	2003	15.00
10,001-25,000	16	69.50	2018	10	2003	13.47
25,001 and up	13	70.27	2032	11	2007	7.98
Total Responses	127	63.63	2022	58	2003	12.75

City	Population	Current Operating Capacity of Water System (%)	Year When Water System is Projected to be at Maximum Capacity	Approved Water Conservation and Management Plan		If Measured, Annual Measured or Estimated Water Loss (%)
				City has an Approved Water Conservation and Management Plan	If so, Year Approved (dates provided by OWR Dept.)	
Albany	48,770	40	2051	✓	2007	21.00
Amity	1,480	90	2010			
Arlington	650	50	2020	✓	2004	4.00
Ashland	21,800	30	2015	✓		
Astoria	9,851	50-75	2020			10.00
Bandon	3,300	50	2023	✓	2003	6.70
Banks	1,435	50	2011	✓	2009	15.00
Bay City	1,265					
Beaverton	60,000	68	2025	✓	2009	5.70
Brookings	6,465			✓		15.00
Brownsville	1,755	80	2025	✓		5.00
Burns	2,664	60				15.00
Butte Falls	450	50				
Cannon Beach	1,650	60	2020	✓		15.54
Carlton	1,755	30	2020			8.50
Cave Junction	1,730	50	2020			12.00
Columbia City	1,975	100				15.00
Condon	795					
Coos Bay	16,670					
Cornelius	11,464			✓		20.70
Corvallis	54,880	65	2025	✓		6.00

DRINKING WATER CAPACITY, PLANNING AND LOSS

City	Population	Current Operating Capacity of Water System (%)	Year When Water System is Projected to be at Maximum Capacity	Approved Water Conservation and Management Plan		If Measured, Annual Measured or Estimated Water Loss (%)
				City has an Approved Water Conservation and Management Plan	If so, Year Approved (dates provided by OWR Dept.)	
Creswell	5,058	50	2030	✓	1992	15.00
Culver	1,325					
Dallas	15,360	75	2020			8.00
Damascus	12,851					
Dayton	2,500	100				
Dayville	175	70				
Detroit	92	40	2030	✓		15.00
Dunes City	1,467					
Echo	715	35	2020	✓		1.00
Elgin	1,730	50				2.00
Fairview	8,000	70	2010	✓	2006	1.50
Falls City	965	30				
Florence	9,410	35	2020			8.00
Garibaldi	881	20	2050			15.00
Gaston	610	50				20.00
Gervais	2,406	60	2011			6.00
Glendale	955	13.8	2031	✓	1996	25.00
Gold Hill	1,100	100	2009			22.00
Grants Pass	33,217	50-75	2025-2030	✓	2003	8.00
Gresham	101,221	60	2020			5.00
Haines	435	90	2012	✓	2006	
Halfway	355	100				45.00
Halsey	840	50	2052			9.00
Happy Valley	12,643					
Heppner	1,420	77	2030		2003	23.00
Hermiston	15,297	67		✓	2003	22.00
Hillsboro	66,226	71	2020	✓	2004	
Idanha	227	30	2030			30.00
Imbler	283	100	2012			
Independence	9,375	85		✓		15.00
Ione	314	75				
Island City	995	40	2020	✓	1999	
Jefferson	3,085					9.00
John Day	1,845	35				5.50
Johnson City	600					
Jordan Valley	240	60				
Joseph	1,105	40		✓	2003	

DRINKING WATER CAPACITY, PLANNING AND LOSS

City	Population	Current Operating Capacity of Water System (%)	Year When Water System is Projected to be at Maximum Capacity	Approved Water Conservation and Management Plan		If Measured, Annual Measured or Estimated Water Loss (%)
				City has an Approved Water Conservation and Management Plan	If so, Year Approved (dates provided by OWR Dept.)	
Junction City	5,345	95	2009			10.50
Klamath Falls	19,462	72	2020	✓	1999	18.00
La Grande	12,682	79	2028	✓	1999	4.00
Lafayette	3,925	95	2015	✓	1999	15.00
Lake Oswego	33,800	86	2016	✓	2008	9.00
Lakeside	1,560					
Lexington	260	fluctuates	2009			5.00
Lincoln City	17,260	40	2020	✓	2006	26.00
Lowell	950	100	2009	✓	2004	20.00
Lyons	1,150					
Madras	6,640					
Malin	805	50	2019			7.00
Medford	76,300	86	2015	✓	2009	5.00
Merrill	869	100	2009	✓		
Mill City	1,680	50	2040			20.00
Molalla	7,590	50	2016			
Monmouth	9,565	80	2015	✓		12.00
Myrtle Creek	3,665	80	2000	✓	1998	8.00
Myrtle Point	2,541	70	2020	✓	1999	9.00
Newberg	22,953	25-75	2015	✓	2004	8.50
North Bend	9,636					
North Plains	1,905		2021	✓		7.00
Oakland	954	40	2025	✓		3.50
Ontario	10,991	80	2013	✓	2000	3.00
Philomath	4,610	75	2020	✓	2006	12.38
Port Orford	1,275	100	2009			50.00
Portland	550,000	75		✓	2008	5.00
Powers	730	40	2030			35.00
Redmond	25,000	70	2018	✓	2000	12.00
Reedsport	4,593	25	2025			
Richland	150	90				10.00
Rivergrove	345					
Rockaway Beach	1,350	75	2014-2024	✓	2009	30.00
Rogue River	2,185	80	2014	✓	2000	0.05
Roseburg	21,235	88.5				16.00
Rufus	214					
Salem	154,510	42	2100	✓	1996	9.00

DRINKING WATER CAPACITY, PLANNING AND LOSS

City	Population	Current Operating Capacity of Water System (%)	Year When Water System is Projected to be at Maximum Capacity	Approved Water Conservation and Management Plan		If Measured, Annual Measured or Estimated Water Loss (%)
				City has an Approved Water Conservation and Management Plan	If so, Year Approved (dates provided by OWR Dept.)	
Scio	783	63	2026			4.12
Seaside	6,100	50	2025			14.00
Seneca	183	40				
Shady Cove	2,850					
Sheridan	6,020	60	2012			3.00
Sherwood	16,450	100	2012	✓	2000	7.00
Silverton	9,649	46	2015	✓	2004	31.00
Sisters	1,875	40	2025	✓	1997	5.00
Spray	140	30				
Springfield	57,320					
Stanfield	2,100	80	2015			7.00
Stayton	7,800	50	2050	✓		15.00
Sublimity	2,285	50	2029	✓	2008	12.00
Sweet Home	9,045	100	2050	✓	2009	40.00
The Dalles	11,500	63	2025			15.00
Toledo	3,612	80	2020			12.00
Tualatin	26,040	80	2015	✓	2009	5.00
Turner	1,730		2030			6.00
Ukiah	249			✓	2005	
Union	1,954	30		✓	1999	
Vale	2,000	70	2035	✓	2003	
Waldport	2,145	70	2030	✓	2002	15.00
Warrenton	4,448	35				
Waterloo	239					
West Linn	25,236	100		✓	2008	5.00
Westfir	325	85				
Weston	745	30	2031			2.00
Winston	5,800					
Yachats	780	65	2020	✓	2002	8.00
Yamhill	965	57	2025	✓	2001	12.00
Yoncalla	1,115	80	2015	✓		3.00

APPENDIX A-3

DRINKING WATER QUANTITY

Summary Information					
Responses by Population	**Number of Responses**	**Average Total Amount of Water Treated in 2008 (mil. Gal.)**	**Average Peak Flow of Water Treated in a 24-Hour Period (mil. Gal)**	**Average Treated Water Storage (mil. Gal.)**	**Average Untreated Water Storage (mil. Gal.)**
0-1,000	37	40	0.36	0.59	0.42
1,001-5,000	43	163	14.00	28.83	6.29
5,001-10,000	18	383	2.31	5.85	229.60
10,001-25,000	16	990	8.80	9.86	191.38
25,001 and up	13	3,735	35.10	56.52	1102.18
Total Responses	127	698	11.15	19.65	157.19

City	**Population**	**Total Amount of Water Treated in 2008 (mil. Gal.)**	**Peak Flow of Water Treated in a 24-Hour Period (mil. Gal)**	**Treated Water Storage (mil. Gal.)**	**Untreated Water Storage (mil. Gal.)**
Albany	48,770	2,975	16.50	19.10	19.10
Amity	1,480	84	0.30	1.00	1.00
Arlington	650	85	0.58	1.30	1.30
Ashland	21,800	1,197	6.80	6.50	6.50
Astoria	9,851	845	3.78	26.00	26.00
Bandon	3,300	218	1.00	3.00	3.00
Banks	1,435	90	0.20	1.57	1.57
Bay City	1,265	225	1.33	1.40	1.40
Beaverton	60,000	2,274	1.70	38.25	38.25
Brookings	6,465	386	2.05	3.77	3.77
Brownsville	1,755	87	0.63	1.30	1.30
Burns	2,664	503	3.00		
Butte Falls	450	39	0.37	0.75	0.75
Cannon Beach	1,650	183	0.74	2.63	2.63
Carlton	1,755	134	0.60	1.58	1.58
Cave Junction	1,730			2.50	2.50
Columbia City	1,975	27	0.14	1.40	1.40
Condon	795			0.03	0.03
Coos Bay	16,670				
Cornelius	11,464			1.50	1.50
Corvallis	54,880	2,770	16.00	23.00	23.00
Creswell	5,058	303	2.00	4.30	4.30
Culver	1,325				
Dallas	15,360	996	5.73	8.13	8.13
Damascus	12,851		0.00		
Dayton	2,500	218	0.58	2.27	2.27
Dayville	175	5	0.03	0.13	0.13

DRINKING WATER QUANTITY

City	Population	Total Amount of Water Treated in 2008 (mil. Gal.)	Peak Flow of Water Treated in a 24-Hour Period (mil. Gal)	Treated Water Storage (mil. Gal.)	Untreated Water Storage (mil. Gal.)
Detroit	92	30	0.24	0.20	0.20
Dunes City	1,467				
Echo	715	72	0.54	0.35	0.35
Elgin	1,730	228		0.00	1.75
Fairview	8,000	3	1.80	6.30	6.30
Falls City	965	28	0.65	0.80	0.80
Florence	9,410	385	1.99	4.50	4.50
Garibaldi	881	67		0.52	0.52
Gaston	610			1.33	1.33
Gervais & Willamina	2,406	63	0.42	0.35	0.35
Glendale	955	51	0.21	1.00	1.00
Gold Hill	1,100			0.95	0.95
Grants Pass	33,217	1,998	13.93	19.00	19.00
Gresham	101,221		11.95	27.25	27.25
Haines	435			0.01	0.01
Halfway	355				
Halsey	840	22	0.17	0.75	0.75
Happy Valley	12,643		0.00		
Heppner	1,420	159	0.86	1.35	1.35
Hermiston	15,297	2	10.00	7.01	7.01
Hillsboro	66,226	4,940	26.18	32.70	32.70
Idanha	227	18	0.25	0.30	0.30
Imbler	283				
Independence	9,375		2.00	3.00	3.00
Ione	314				
Island City	995				
Jefferson	3,085	123	0.82	1.75	1.75
John Day	1,845	131	20.33	2.41	2.41
Johnson City	600				
Jordan Valley	240				
Joseph	1,105	107	1.44	1.30	1.30
Junction City	5,345	105	3.60	2.80	2.80
Klamath Falls	19,462	2,910	18.10	16.40	16.40
La Grande	12,682		8.50	11.50	11.50
Lafayette	3,925	97	0.69	0.50	0.50
Lake Oswego	33,800	2,067	14.96	27.00	27.00
Lakeside	1,560				
Lexington	260				
Lincoln City	17,260	646	3.04	7.25	7.25
Lowell	950	28	0.31	0.50	0.50
Lyons	1,150				

DRINKING WATER QUANTITY

City	Population	Total Amount of Water Treated in 2008 (mil. Gal.)	Peak Flow of Water Treated in a 24-Hour Period (mil. Gal)	Treated Water Storage (mil. Gal.)	Untreated Water Storage (mil. Gal.)
Madras	6,640				
Malin	805	70	0.80	0.45	0.45
Medford	76,300	9,762	56.00	36.42	36.42
Merrill	869				
Mill City	1,680	73	0.18	1.25	1.25
Molalla	7,590	301	2.20	3.20	3.20
Monmouth	9,565	500	1.50	5.00	5.00
Myrtle Creek	3,665			1.50	1.50
Myrtle Point	2,541	108	0.57	3.00	3.00
Newberg	22,953	975	6.07	12.00	12.00
North Bend	9,636				
North Plains	1,905			1.00	1.00
Oakland	954	63	0.31	1.00	1.00
Ontario	10,991	2,069	9.80	10.75	10.75
Philomath	4,610	182	1.16	1.25	1.25
Port Orford	1,275	60	0.39	1.00	1.00
Portland	550,000	36,000	162.00	300.00	10,000.00
Powers	730	63	0.35	0.47	0.47
Redmond	25,000	2	12.40	10.00	10.00
Reedsport	4,593	358	1.80	3.31	3.31
Richland	150	30	0.40	0.33	0.33
Rivergrove	345				
Rockaway Beach	1,350	115	1.00	3.30	3.30
Rogue River	2,185	77	0.74	0.75	0.00
Roseburg	21,235	2	9.39	10.70	10.70
Rufus	214	14	0.19	0.40	0.40
Salem	154,510	10,310	47.10	137.00	137.00
Sandy	8,823	410	2.46	3.75	3.75
Scio	783	33	0.15	0.50	0.50
Seaside	6,100	485	2.47	6.50	6.50
Seneca	183				
Shady Cove	2,850				
Sheridan	6,020	306	1.40	4.08	4.08
Sherwood	16,450			9.50	9.50
Silverton	9,649	563	2.80	4.50	4.50
Sisters	1,875	212		1.60	1.60
Spray	140				
Springfield	57,320				
Stanfield	2,100				
Stayton	7,800			5.40	5.40
Sublimity	2,285		1.50	2.00	2.00
Sweet Home	9,045	389	0.00	4.58	4.58

DRINKING WATER QUANTITY

City	Population	Total Amount of Water Treated in 2008 (mil. Gal.)	Peak Flow of Water Treated in a 24-Hour Period (mil. Gal)	Treated Water Storage (mil. Gal.)	Untreated Water Storage (mil. Gal.)
The Dalles	11,500	1,100	7.00	17.00	17.00
Toledo	3,612	310	1.57	2.30	2.30
Tualatin	26,040			13.00	13.00
Turner	1,730			0.50	0.50
Ukiah	249				
Union	1,954		1.20	0.75	0.75
Vale	2,000	98	9.68	1.35	1.35
Waldport	2,145	90	350.00	2.30	2.30
Warrenton	4,448	693	3.16	5.10	5.10
Waterloo	239				
West Linn	25,236	220	19.80	5.50	5.50
Westfir	325	29	0.19	0.25	0.25
Weston	745				
Winston	5,800				
Yachats	780	56	0.50	1.25	1.25
Yamhill	965		0.53	1.00	1.00
Yoncalla	1,115	70		0.72	0.72

APPENDIX A-4

DRINKING WATER RATE CHARACTERISTICS

Summary Information								
			Type of Rate Structure (number of cities)					
Response by Population	Number of Responses	Average Year of Last Rate Change	Flat Rate	Inclining Block Rate	Declining Block Rate	Other	Average Cost per 5,000 Gallons	Rate Auto-Adjusts for CPI or Income (number of cities)
0-1,000	37	2007	14	13	0	12	$33.51	1
1,001-5,000	43	2008	6	21	1	9	$31.41	10
5,001-10,000	18	2008	6	2	0	8	$27.06	2
10,001-25,000	16	2009	3	4	2	6	$23.64	1
25,001 and up	13	2009	6	5	1	3	$22.25	1
Total Responses	127	2008	35	45	4	38	$29.23	15

			Type of Rate Structure					
City	Population	Year of Last Rate Change	Flat Rate	Inclining Block Rate	Declining Block Rate	Other	Cost per 5,000 Gallons	Rate Auto-Adjusts for CPI or Income
Albany	48,770	2008			✓		$36.49	
Amity	1,480	2005	✓				$38.08	
Arlington	650	2004		✓			$32.00	
Ashland	21,800	2009		✓			$23.30	
Astoria	9,851	2009				✓	$27.77	
Bandon	3,300	2006	✓				$17.40	
Banks	1,435	2009		✓			$30.40	✓
Bay City	1,265	2009		✓			$24.55	
Beaverton	60,000	2009	✓					
Brookings	6,465	2009				✓		✓
Brownsville	1,755	2009		✓			$40.48	
Burns	2,664	2009				✓	$19.24	✓
Butte Falls	450	2008	✓			✓		
Cannon Beach	1,650	2006		✓				
Carlton	1,755					✓	$68.15	✓
Cave Junction	1,730	2005		✓			$33.35	
Columbia City	1,975	2009		✓			$38.25	
Condon	795	2005						

DRINKING WATER RATE CHARACTERISTICS

City	Population	Year of Last Rate Change	Type of Rate Structure				Cost per 5,000 Gallons	Rate Auto-Adjusts for CPI or Income
			Flat Rate	Inclining Block Rate	Declining Block Rate	Other		
Coos Bay	16,670							
Cornelius	11,464	2009		✓			$39.96	
Corvallis	54,880	2009		✓			$21.73	
Creswell	5,058	2009				✓	$43.35	✓
Culver	1,325							
Dallas	15,360	2009			✓		$40.26	
Damascus	12,851							
Dayton	2,500	2009		✓			$48.00	
Dayville	175	2009					$42.50	
Detroit	92	2009	✓			✓	$56.00	
Dunes City	1,467							
Echo	715	2007				✓	$27.00	
Elgin	1,730	2009		✓			$24.50	
Fairview	8,000	2009	✓				$26.37	
Falls City	965	2003		✓			$34.36	
Florence	9,410	2009		✓			$20.67	
Garibaldi	881	2008		✓			$27.93	
Gaston	610	2009	✓	✓			$40.84	
Gervais	2,406	2008		✓			$23.40	
Glendale	955	2009		✓			$39.00	
Gold Hill	1,100	1999				✓	$25.40	
Grants Pass	33,217	2008	✓	✓			$32.17	✓
Gresham	101,221	2009		✓			$15.52	
Haines	435	2009	✓					
Halfway	355	2005				✓	$23.18	
Halsey	840	2009		✓			$32.50	
Happy Valley	12,643							
Heppner	1,420	2009		✓			$37.15	
Hermiston	15,297	2009			✓		$15.44	
Hillsboro	66,226	2009				✓	$14.97	
Idanha	227	2006		✓				
Imbler	283		✓			✓		
Independence	9,375	2007	✓			✓	$18.90	
Ione	314	2007	✓					
Island City	995	2006				✓	$20.00	
Jefferson	3,085	2008		✓			$26.59	✓

DRINKING WATER RATE CHARACTERISTICS

City	Population	Year of Last Rate Change	Type of Rate Structure				Cost per 5,000 Gallons	Rate Auto-Adjusts for CPI or Income
			Flat Rate	Inclining Block Rate	Declining Block Rate	Other		
John Day	1,845	2009		✓			$27.50	
Johnson City	600					✓		
Jordan Valley	240	2007				✓	$18.72	
Joseph	1,105	2009	✓				$23.33	
Junction City	5,345	2009		✓			$23.26	
Klamath Falls	19,462	2009				✓	$13.20	✓
La Grande	12,682	2009		✓			$15.01	
Lafayette	3,925	2005		✓			$42.55	✓
Lake Oswego	33,800	2009				✓	$19.49	
Lakeside	1,560							
Lexington	260	2007		✓			$39.00	
Lincoln City	17,260	2009				✓	$32.79	
Lowell	950	2009				✓	$38.50	
Lyons	1,150							
Madras	6,640	2009				✓		
Malin	805		✓	✓				
Medford	76,300	2009		✓		✓	$9.81	
Merrill	869	2006		✓			$23.00	
Mill City	3,302	2015	✓	✓			$39.92	
Molalla	7,590	1998					$25.87	
Monmouth	9,565	2009				✓	$20.68	
Myrtle Creek	3,665	2007		✓			$25.36	
Myrtle Point	2,541	2009		✓			$27.11	
Newberg	22,953	2009	✓				$25.38	
North Bend	9,636							
North Plains	1,905	2009		✓			$68.73	✓
Oakland	954	2009				✓	$60.86	✓
Ontario	10,991	2006	✓			✓	$16.75	
Philomath	4,610	2009				✓	$32.32	
Port Orford	1,275	2009		✓			$45.16	✓
Portland	550,000	2009	✓				$38.44	
Powers	730	2007		✓				
Redmond	25,000	2009				✓	$22.37	
Reedsport	4,593	2006			✓		$23.16	
Richland	150	2005	✓					
Rivergrove	345							
Rockaway Beach	1,350	2009	✓			✓	$24.20	

DRINKING WATER RATE CHARACTERISTICS

City	Population	Year of Last Rate Change	Type of Rate Structure				Cost per 5,000 Gallons	Rate Auto-Adjusts for CPI or Income
			Flat Rate	Inclining Block Rate	Declining Block Rate	Other		
Rogue River	2,185	2009	✓				$36.55	✓
Roseburg	21,235	2009				✓	$22.44	
Rufus	214	2009		✓				
Salem	154,510	2009	✓				$18.35	
Sandy	8,823	2008	✓				$18.55	
Scio	783	2009		✓			$19.75	
Seaside	6,100	2008	✓				$41.40	
Seneca	183	2008	✓				$35.00	
Shady Cove	2,850							
Sheridan	6,020	2009				✓	$35.14	
Sherwood	16,450	2009		✓			$16.76	
Silverton	9,649	2009				✓	$20.49	
Sisters	1,875	2009				✓		
Spray	140	2008	✓				$28.00	
Springfield	57,320							
Stanfield	2,100	2004				✓	$24.50	
Stayton	7,800	2009	✓				$26.58	
Sublimity	2,285	2009					$10.90	
Sweet Home	9,045	2009	✓				$29.80	
The Dalles	11,500	2009	✓			✓		
Toledo	3,612	2009				✓	$19.35	
Tualatin	26,040	2008	✓				$23.20	
Turner	1,730	2006		✓			$34.77	
Ukiah	249	2005	✓					
Union	1,954	2009					$18.91	✓
Vale	2,000	2000		✓			$30.22	
Waldport	2,145	2009		✓			$29.85	✓
Warrenton	4,448	2009				✓		
Waterloo	239							
West Linn	25,236	2009	✓	✓			$14.54	
Westfir	325	2007	✓				$37.50	
Weston	745	2004	✓				$25.00	
Winston	5,800							
Yachats	780	2006				✓	$34.63	
Yamhill	965	2003				✓	$37.56	
Yoncalla	1,115	2007					$31.13	

APPENDIX B-1

WASTEWATER SYSTEM INFORMATION

Summary Information								
Response by Population	Number of Responses	What level of sewage treatment is provided to city wastewater? (check all that apply) (number of responses)					Total Miles of Sewer Lines (all sizes)	Average Age of Treatment Plant(s)
		Primary	Secondary	Advanced Treatment	Nitrogen Removal	Phosphorous Removal		
0-1,000	37	21	13	3	2	0	26	19.48
1,001-5,000	43	26	26	5	6	5	35	20.03
5,001-10,000	18	12	10	4	6	3	17	22.06
10,001-25,000	16	3	10	3	3	3	12	28.14
25,001 and up	13	5	10	3	3	2	13	40.05
Total Responses	127	67	69	18	20	13	103	22.83

City	Population	What level of sewage treatment is provided to city wastewater? (check all that apply)					Total Miles of Sewer Lines (all sizes)	Age or Average Age of Treatment Plant(s)
		Primary	Secondary	Advanced Treatment	Nitrogen Removal	Phosphorous Removal		
Albany	48,770		✓				219	0
Amity	1,480	✓	✓	✓			7	5
Arlington	650	✓	✓	✓	✓		15	3
Ashland	21,800		✓	✓		✓	109.5	7
Astoria	9,851	✓					68	35
Bandon	3,300	✓	✓		✓	✓	24	16
Banks	1,435						0	0
Bay City	1,265	✓	✓				10.5	14
Beaverton	60,000			✓			274	0
Brookings	6,465						35	20
Brownsville	1,755	✓					10.64	2
Burns	2,664	✓	✓				18.79	4
Butte Falls	450	✓					Unknown	35
Cannon Beach	1,650	✓	✓	✓	✓		18	2
Carlton	1,755	✓	✓				7.36	20
Cave Junction	1,730	✓	✓			✓	11	10
Columbia City	1,975				✓		13	0
Condon	795						0	0
Coos Bay	16,670		✓				88	45.5
Cornelius	11,464						24	0
Corvallis	54,880		✓				220	54
Creswell	5,058	✓					42	3
Culver	1,325		✓				10.5	35
Dallas	15,360		✓		✓	✓	40	10
Damascus	12,851						0	0
Dayton	2,500	✓					10.7	45
Dayville	175	✓					2.5	8
Detroit	92						0	0

WASTEWATER SYSTEM INFORMATION

City	Population	What level of sewage treatment is provided to city wastewater? (check all that apply)					Total Miles of Sewer Lines (all sizes)	Age or Average Age of Treatment Plant(s)
		Primary	Secondary	Advanced Treatment	Nitrogen Removal	Phosphorous Removal		
Dunes City	1,467						0	0
Echo	715	✓					5	34
Elgin	1,730						12	20
Fairview	8,000	✓	✓	✓	✓	✓	25	Treatment by City of Gresham
Falls City	965						6.5	30
Florence	9,410		✓				88	9
Garibaldi	881	✓					13	5
Gaston	610						0	0
Gervais	2,406	✓	✓				4.1	10
Glendale	955	✓	✓	✓			4.97	22
Gold Hill	1,100	✓					8	27
Grants Pass	33,217		✓				160	74
Gresham	101,221	✓	✓				440	15
Haines	435	✓					20	30
Halfway	355	✓	✓				9.5	12
Halsey	840	✓	✓				5.11	40
Happy Valley	12,643						0	0
Heppner	1,420	✓	✓				20	2
Hermiston	15,297		✓				80	28
Hillsboro	66,226						257.9	0
Idanha	227						0	0
Imbler	283						0	0
Independence	9,375	✓					0	48
Ione	314						0	0
Island City	995						6	7
Jefferson	3,085	✓	✓				0	31
John Day	1,845		✓				18	30
Johnson City	600						10	0
Jordan Valley	240	✓					3.4	30
Joseph	1,105	✓	✓				6.5	15
Junction City	5,345	✓	✓				32	45
Klamath Falls	19,462	✓	✓	✓	✓	✓	151	50
La Grande	12,682		✓				83	28
Lafayette	3,925	✓	✓	✓		✓	10	3
Lake Oswego	33,800		✓				200	0
Lakeside	1,560		✓	✓	✓		21.7	29
Lexington	260						0	0
Lincoln City	17,260		✓				0	15
Lowell	950	✓	✓				5.5	6

WASTEWATER SYSTEM INFORMATION

City	Population	What level of sewage treatment is provided to city wastewater? (check all that apply)					Total Miles of Sewer Lines (all sizes)	Age or Average Age of Treatment Plant(s)
		Primary	Secondary	Advanced Treatment	Nitrogen Removal	Phosphorous Removal		
Lyons	1,150						0	0
Madras	6,640			✓			55	12
Malin	805	✓	✓				7	50
Medford	76,300	✓	✓		✓		249	30
Merrill	869	✓					0	3
Mill City	1,680	✓					13.25	18
Molalla	7,590	✓	✓	✓	✓		77.37	3
Monmouth	9,565	✓					26	5
Myrtle Creek	3,665	✓	✓				30.3	5
Myrtle Point	2,541	✓	✓		✓	✓	22	55
Newberg	22,953	✓	✓				75	22
North Bend	9,636		✓				38	18
North Plains	1,905						0	0
Oakland	954	✓					7.75	8
Ontario	10,991	✓					74.7	14
Philomath	4,610	✓					17.99	23
Port Orford	1,275	✓	✓	✓			15	20
Portland	550,000						1882	54.4
Powers	730	✓	✓				4.7	45
Redmond	25,000		✓	✓	✓		137	30
Reedsport	4,593		✓				30.8	29
Richland	150						4	35
Rivergrove	345						0	0
Rockaway Beach	1,350	✓	✓				30	29
Rogue River	2,185	✓	✓		✓	✓	12	12
Roseburg	21,235	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rufus	214	✓	✓				1.6	3
Salem	154,510		✓				780	40
Sandy	8,823			✓	✓	✓	100	10
Scio	783	✓	✓				5.3	38
Seaside	6,100	✓	✓				36.2	23
Seneca	183						2.75	35
Shady Cove	2,850		✓				35	28
Sheridan	6,020	✓	✓				11.36	30
Sherwood	16,450						61	0
Silverton	9,649		✓		✓		30	10
Sisters	1,875	✓	✓				23	7
Spray	140	✓					3	1
Springfield	57,320	✓	✓				225	0
Stanfield	2,100		✓				7	0

WASTEWATER SYSTEM INFORMATION

City	Population	What level of sewage treatment is provided to city wastewater? (check all that apply)					Total Miles of Sewer Lines (all sizes)	Age or Average Age of Treatment Plant(s)
		Primary	Secondary	Advanced Treatment	Nitrogen Removal	Phosphorous Removal		
Stayton	7,800	✓			✓		33	13
Sublimity	2,285						13	0
Sweet Home	9,045	✓	✓				50.2	64
The Dalles	11,500		✓				75	60
Toledo	3,612		✓				21.5	55
Tualatin	26,040	✓	✓	✓	✓	✓	93	33
Turner	1,730						0	0
Ukiah	249	✓					12	30
Union	1,954						0	0
Vale	2,000	✓					40	4
Waldport	2,145	✓					11	15
Warrenton	4,448						0	0
Waterloo	239						0	0
West Linn	25,236	✓	✓	✓	✓	✓	114	20
Westfir	325	✓	✓	✓	✓		3	2
Weston	745		✓				5	1
Winston	5,800	✓	✓		✓	✓	15	27
Yachats	780		✓				20	1
Yamhill	965	✓	✓				15	12
Yoncalla	1,115	✓	✓				3	41

APPENDIX B-2

WASTEWATER QUANTITY INFORMATION

Summary Information					
Response by Population	**Number of Responses**	**Average Total Capacity of Treatment Plants(s) (mil/gallons per day)**	**Average Total Amount of Wastewater Treated in 2008 (mil gallons)**	**Average Peak Wet Weather Flow in 2008 (mil/gallons per day)**	**Average Peak Dry Weather Flow in 2008 (mil/gallons per day)**
0-1,000	37	0.36	34.51	0.84	0.15
1,001-5,000	43	3.80	116.14	26.22	13.34
5,001-10,000	18	4.87	471.37	1,025.78	1.61
10,001-25,000	16	7.38	703.32	7.04	2.76
25,001 and up	13	102.74	7,742.64	109.22	33.71
Total Responses	127	13.53	960.46	197.67	8.51

City	**Population**	**Total Capacity of Treatment Plants(s) (mil/gallons per day)**	**Total Amount of Wastewater Treated in 2008 (mil gallons)**	**Peak Wet Weather Flow in 2008 (mil/gallons per day)**	**Peak Dry Weather Flow in 2008 (mil/gallons per day)**
Albany	48,770	12.3	3,300	17.6	10.4
Amity	1,480	1.2	72.81	0.89	0.19
Arlington	650	0.13	16.46	0.053	0.044
Ashland	21,800	8	707.09	5.88	1.58
Astoria	9,851	20	1,398	16345	11.2
Bandon	3,300	2.1	123	0.78	0.38
Banks	1,435	0	0	0	0
Bay City	1,265	1.02	102.94	1.38	0.074
Beaverton	60,000	0	0	0	0
Brookings	6,465	15.5	426.63	7.37	1.22
Brownsville	1,755	5.58	45.05	1.05	0.14
Burns	2,664	1.5	203.63	1	0.4
Butte Falls	450	0.075	24.29	0.163	0.055
Cannon Beach	1,650	4.3	228.63	2.28	1.06
Carlton	1,755	1.7	73.22	1.7	0.15
Cave Junction	1,730	2	68.94	1.12	0.4
Columbia City	1,975	0	37.79	0.14	0.09
Condon	795	0	0	0	0
Coos Bay	16,670	20	1,93.6	11.31	3.24
Cornelius	11,464	0	0	0	0
Corvallis	54,880	9.7	3,000	124	8
Creswell	5,058	1	3.5	2	0.5
Culver	1,325	0.09	12	0.063	0.062
Dallas	15,360	16.5	850.9	15	2
Damascus	12,851	0	0	0	0
Dayton	2,500	24.45	0	2.32	0.35
Dayville	175	0.2	3.82	0.01	0.02

WASTEWATER QUANTITY INFORMATION

City	Population	Total Capacity of Treatment Plants(s) (mil/gallons per day)	Total Amount of Wastewater Treated in 2008 (mil gallons)	Peak Wet Weather Flow in 2008 (mil/gallons per day)	Peak Dry Weather Flow in 2008 (mil/gallons per day)
Detroit	92	0	0	0	0
Dunes City	1,467	0	0	0	0
Echo	715	0.12	26.43	0.18	0.03
Elgin	1,730	0	93	11	1.6
Fairview	8,000	Treatment by City of Gresham	Treatment by City of Gresham	Treatment by City of Gresham	Treatment by City of Gresham
Falls City	965	0.053	13	0.078	0.03
Florence	9,410	6	285.88	1.11	0.85
Garibaldi	881	2.25	81	1.2	0.2
Gaston	610	0	0	0	0
Gervais	2,406	0.6	78.4	0.8	0.15
Glendale	955	0.31	43.74	0.49	0.09
Gold Hill	1,100	0.08	62.85	0.12	0.9
Grants Pass	33,217	6.4	2,033	15.9	6
Gresham	101,221	20	4,745	20.9	12.1
Haines	435	na	na	0.16	0.02
Halfway	355	0.116	0	0.43	0.24
Halsey	840	na	38.16	6.88	0.02
Happy Valley	12,643	0	0	0	0
Heppner	1,420	0.23	64.9	0.29	0.2
Hermiston	15,297	2	577	1.8	1.7
Hillsboro	66,226	0	0	0	0
Idanha	227	0	0	0	0
Imbler	295	0	0	0	0
Independence	9,375	4	0	8	0.5
Ione	314	0	0	0	0
Island City	995	0	0	0.1	0.1
Jefferson	3,085	0.4	127.63	0.73	0.29
John Day	1,845	0.6	96.6	0.84	0.18
Johnson City	600	0	0	0	0
Jordan Valley	240	0.047	0.95	0.12	0.03
Joseph	1,105	0	0	0	0
Junction City	5,345	1.5	408.64	3.34	0.37
Klamath Falls	19,462	6	117	11.5	3.2
La Grande	12,682	11.5	706.62	3.52	1.92
Lafayette	3,925	3	106.61	0.73	0.21
Lake Oswego	33,800	0	0	0	0
Lakeside	1,560	0.5	85.1	0.79	0.27
Lexington	260	0	0	0	0
Lincoln City	17,260	3	570.63	4.07	1.72

WASTEWATER QUANTITY INFORMATION

City	Population	Total Capacity of Treatment Plants(s) (mil/gallons per day)	Total Amount of Wastewater Treated in 2008 (mil gallons)	Peak Wet Weather Flow in 2008 (mil/gallons per day)	Peak Dry Weather Flow in 2008 (mil/gallons per day)
Lowell	950	1.5	29.44	1.25	0.15
Lyons	1,150	0	0	0	0
Madras	6,640	1.5	185	0.5	0.5
Malin	805	0.14	30	0.14	0.07
Medford	76,300	20	6,567	47	25.7
Merrill	869	0.11	0	0.13	0.1
Mill City	1,680	0.18	31.03	0.16	0.09
Molalla	7,590	4	431	3.73	2.14
Monmouth	9,565	3.5	500	6	1
Myrtle Creek	3,665	1.8	314.68	2.5	0.7
Myrtle Point	2,541	1	107	0.52	0.2
Newberg	22,953	4	1,075.77	11.57	3.64
North Bend	9,636	2	507.39	4.213	1.285
North Plains	1,905	0	0	0	0
Oakland	954	0.6	66.57	0.54	0.24
Ontario	10,991	3.06	568.63	2.01	1.9
Philomath	4,610	0.88	325	2.5	0.085
Port Orford	1,275	2	60	0.5	0.15
Portland	550,000	108.3	26705	245	92
Powers	730	0.3	65.2	0.88	0.23
Redmond	25,000	2.99	671.3	2.3	2.3
Reedsport	4,593	5.3	338.7	4.05	0.89
Richland	150	0.05	0	0	0
Rivergrove	345	0	0	0	0
Rockaway Beach	1,350	1.5	93.58	847	442
Rogue River	2,185	1.4	117.06	0.71	0.53
Roseburg	21,235	na	na	na	na
Rufus	214	na	na	na	na
Salem	154,510	205	13,191.13	97.59	37.81
Sandy	8,823	1.25	401.58	5.46	0.73
Scio	783	0.5	30.24	4.88	1.15
Seaside	6,100	2.25	484	4.6	1.3
Seneca	183	0	0	0.07	0.04
Shady Cove	2,850	0.45	100.61	0.71	0.25
Sheridan	6,020	3	457.6	3.5	0.8
Sherwood	16,450	0	0	0	0
Silverton	9,649	2.5	370.44	5.8	0.78
Sisters	1,875	0.4	64.54	0.23	0.23
Spray	140	0	0	0	0
Springfield	57,320	175	0	165	0
Stanfield	2,100	0.26	48	0.17	0.15

WASTEWATER QUANTITY INFORMATION

City	Population	Total Capacity of Treatment Plants(s) (mil/gallons per day)	Total Amount of Wastewater Treated in 2008 (mil gallons)	Peak Wet Weather Flow in 2008 (mil/gallons per day)	Peak Dry Weather Flow in 2008 (mil/gallons per day)
Stayton	7,800	1.37	602.31	4.78	1.853
Sublimity	2,285	0	0	0	0
Sweet Home	9,045	7.7	679.895	0	0
The Dalles	11,500	4.15	798	8.51	7.17
Toledo	3,612	2.6	265.56	3.5	0.71
Tualatin	26,040	368	2400	250	77.7
Turner	1,730	0	0	0	0
Ukiah	249	0.27	0	0	0
Union	1,954	0	0	0	0
Vale	2,000	53.6	1.09	0.004	0.004
Waldport	2,145	0.7	82.67	0.68	0.231
Warrenton	4,448	0	0	0	0
Waterloo	239	0	0	0	0
West Linn	25,236	na	na	na	na
Westfir	325	0.03	unknown	0.025	0.01
Weston	745	0.3	24.82	0.13	0.33
Winston	5,800	5.8	400	7	0.7
Yachats	780	0.33	55	0.98	0.21
Yamhill	965	0.13	37.61	0.46	0.1
Yoncalla	1,115	0.16	200	0.24	0.14

APPENDIX B-3a

WASTEWATER RATE INFORMATION

Summary Information							
		In what year did the city last change its wastewater rates? (average)		How did the rates change? (number of responses)			
Response by Population	Number of Responses	Year	> 10 years	Increased	Decreased	Change in rate structure	Other
0-1,000	37	2007.17	2	22	1	2	2
1,001-5,000	43	2007.81	0	36	2	1	0
5,001-10,000	18	2007.65	2	14	0	1	2
10,001-25,000	16	2008.69	0	13	0	0	0
25,001 and up	13	2008.85	0	12	1	0	0
Total Responses	127	2007.88	4	97	4	4	4

		In what year did the city last change its wastewater rates?		How did the rates change?			
City	Population	Year	> 10 years	Increased	Decreased	Change in rate structure	Other
Albany	48,770	2009		✓			
Amity	1,480	2005		✓			
Arlington	650	2006		✓			
Ashland	21,800	2009		✓			
Astoria	9,851	2009					✓
Bandon	3,300	2009		✓			
Banks	1,435						
Bay City	1,265	2009		✓			
Beaverton	60,000	2009		✓			
Brookings	6,465	2009		✓			
Brownsville	1,755	2009		✓			
Burns	2,664	2009		✓			
Butte Falls	450	2008		✓			
Cannon Beach	1,650	2009		✓			
Carlton	1,755	2008		✓			
Cave Junction	1,730	2005		✓			
Columbia City	1,975	2009		✓			
Condon	795						
Coos Bay	16,670	2009		✓			
Cornelius	11,464	2009		✓			
Corvallis	54,880	2009		✓			
Creswell	5,058	2004		✓			
Culver	1,325	2009		✓			
Dallas	15,360	2008		✓			
Damascus	12,851						

WASTEWATER RATE INFORMATION

City	Population	In what year did the city last change its wastewater rates?		How did the rates change?			
		Year	> 10 years	Increased	Decreased	Change in rate structure	Other
Dayton	2,500	2008		✓			
Dayville	175	2002				✓	
Detroit	92						
Dunes City	1,467						
Echo	715	2009		✓			
Elgin	1,730	2009		✓			
Fairview	8,000	2009					✓
Falls City	965	2009		✓			
Florence	9,410	2009		✓			
Garibaldi	881	2009		✓			
Gaston	610						
Gervais	2,406	2007		✓			
Glendale	955	2009		✓			
Gold Hill	1,100	2004		✓			
Grants Pass	33,217	2008		✓			
Gresham	101,221	2009		✓			
Haines	435	2009		✓			
Halfway	355	2006		✓			
Halsey	840	2009		✓			
Happy Valley	12,643						
Heppner	1,420	2009			✓		
Hermiston	15,297	2009		✓			
Hillsboro	66,226	2008		✓			
Idanha	227						
Imbler	283						
Independence	9,375	2000		✓			
Ione	314						
Island City	995	2006		✓			
Jefferson	3,085			✓			
John Day	1,845	2009		✓			
Johnson City	600						
Jordan Valley	240	n/a					
Joseph	1,105	2009		✓			
Junction City	5,345	2009				✓	
Klamath Falls	19,462	2009		✓			
La Grande	12,682	2009		✓			
Lafayette	3,925	2005				✓	
Lake Oswego	33,800	2009		✓			
Lakeside	1,560	2007		✓			

WASTEWATER RATE INFORMATION

City	Population	In what year did the city last change its wastewater rates?		How did the rates change?			
		Year	> 10 years	Increased	Decreased	Change in rate structure	Other
Lexington	260						
Lincoln City	17,260	2009		✓			
Lowell	950	2009			✓		
Lyons	1,150						
Madras	6,640	2009		✓			
Malin	805	2008		✓			
Medford	76,300	2009		✓			
Merrill	869	2006		✓			
Mill City	1,680	2008		✓			
Molalla	7,590		✓				
Monmouth	9,565	2009		✓			
Myrtle Creek	3,665	2005		✓			
Myrtle Point	2,541	2009		✓			
Newberg	22,953	2009		✓			
North Bend	9,636	2003		✓			
North Plains	1,905						
Oakland	954	2009		✓			
Ontario	10,991	2006		✓			
Philomath	4,610	2008		✓			
Port Orford	1,275	2009		✓			
Portland	550,000	2009					
Powers	730	2007		✓			
Redmond	25,000	2009		✓			
Reedsport	4,593	2009		✓			
Richland	150	2009		✓			
Rivergrove	345						
Rockaway Beach	1,350	2009		✓			
Rogue River	2,185	2009		✓			
Roseburg	21,235	na					
Rufus	214	2000		✓			
Salem	154,510	2009		✓			
Sandy	8,823	2008		✓			
Scio	783		✓				
Seaside	6,100	2008		✓			
Seneca	183	2009		✓			✓
Shady Cove	2,850	2002		✓			
Sheridan	6,020	2009		✓			
Sherwood	16,450	2009		✓			
Silverton	9,649	2009		✓			

WASTEWATER RATE INFORMATION

City	Population	In what year did the city last change its wastewater rates?		How did the rates change?			
		Year	> 10 years	Increased	Decreased	Change in rate structure	Other
Sisters	1,875	2009			✓		
Spray	140	2009					✓
Springfield	57,320	2009		✓			
Stanfield	2,100	2007		✓			
Stayton	7,800	2008		✓			
Sublimity	2,285	2009		✓			
Sweet Home	9,045	2009		✓			
The Dalles	11,500	2009		✓			
Toledo	3,612	2009		✓			
Tualatin	26,040	2009		✓	✓		
Turner	1,730	2006		✓			
Ukiah	249		✓	✓			
Union	1,954	2009		✓			
Vale	2,000	2009		✓			
Waldport	2,145	2009		✓			
Warrenton	4,448			✓			
Waterloo	239						
West Linn	25,236	2009		✓			
Westfir	325	2007		✓			
Weston	745	2004		✓			
Winston	5,800	2009		✓			
Yachats	780	2006		✓		✓	
Yamhill	965	2007		✓			
Yoncalla	1,115	2006		✓			

APPENDIX B-3b

WASTEWATER RATE INFORMATION (CONTINUED)

Summary Information			
Responses by Population	**Number of Responses**	**Average Wastewater Monthly cost (5000 gal/mo.; 668.4 c.f./mo.) In-City**	**If wastewater rates are based on water consumption, is there a seasonal adjustment for wastewater (i.e. winter average used for summer months) (number of responses)**
0-1,000	37	$34.62	3
1,001-5,000	43	$39.12	17
5,001-10,000	18	$36.17	9
10,001-25,000	16	$31.26	9
25,001 and up	13	$30.36	11
Total Responses	127	$35.61	49

City	Population	Wastewater Monthly cost (5000 gal/mo.; 668.4 c.f./mo.) In-City	If wastewater rates are based on water consumption, is there a seasonal adjustment for wastewater (i.e. winter average used for summer months)
Albany	48,770	$38.49	✓
Amity	1,480	$48.11	✓
Arlington	650	$38.00	
Ashland	21,800	$26.97	✓
Astoria	9,851	$38.42	✓
Bandon	3,300	$32.08	✓
Banks	1,435		
Bay City	1,265	$30.94	
Beaverton	60,000		✓
Brookings	6,465		
Brownsville	1,755	$36.90	✓
Burns	2,664	$28.04	
Butte Falls	450		
Cannon Beach	1,650		
Carlton	1,755	$38.77	
Cave Junction	1,730	$31.00	✓
Columbia City	1,975	$24.15	✓
Condon	795		
Coos Bay	16,670	$43.92	✓
Cornelius	11,464	$30.80	✓
Corvallis	54,880	$28.83	✓
Creswell	5,058	$42.20	✓
Culver	1,325	$33.00	
Dallas	15,360	$38.40	
Damascus	12,851		
Dayton	2,500	$25.00	
Dayville	175	$28.00	

WASTEWATER RATE INFORMATION (CONTINUED)

City	Population	Wastewater Monthly cost (5000 gal/mo.; 668.4 c.f./mo.) In-City	If wastewater rates are based on water consumption, is there a seasonal adjustment for wastewater (i.e. winter average used for summer months)
Detroit	92		
Dunes City	1,467		
Echo	715	$43.00	
Elgin	1,730	$17.25	
Fairview	8,000	$31.58	
Falls City	965	$37.00	
Florence	9,410	$38.86	
Garibaldi	881	$46.50	
Gaston	610		
Gervais	2,406	$37.00	
Glendale	955	$40.00	✓
Gold Hill	1,100	$31.17	
Grants Pass	33,217	$27.84	✓
Gresham	101,221	$24.09	✓
Haines	435		
Halfway	355	$17.46	
Halsey	840	$26.00	
Happy Valley	12,643		
Heppner	1,420	$23.10	
Hermiston	15,297	$18.48	✓
Hillsboro	66,226	$30.79	✓
Idanha	227		
Imbler	283		
Independence	9,375	$24.82	
Ione	314		
Island City	995	$40.00	
Jefferson	3,085	$36.25	✓
John Day	1,845	$31.00	✓
Johnson City	600		
Jordan Valley	240	$17.94	
Joseph	1,105	$17.69	
Junction City	5,345	$42.95	✓
Klamath Falls	19,462	$ 6.96	✓
La Grande	12,682	$32.26	
Lafayette	3,925	$58.64	✓
Lake Oswego	33,800	$36.71	✓
Lakeside	1,560	$45.00	
Lexington	260		
Lincoln City	17,260	$38.84	
Lowell	950	$38.90	

WASTEWATER RATE INFORMATION (CONTINUED)

City	Population	Wastewater Monthly cost (5000 gal/mo.; 668.4 c.f./mo.) In-City	If wastewater rates are based on water consumption, is there a seasonal adjustment for wastewater (i.e. winter average used for summer months)
Lyons	1,150		
Madras	6,640		✓
Malin	805	$14.00	
Medford	76,300	$13.11	✓
Merrill	869	$32.00	
Mill City	1,680	$38.52	
Molalla	7,590		✓
Monmouth	9,565	$31.92	
Myrtle Creek	3,665	$68.00	
Myrtle Point	2,541	$34.42	✓
Newberg	22,953	$48.21	✓
North Bend	9,636	$25.25	
North Plains	1,905		
Oakland	954	$49.40	
Ontario	10,991	$27.90	✓
Philomath	4,610	$35.78	✓
Port Orford	1,275	$66.63	
Portland	550,000	$44.18	
Powers	730		✓
Redmond	25,000		✓
Reedsport	4,593	$57.00	✓
Richland	150		
Rivergrove	345		
Rockaway Beach	1,350	$34.95	
Rogue River	2,185	$44.27	✓
Roseburg	21,235		
Rufus	214		
Salem	154,510	$40.24	✓
Sandy	8,823	$23.04	✓
Scio	783	$23.25	✓
Seaside	6,100	$46.44	
Seneca	183	$15.00	
Shady Cove	2,850	$43.00	
Sheridan	6,020	$32.50	
Sherwood	16,450	$31.16	✓
Silverton	9,649	$47.63	✓
Sisters	1,875		✓
Spray	140	$43.00	
Springfield	57,320	$36.87	✓
Stanfield	2,100	$41.25	✓

WASTEWATER RATE INFORMATION (CONTINUED)

City	Population	Wastewater Monthly cost (5000 gal/mo.; 668.4 c.f./mo.) In-City	If wastewater rates are based on water consumption, is there a seasonal adjustment for wastewater (i.e. winter average used for summer months)
Stayton	7,800	$40.04	✓
Sublimity	2,285	$42.80	
Sweet Home	9,045	$40.86	✓
The Dalles	11,500		
Toledo	3,612	$55.75	✓
Tualatin	26,040	$30.40	✓
Turner	1,730	$60.46	✓
Ukiah	249		
Union	1,954		
Vale	2,000	$40.00	
Waldport	2,145	$57.06	✓
Warrenton	4,448		
Waterloo	239		
West Linn	25,236	$12.74	
Westfir	325	$37.50	
Weston	745	$42.50	
Winston	5,800	$36.00	
Yachats	780	$45.83	
Yamhill	965	$51.68	
Yoncalla	1,115	$35.00	

APPENDIX B-4

WASTEWATER PLANNING INFORMATION

Summary Information						
			Does the city maintain an asset management system for its wastewater utility? (number of responses)			Does the city's wastewater rate ordinance have an automatic CPI/ Income adjustment? (number of responses)
Responses by Population	Number of Responses	Are the wastewater plants releasing stream water that is quality limited (TMDL) or under special regulation? (number of responses)	Yes, adequately funded	Yes, inadequately funded	No	Yes
0-1,000	37	13	6	8	12	1
1,001-5,000	43	21	6	10	18	8
5,001-10,000	18	7	2	5	11	2
10,001-25,000	16	7	2	9	2	1
25,001 and up	13	8	5	3	4	1
Total Responses	127	56	21	35	47	13

		Are the wastewater plants releasing stream water that is quality limited (TMDL) or under special regulation?	Does the city maintain an asset management system for its wastewater utility?			Does the city's wastewater rate ordinance have an automatic CPI/ Income adjustment?
City	Population		Yes, adequately funded	Yes, inadequately funded	No	Yes
Albany	48,770	✓		✓		
Amity	1,480				✓	
Arlington	650	✓	✓			
Ashland	21,800	✓		✓		
Astoria	9,851	✓		✓		
Bandon	3,300	✓		✓		
Banks	1,435					
Bay City	1,265	✓		✓		
Beaverton	60,000	✓	✓			
Brookings	6,465				✓	✓
Brownsville	1,755	✓		✓		
Burns	2,664					✓
Butte Falls	450	✓	✓			
Cannon Beach	1,650	✓	✓			
Carlton	1,755	✓			✓	✓
Cave Junction	1,730	✓			✓	
Columbia City	1,975				✓	
Condon	795					
Coos Bay	16,670			✓		
Cornelius	11,464			✓		
Corvallis	54,880	✓			✓	

WASTEWATER PLANNING INFORMATION

City	Population	Are the wastewater plants releasing stream water that is quality limited (TMDL) or under special regulation?	Does the city maintain an asset management system for its wastewater utility?			Does the city's wastewater rate ordinance have an automatic CPI/ Income adjustment?
			Yes, adequately funded	Yes, inadequately funded	No	Yes
Creswell	5,058	✓		✓		✓
Culver	1,325				✓	
Dallas	15,360	✓			✓	
Damascus	12,851					
Dayton	2,500				✓	
Dayville	175	✓			✓	
Detroit	92					
Dunes City	1,467					
Echo	715	✓			✓	
Elgin	1,730	✓		✓		
Fairview	8,000				✓	
Falls City	965	✓			✓	
Florence	9,410				✓	
Garibaldi	881	✓		✓		
Gaston	610					
Gervais	2,406				✓	
Glendale	955	✓		✓		
Gold Hill	1,100	✓			✓	
Grants Pass	33,217	✓	✓			✓
Gresham	101,221		✓			
Haines	435				✓	
Halfway	355	✓			✓	
Halsey	840					
Happy Valley	12,643					
Heppner	1,420				✓	
Hermiston	15,297	✓		✓		
Hillsboro	66,226				✓	
Idanha	227					
Imbler	283					
Independence	9,375	✓			✓	
Ione	314					
Island City	995			✓		
Jefferson	3,085	✓			✓	✓
John Day	1,845			✓		
Johnson City	600					
Jordan Valley	240				✓	
Joseph	1,105	✓		✓		

WASTEWATER PLANNING INFORMATION

City	Population	Are the wastewater plants releasing stream water that is quality limited (TMDL) or under special regulation?	Does the city maintain an asset management system for its wastewater utility?			Does the city's wastewater rate ordinance have an automatic CPI/ Income adjustment?
			Yes, adequately funded	Yes, inadequately funded	No	Yes
Junction City	5,345	✓		✓		
Klamath Falls	19,462	✓		✓		✓
La Grande	12,682	✓	✓			
Lafayette	3,925				✓	✓
Lake Oswego	33,800				✓	
Lakeside	1,560	✓	✓			
Lexington	260					
Lincoln City	17,260			✓		
Lowell	950	✓			✓	
Lyons	1,150					
Madras	6,640				✓	
Malin	805			✓		
Medford	76,300	✓	✓			
Merrill	869		✓			
Mill City	1,680	✓			✓	
Molalla	7,590		✓			
Monmouth	9,565				✓	
Myrtle Creek	3,665			✓		
Myrtle Point	2,541	✓			✓	
Newberg	22,953	✓			✓	
North Bend	9,636				✓	
North Plains	1,905					
Oakland	954	✓	✓			✓
Ontario	10,991	✓		✓		
Philomath	4,610	✓	✓			
Port Orford	1,275		✓			✓
Portland	550,000					
Powers	730	✓			✓	
Redmond	25,000			✓		
Reedsport	4,593	✓			✓	
Richland	150			✓		
Rivergrove	345					
Rockaway Beach	1,350	✓				
Rogue River	2,185	✓			✓	✓
Roseburg	21,235					
Rufus	214		✓			
Salem	154,510	✓		✓		

WASTEWATER PLANNING INFORMATION

City	Population	Are the wastewater plants releasing stream water that is quality limited (TMDL) or under special regulation?	Does the city maintain an asset management system for its wastewater utility?			Does the city's wastewater rate ordinance have an automatic CPI/ Income adjustment?
			Yes, adequately funded	Yes, inadequately funded	No	Yes
Sandy	8,823				✓	
Scio	783	✓			✓	
Seaside	6,100	✓	✓			
Seneca	183				✓	
Shady Cove	2,850	✓		✓		
Sheridan	6,020				✓	
Sherwood	16,450		✓			
Silverton	9,649	✓			✓	
Sisters	1,875				✓	
Spray	140		✓			
Springfield	57,320	✓	✓			
Stanfield	2,100	✓		✓		
Stayton	7,800	✓			✓	
Sublimity	2,285					
Sweet Home	9,045			✓		
The Dalles	11,500			✓		
Toledo	3,612	✓		✓		
Tualatin	26,040	✓			✓	
Turner	1,730				✓	
Ukiah	249	✓		✓		
Union	1,954					✓
Vale	2,000		✓			
Waldport	2,145		✓			✓
Warrenton	4,448					
Waterloo	239					
West Linn	25,236			✓		
Westfir	325			✓		
Weston	745				✓	
Winston	5,800			✓		
Yachats	780				✓	
Yamhill	965			✓		
Yoncalla	1,115	✓			✓	

APPENDIX C-1

STORMWATER QUANTITY INFORMATION

Summary Information											
		Are stormwater rates included in the wastewater rates, or is it a separate utility fee? (number of responses)						Does the city offer stormwater fee reductions for onsite stormwater management? (number of responses)		
Responses by Population	Number of Responses	Storm-water fees included in rates	Storm-water fees are a separate utility fee	Storm-water fees are paid to a joint district with the county	No charge for storm-water services provided	No storm-water service provided	Other	Yes	If yes, nature of reduction	If yes, amount
0-1,000	37	1	2	0	5	4	1	0		
1,001-5,000	43	4	2	1	9	1	0	0		
5,001-10,000	18	1	9	0	2	0	1	4		
10,001-25,000	16	1	8	0	3	1	0	3		
25,001 and up	13	1	9	1	1	0	0	8		
Total Responses	127	8	30	2	20	6	2	15		

		Are stormwater rates included in the wastewater rates, or is it a separate utility fee?						Does the city offer stormwater fee reductions for onsite stormwater management?		
City	Population	Storm-water fees included in rates	Storm-water fees are a separate utility fee	Storm-water fees are paid to a joint district with the county	No charge for storm-water services provided	No storm-water service provided	Other	Yes	If yes, nature of reduction	If yes, amount
Albany	48,770				✓					
Amity	1,480				✓					
Arlington	650									
Ashland	21,800		✓							
Astoria	9,851						✓			
Bandon	3,300				✓					
Banks	1,435									
Bay City	1,265									
Beaverton	60,000		✓					✓		
Brookings	6,465		✓					✓		
Brownsville	1,755									
Burns	2,664									
Butte Falls	450									
Cannon Beach	1,650		✓							
Carlton	1,755	✓								
Cave Junction	1,730									
Columbia City	1,975				✓					
Condon	795									
Coos Bay	16,670	✓								

STORMWATER QUANTITY INFORMATION

City	Population	Are stormwater rates included in the wastewater rates, or is it a separate utility fee?						Does the city offer stormwater fee reductions for onsite stormwater management?		
		Storm-water fees included in rates	Storm-water fees are a separate utility fee	Storm-water fees are paid to a joint district with the county	No charge for storm-water services provided	No storm-water service provided	Other	Yes	If yes, nature of reduction	If yes, amount
Cornelius	11,464		✓							
Corvallis	54,880		✓					✓		
Creswell	5,058				✓					
Culver	1,325									
Dallas	15,360				✓					
Damascus	12,851									
Dayton	2,500									
Dayville	175					✓				
Detroit	92									
Dunes City	1,467									
Echo	715									
Elgin	1,730				✓					
Fairview	8,000		✓							
Falls City	965									
Florence	9,410		✓							
Garibaldi	881				✓					
Gaston	610				✓					
Gervais	2,406	✓								
Glendale	955		✓							
Gold Hill	1,100				✓					
Grants Pass	33,217									
Gresham	101,221		✓					✓	Up to 27% in bill if 100% on-site storm-water manage-ment	
Haines	435									
Halfway	355									
Halsey	840		✓							
Happy Valley	-									
Heppner	1,420									
Hermiston	15,297					✓				
Hillsboro	66,226		✓					✓	If storm	100
Idanha	227									
Imbler	-									
Independence	9,375		✓							
Ione	314									

STORMWATER QUANTITY INFORMATION

City	Population	Are stormwater rates included in the wastewater rates, or is it a separate utility fee?						Does the city offer stormwater fee reductions for onsite stormwater management?		
		Storm-water fees included in rates	Storm-water fees are a separate utility fee	Storm-water fees are paid to a joint district with the county	No charge for storm-water services provided	No storm-water service provided	Other	Yes	If yes, nature of reduction	If yes, amount
Island City	995									
Jefferson	3,085				✓					
John Day	1,845									
Johnson City	600									
Jordan Valley	240									
Joseph	1,105									
Junction City	5,345									
Klamath Falls	19,462				✓					
La Grande	12,682		✓							
Lafayette	3,925									
Lake Oswego	33,800		✓					✓	50% for residential, and commercial is reduced by the percent of quality and quantity improve-ment	Varies
Lakeside	1,560									
Lexington	260									
Lincoln City	17,260									
Lowell	950	✓					✓			
Lyons	1,150									
Madras	6,640	✓								
Malin	805					✓				
Medford	76,300		✓							
Merrill	869									
Mill City	1,680				✓					
Molalla	7,590		✓							
Monmouth	9,565									
Myrtle Creek	3,665									
Myrtle Point	2,541									
Newberg	22,953		✓					✓	Comm. Cust	Varies
North Bend	9,636		✓					✓	Rate & Quality Control	Up to 1/3 off
North Plains	1,905									
Oakland	954									

STORMWATER QUANTITY INFORMATION

City	Population	Are stormwater rates included in the wastewater rates, or is it a separate utility fee?						Does the city offer stormwater fee reductions for onsite stormwater management?		
		Storm-water fees included in rates	Storm-water fees are a separate utility fee	Storm-water fees are paid to a joint district with the county	No charge for storm-water services provided	No storm-water service provided	Other	Yes	If yes, nature of reduction	If yes, amount
Ontario	10,991		✓							
Philomath	4,610		✓							
Port Orford	1,275									
Portland	550,000							✓	On site measures	Up to 35%
Powers	730				✓					
Redmond	25,000				✓					
Reedsport	4,593	✓								
Richland	150					✓				
Rivergrove	350									
Rockaway Beach	1,350									
Rogue River	2,185					✓				
Roseburg	21,235		✓							
Rufus	214									
Salem	154,510	✓								
Sandy	8,823		✓					✓	Reduction or elimination of impervious surface	Up to 100%
Scio	783				✓					
Seaside	6,100									
Seneca	183					✓				
Shady Cove	2,850									
Sheridan	6,020		✓							
Sherwood	16,450		✓					✓		
Silverton	9,649									
Sisters	1,875									
Spray	140									
Springfield	57,320		✓							
Stanfield	2,100									
Stayton	7,800				✓					
Sublimity	2,285									
Sweet Home	9,045		✓					✓		
The Dalles	11,500		✓					✓	Water if onsite	Full
Toledo	3,612	✓								

STORMWATER QUANTITY INFORMATION

City	Population	Are stormwater rates included in the wastewater rates, or is it a separate utility fee?						Does the city offer stormwater fee reductions for onsite stormwater management?		
		Storm-water fees included in rates	Storm-water fees are a separate utility fee	Storm-water fees are paid to a joint district with the county	No charge for storm-water services provided	No storm-water service provided	Other	Yes	If yes, nature of reduction	If yes, amount
Tualatin	26,040		✓	✓				✓	Exempt if no runoff from 100 year storm event	100
Union	1,954									
Vale	2,000				✓					
Waldport	2,145									
Warrenton	4,785			✓						
Waterloo	239									
West Linn	25,236		✓							
Westfir	325									
Weston	745									
Winston	5,800									
Yachats	780				✓					
Yamhill	965									
Yoncalla	1,115				✓					

APPENDIX C-2

STORMWATER RATE INFORMATION

Summary Information								
		Does the city maintain an asset management system for its stormwater utility? (number of responses)			When did the city last change its stormwater rates? (year)		Does the city's stormwater rate ordinance have an automatic CPI/Income adjustment? (number of responses)	Average monthly cost In-City
Responses by Population	Number of Responses	Yes (adequately funded)	Yes (not adequately funded)	No	Year (average)	Over 10 years ago (number of responses)		
0-1,000	37	0	1	7	2004	0	0	$0.00
1,001-5,000	43	2	1	8	2007	1	2	$1.88
5,001-10,000	18	0	2	9	2007	0	2	$4.49
10,001-25,000	16	1	8	1	2009	1	1	$4.37
25,001 and up	13	2	2	6	2008	1	0	$6.55
Total Responses	127	5	14	31	2008	3	5	$4.87

City	Population	Does the city maintain an asset management system for its stormwater utility?			When did the city last change its stormwater rates? (year)		Does the city's stormwater rate ordinance have an automatic CPI/Income adjustment?	Monthly cost In-City
		Yes (adequately funded)	Yes (not adequately funded)	No	Year	Over 10 years ago		
Albany	48,770			✓				
Amity	1,480			✓				
Arlington	650							
Ashland	21,800		✓		2009			$4.17
Astoria	9,851		✓					
Bandon	3,300							
Banks	1,435							
Bay City	1,265							
Beaverton	60,000	✓			2009			
Brookings	6,465			✓	2009		✓	
Brownsville	1,755							
Burns	2,664							
Butte Falls	450							
Cannon Beach	1,650	✓			2009		✓	
Carlton	1,755			✓				
Cave Junction	1,730							
Columbia City	1,975							
Condon	795							
Coos Bay	16,670		✓					
Cornelius	11,464		✓		2009		✓	$4.25
Corvallis	54,880			✓	2002			$4.98
Creswell	5,058							

STORMWATER RATE INFORMATION

City	Population	Does the city maintain an asset management system for its stormwater utility?			When did the city last change its stormwater rates? (year)		Does the city's stormwater rate ordinance have an automatic CPI/Income adjustment?	Monthly cost In-City
		Yes (adequately funded)	Yes (not adequately funded)	No	Year	Over 10 years ago		
Culver	1,325							
Dallas	15,360							$2.00
Damascus	12,851							
Dayton	2,500							
Dayville	175							
Detroit	92							
Dunes City	1,467							
Echo	715							
Elgin	1,730			✓				
Fairview	8,000			✓	2009			$8.12
Falls City	965							
Florence	9,410			✓	2008			$4.16
Garibaldi	881		✓					
Gaston	610			✓				
Gervais	2,406			✓	2003		✓	
Glendale	955			✓				
Gold Hill	1,100							
Grants Pass	33,217							
Gresham	101,221			✓	2009			$8.60
Haines	435							
Halfway	355							
Halsey	840			✓				
Happy Valley	12,643							
Heppner	1,420				2008			
Hermiston	15,297							
Hillsboro	66,226			✓				$4.25
Idanha	227				2009			
Imbler	283							
Independence	9,375						✓	$6.18
Ione	314							
Island City	995							
Jefferson	3,085			✓		✓		
John Day	1,845							
Johnson City	600							
Jordan Valley	240							
Joseph	1,105							
Junction City	5,345				2009			
Klamath Falls	19,462							

STORMWATER RATE INFORMATION

City	Population	Does the city maintain an asset management system for its stormwater utility?			When did the city last change its stormwater rates? (year)		Does the city's stormwater rate ordinance have an automatic CPI/Income adjustment?	Monthly cost In-City
		Yes (adequately funded)	Yes (not adequately funded)	No	Year	Over 10 years ago		
La Grande	12,682		✓		2009			
Lafayette	3,925							
Lake Oswego	33,800			✓				
Lakeside	1,560							
Lexington	260							
Lincoln City	17,260							
Lowell	950							
Lyons	1,150							
Madras	6,640			✓	2009			
Malin	805							
Medford	76,300	✓						$5.20
Merrill	869							
Mill City	1,680							
Molalla	7,590			✓				
Monmouth	9,565							
Myrtle Creek	3,665				2009			
Myrtle Point	2,541				2004			
Newberg	22,953			✓				$3.80
North Bend	9,636			✓				$4.50
North Plains	1,905				2006			
Oakland	954				2009			
Ontario	10,991		✓					$1.16
Philomath	4,610	✓			2009			$0.75
Port Orford	1,275							
Portland	550,000							$8.64
Powers	730			✓	2002			
Redmond	25,000		✓					
Reedsport	4,593			✓				$3.00
Richland	150			✓	2009			
Rivergrove	345							
Rockaway Beach	1,350				2009			
Rogue River	2,185				2005			
Roseburg	21,235		✓					$3.45
Rufus	214							
Salem	154,510		✓			✓		
Sandy	8,823			✓				$3.00
Scio	783			✓	2002			

STORMWATER RATE INFORMATION

City	Population	Does the city maintain an asset management system for its stormwater utility?			When did the city last change its stormwater rates? (year)		Does the city's stormwater rate ordinance have an automatic CPI/Income adjustment?	Monthly cost In-City
		Yes (adequately funded)	Yes (not adequately funded)	No	Year	Over 10 years ago		
Seaside	6,100				2009			
Seneca	183							
Shady Cove	2,850							
Sheridan	6,020			✓				
Sherwood	16,450	✓			2009			$11.77
Silverton	9,649							
Sisters	1,875							
Spray	140							
Springfield	57,320				2008			$9.84
Stanfield	2,100				2008			
Stayton	7,800			✓	2009			
Sublimity	2,285				2009			
Sweet Home	9,045		✓					$1.00
The Dalles	11,500		✓					
Toledo	3,612		✓					
Tualatin	26,040			✓				
Turner	1,730							
Ukiah	249				2008			
Union	1,954							
Vale	2,000			✓	2009			
Waldport	2,145							
Warrenton	4,448			✓				
Waterloo	239							
West Linn	25,236		✓					$4.35
Westfir	325							
Weston	745							
Winston	5,800							
Yachats	780			✓				
Yamhill	965							
Yoncalla	1,115							

APPENDIX D-1

The following pages include the survey instrument,
"Survey on Utility Rates: Water/Wastewater/Stormwater."

League of Oregon Cities

Survey on Utility Rates
Water/Wastewater/Stormwater

INTRODUCTION

The following survey requests information regarding your city's essential utility services. We ask that you complete all sections of the survey to ensure that all relevant information on the utilities are gathered. This survey has five sections to complete with an extra blank page on the end for additional comments (only complete the sections pertaining to your city/system):

I. Water Services
II. Wastewater Services
III. Stormwater Services
IV. Utility Billing
V. Utility Rate Schedules (Or the city can send in the their rate schedule/ordinance)

Does your city provide any of the following utility services? (check all that apply):

- ☐ Water
- ☐ Wastewater
- ☐ Stormwater
- ☐ None of these services
- ☐ Provide the following services jointly with special district(s): _____

I. WATER SERVICES

Service Population

	Inside City Limits	Outside City Limits
Service Population (permanent residents):		
Service Population (including peak seasonal):		
Number of Connections:		

Facilities and Water Source

1. Total miles of water lines (all sizes): _____
2. Water source:
   - ☐ Surface
   - ☐ Ground
   - ☐ Wholesale
   - ☐ Other: _____
3. Water Source is:
   - ☐ Gravity Fed
   - ☐ Pumped
   - ☐ Other: _____
4. Distance(s) from source to city: _____

Age and Capacity

5. Age or Average Age of Water Plant(s): _____
6. Total Capacity of Water Plant(s) (gallons per day): _____
7. What is the total amount of water treated in 2008 (gallons): _____
8. What was the peak flow of water treated in a 24-hour period in 2008 (gallons): _____
9. How much treated water storage do you have (gallons): _____
10. How much untreated water storage do you have (gallons): _____
11. At what capacity is your entire water system operating? _____%
12. When is your water system projected to be at maximum capacity (year – e.g. 2010)? _____
13. Does your city have an approved water conservation and management plan?
    - ☐ Yes Water Resources Department Approval Date: _____
    - ☐ No
14. What is the annual measured (or estimated) water loss (unaccounted for water) of your system? _____%
    - ☐ Water loss not measured

15. If water loss is measured (or estimated): What is the method used to determine the amount of water loss in your system?
    - ☐ Estimate
    - ☐ Recently adopted IWA/AWWA water loss methodology
    - ☐ Comparison of production meters and customer metered volumes
    - ☐ Other: Please Indicate_____
    - ☐ Don't know

Water Rates and Charges

16. What is the rate structure for your city's water service?
    - ☐ Flat Rate
    - ☐ Inclining Block Rate
    - ☐ Declining Block Rate
    - ☐ Other _____

For all rate structures, please send the Environmental Finance Center (EFC) a copy of your water rate schedule so that a comparative rate analysis can be conducted. Please be sure the base rate and usage rates are included for residential/commercial, and customers inside city limits vs. outside. If you do not have a fee schedule, please complete the table attached to the survey.

17. What percent of the city's water rate revenue accounts for debt service? _____%

18. Does the city maintain an asset management system for its water utility?
    - ☐ Yes (adequately funded)
    - ☐ Yes (not adequately funded)
    - ☐ No

19. When did the city last change its water rates (year)? _____ ☐ Over 10 years ago

20. How did the rates change?
    - ☐ Increased
    - ☐ Decreased
    - ☐ Change in Rate Structure
    - ☐ Other: _____

21. Why did the city change its water rates? (check all that apply):
    - ☐ State/Federal Mandate ☐ Treatment Costs ☐ Labor Costs
    - ☐ Inflation/CPI ☐ Capital Improvement ☐ Reason Unknown
    - ☐ Other _____

22. Does the city's water rate ordinance have an automatic CPI/Income adjustment?
    - ☐ Yes
    - ☐ No

II. WASTEWATER SERVICES

Service Population

	Inside City Limits	Outside City Limits
Service Population (permanent residents):		
Service Population (including peak seasonal):		
Number of Connections:		

Lines, Facilities & Treatment

1. Total Miles of Sewer Lines (all sizes): _____
2. Number of Pump/Lift Stations: _____
3. Number of Treatment Plants: _____
4. What percent of the city's wastewater lines is "combined sewer"? (In combined sewers, the wastewater lines are used for both stormwater and wastewater.) _____%
5. What level of sewage treatment is provided to city wastewater? *(check all that apply)*
   - ☐ Primary
   - ☐ Secondary
   - ☐ Advanced Treatment
   - ☐ Nitrogen Removal
   - ☐ Phosphorous Removal
6. Are the wastewater plants releasing stream water that is quality limited (TMDL) or under special regulation?
   - ☐ Yes
   - ☐ No

Age and Capacity

7. Age or Average Age of Treatment Plant(s): _____
8. Total Capacity of Treatment Plants(s) (gallons per day): _____
9. What is the total amount of wastewater treated in 2008 (gallons): _____
10. Peak Wet Weather Flow in 2008 (gallons per day): _____
11. Peak Dry Weather Flow in 2008 (gallons per day): _____
12. At what capacity is your entire wastewater system operating? _____%
13. When is your wastewater system projected to be at maximum capacity (year – e.g. 2010)? _____

Wastewater Rates

Please send the EFC a copy of your wastewater rate schedule so that a comparative rate analysis can be conducted. Please be sure the base rate and usage rates are included for residential/commercial, and customers inside city limits vs. outside. If you do not have a fee schedule, please complete the table attached to the survey.

14. If wastewater rates are based on water consumption, is there a seasonal adjustment for wastewater (i.e. winter average used for summer months):
    - ☐ Yes
    - ☐ No

15. What percent of the city's wastewater rate revenue accounts for debt service? _____%

16. Does the city maintain an asset management system for its wastewater utility?
    - ☐ Yes (adequately funded)
    - ☐ Yes (not adequately funded)
    - ☐ No

17. When did the city last change its wastewater rates (year)? _____ ☐ Over 10 years ago

18. How did the rates change?
    - ☐ Increased
    - ☐ Decreased
    - ☐ Change in Rate Structure
    - ☐ Other: _____

19. Why did the city change its wastewater rates? (check all that apply):
    - ☐ State/Federal Mandate ☐ Treatment Costs ☐ Labor Costs
    - ☐ Inflation/CPI ☐ Capital Improvement ☐ Reason Unknown
    - ☐ Other: _____

20. Does the city's wastewater rate ordinance have an automatic CPI/Income adjustment?
    - ☐ Yes
    - ☐ No

Other Wastewater Programs

21. Does your city administer an industrial wastewater pretreatment program?
    - ☐ Yes
    - ☐ No

22. Does the city apply or provide reclaimed water to public/private property?
    - ☐ Yes
    - ☐ No

23. If yes, what percentage of total reclaimed water is reused/applied? _____%

24. Please describe ownership and use of the property where the application occurs (i.e. city park, private golf course, industrial cooling tower, etc.)

    _____

    _____

25. Does the city apply biosolids to public/private property?
    - ☐ Yes
    - ☐ No

26. If yes, what percentage of biosolids is applied? _____%

27. Please describe ownership and use of the land where the application occurs (i.e. city park, private golf course, etc.)_____

III. STORMWATER SERVICES

Current System Characteristics

	Inside City Limits	Outside City Limits
Number of Customers/Connections:		

Stormwater Rates

1. Are stormwater rates included in the wastewater rates, or is it a separate utility fee?
   - ☐ Stormwater fees are included in wastewater rates
   - ☐ Stormwater fees are a separate utility fee
   - ☐ Stormwater fees are paid to a joint district within the county
   - ☐ No charge for stormwater services
   - ☐ No stormwater service provided
   - ☐ Other: _____

2. Does the city offer stormwater fee reductions for onsite stormwater management?
   - ☐ Yes (nature: _____ amount: _____)
   - ☐ No

If the city charges a fee, please send the EFC a copy of your stormwater rate schedule so that a comparative rate analysis can be conducted. Please be sure the base rate and usage rates are included for residential/commercial, and customers inside city limits vs. outside. If you do not have a fee schedule, please complete the table attached to the survey.

3. What percent of the city's stormwater rate revenue accounts for debt service? _____%

4. Does the city maintain an asset management system for its stormwater utility?
   - ☐ Yes (adequately funded)
   - ☐ Yes (not adequately funded)
   - ☐ No

5. When did the city last change its stormwater rates (year)? _____ ☐ Over 10 years ago

6. How did the rates change?
   - ☐ Increased
   - ☐ Decreased
   - ☐ Change in Rate Structure
   - ☐ Other: _____

7. Why did the city change its stormwater rates? (check all that apply):
   - ☐ State/Federal Mandate ☐ Treatment Costs ☐ Labor Costs
   - ☐ Inflation/CPI ☐ Capital Improvement ☐ Reason Unknown
   - ☐ Other_____

8. Does the city's stormwater rate ordinance have an automatic CPI/Income adjustment?
   - ☐ Yes
   - ☐ No

IV. UTILIY BILLING

1. How often are bills issued?
   - ☐ Monthly
   - ☐ Bi-Monthly
   - ☐ Quarterly
   - ☐ Other: _____

2. Does the city contract out for billing services?
   - ☐ Yes
   - ☐ No

3. If no, what computer software program does the city use? _____

4. Does the city charge a late fee for delinquent bills?
   - ☐ Yes
   - ☐ No

5. If yes, what is the late fee rate (e.g. 5% of bill, or $5 flat fee)? _____

6. How many days passed the due date are allowed before the late fee is assessed?_____

7. Does your city disconnect water service due to nonpayment?
   - ☐ Yes
   - ☐ No

Please send the EFC a copy of your city's water/wastewater shutoff policy.

8. Does the city provide waivers or reductions to certain utility customers (low income families, senior citizens, schools, etc.)?
   - ☐ Yes
   - ☐ No

9. If yes, please describe the waiver/reduction:

Customer Type	Amount of Waiver Reduction	Utility Bill Waived/Reduced (check all that apply)
		□ Water □ Wastewater □ Stormwater
		□ Water □ Wastewater □ Stormwater
		□ Water □ Wastewater □ Stormwater
		□ Water □ Wastewater □ Stormwater
		□ Water □ Wastewater □ Stormwater
		□ Water □ Wastewater □ Stormwater

V. Utility Rate Structure

Water

Customer Type	Meter Size	Base Rate	Usage Included	Volume Rate

Wastewater Customer Type	Meter Size	Base Rate	Usage Included	Volume Rate

Stormwater Customer Type	Lot Size	Base Rate	Additional Charge