

# **RESOLUTION NO. 24 -07**

## **A RESOLUTION ESTABLISHING AN UPDATED SYSTEMS DEVELOPMENT CHARGE FOR WASTEWATER COLLECTION AND TREATMENT.**

**WHEREAS**, the City of Aumsville Systems Development Ordinance, Ordinance No. 387 provides for the setting of systems development charges upon completion of an analysis of projected capital improvements to be constructed and adoption of a methodology explaining how the systems development fees were calculated; and

**WHEREAS**, the City of Aumsville has enacted Ordinance 387, which specifies that such charges shall be set by a separate resolution of the City Council, and

**WHEREAS**, the preparation of this document was funded in part with a grant from the Oregon State Lottery, administered by the State of Oregon Economic Development Department.

**NOW, THEREFORE, THE CITY OF AUMSVILLE HEREBY RESOLVES AS FOLLOWS:**

### **SECTION 1. IMPOSITION OF SYSTEMS DEVELOPMENT CHARGES**

This resolution shall establish the most current methodology, and it replaces the methodology set forth in Resolutions 06-05 and shall be the basis for imposing a systems development charge (SDC) on those activities that create the need for or increase the demand for necessary capital improvements to sustain an adequate wastewater collection and treatment system within the City of Aumsville, Oregon.

### **SECTION 2. SCOPE**

The charge imposed by this resolution is separate from and in addition to any applicable taxes, fees, assessments, charges, including but not limited to other systems development charges, which may be required by the City of Aumsville or imposed as a condition of a land use or development approval.

### **SECTION 3. SDC FEES: IMPROVEMENT FEE and REIMBURSEMENT FEE**

The SDC fee imposed by this resolution is a combination of an improvement fee and a reimbursement fee and is not a tax on the land.

### **SECTION 4. METHODOLOGY**

The City Council of Aumsville hereby adopts the following methodology as the basis for setting the systems development fee imposed by this resolution as authorized by Ordinance 387.

A. The **City of Aumsville Sanitary Sewer Master Plan** dated November 2004 and updated April 2007, prepared by James Schuette, PE, JMS Engineering; the **City of Aumsville "Wastewater Facilities Plan"** dated June 1999 prepared by Balfour Consulting, Inc.; Resolutions No. 16-94, 12-01 and 13-03; the **Aumsville Comprehensive Plan** (Ordinance 324, dated July 14, 1986); the **Aumsville Development Ordinance** (Ordinance 323, dated June 10, 1986, as amended) and the **Marion County Urban Growth Management Plan** (Marion County Ordinance 1166) shall be considered the primary source documents upon which the charges imposed herein are promulgated and constitute the improvements plan described in the Systems Development Ordinance, No. 387.

B. The City of Aumsville currently operates and maintains a municipal wastewater system. This system has been operated by the City since the late 1960's.

The wastewater from users in the city is collected through the piped sanitary sewer collection system of 6" to 10" sewer lines connected to a 10" main trunk line, which delivers the wastewater to the treatment facility. The treatment system is a facultative lagoon facility, consisting of two primary lagoons, one secondary lagoon, and one tertiary lagoon.

C. The **City of Aumsville "Wastewater System Facilities Plan"** was prepared by Balfour Consulting, Inc. in June 1999 and was updated by JMS Engineering in November 2004. Cost estimates were updated in April 2007. These two plans establish standards and guidelines for the development of the city's wastewater system. They provide an assessment of the wastewater collection and treatment facilities which existed in 1999 and lists the projected facilities improvement needs required to meet the demands of new growth in the City of Aumsville.

According to the November 2004 **Sanitary Sewer Master Plan** by JMS Engineering, the wastewater treatment plant had an average dry-weather flow of .230 million gallons per day for the three year period 2001 to 2003 and average wet weather flows of 460,000 gallons per day during the same period. According to the 1999 Facility plan, the Aumsville Wastewater Plant had a design flow capacity of .370 million gallons per day (MGD). With I&I controls, land application of treated sewage and modifications to the wastewater treatment facilities, the system is adequate for current peak flow demands. But, there is no reserve capacity remaining. For purposes of this SDC analysis, the city concludes the wastewater treatment facilities are at capacity with the current level of development in the community.

The projected 2026 average day dry-weather demand is .817 MGD. The maximum wet-weather demand in the Balfour report was calculated to be 1.414 MGD. In order to meet these design demands, the city will be required to construct both treatment and collection system improvements. The city must construct a number of improvements including a 24" gravity trunk line to replace an existing 10" line,

upgrade the influent pump station, expand the treatment lagoons and associated facilities and acquire additional land for the expanded facilities. However, the **Aumsville Wastewater Facilities Plan** (Balfour 1999) does not clearly separate out improvements which are needed to meet current demand generated by current users versus future flow demands generated by growth. The 2004 update by JMS identifies system wide improvements and collection/pump station improvements needed to serve future growth.

- D. The 2004 **Sanitary Sewer Master Plan** updated the original Capital Improvements Plan (CIP). JMS updated cost estimates in April 2007. These updates identify treatment plant and collection system improvements which are needed to meet the current demands, handle maximum dry-weather flows and support future development within the Aumsville UGB. The updated April 2007 CIP cost estimate serves as the basis for calculating the Sewer SDC.

The CIP projects are summarized in Tables 1a, 1b and 1c.

Table 1a  
**Improvement Fee Calculation**  
**Planned Wastewater System Capital Improvement Projects**

<b>Proposed Wastewater System Improvements</b>		<b>Project Cost</b>
<b>Priority 1 -- Wastewater Treatment</b>		
4.1	Land Application	802,860
4.2	Chlorination / Dechlorination	355,960
4.3	Master Lift Station / Headworks	1,362,450
4.4	Upgrade Transfer Structure – Lagoon	182,300
4.5	Upgrade 10" to 24" Main	288,411
4.6	Additional Aeration Capacity	120,200
4.7	Effluent Filtration Upgrade	616,800
<b>Priority 2 – Collection System for Future Growth Areas</b>		
5.1A	Pump Station west of 11 <sup>th</sup> Street	436,300
5.1B	Collection – West of 11 <sup>th</sup> Street	356,500
5.2	Collection – East of 1 <sup>st</sup> Street	159,200
5.3	Delmar Sanitary Bypass	195,570
<b>Construction Subtotal</b>		<b>\$4,876,551</b>
Indirect Costs @ 35%		1,706,793
<b>Improvement Fee Total</b>		<b>\$6,583,344</b>

Note: Indirect costs of 35% include construction contingencies (10%), engineering design, inspection, construction management and surveys (17%), city admin & legal (3%) and inflation costs (1 yr @ 5%).

Table 1b  
**Reimbursement Fee Calculation**  
**Completed Wastewater System Capital Improvement Projects**  
**2001-2007**

<b>Completed Wastewater System Improvements</b>		<b>Project Cost</b>
1	Wastewater Treatment	343,067
2	Land Acquisition	512,489
3	Collection System	95,900
4	Administrative & Master Plan Services	7,213
<b>Reimbursement Fee Total</b>		<b>958,669</b>

Table 1c  
**Totals – Improvement Fee & Reimbursement Fee**

	<b>Project Cost</b>
Improvement Fee Share	6,583,344
Reimbursement Fee Share	958,669
<b>Reimbursement Fee Total</b>	<b>7,542,013</b>

- F. In the **Aumsville Water Master Plan Update-2004** JMS Engineering developed the methodology and determined the basis for calculating equivalent dwelling units. For purposes of this wastewater SDC calculation wastewater discharge is assumed at 332 gpdd = 1 Equivalent Dwelling Unit.
- G. Projected sewer flows in 2026 are .818 MGD based on a population of 5820 persons and 2464 EDUs. Table 2 shows the upgraded wastewater system will benefit both current users and future users.

Table 2  
**Determination of Equivalent Dwelling Units**  
**City of Aumsville Wastewater System**

	<b>WWTP Demand Gallons Per Day</b>	<b># of EDU's based on average daily flow 280 gallons per household/day</b>	<b>%</b>
2026 Projected Flows	817,926	2,464	100%
2006 Actual Use (Current Users)	402,000	1211	49%
Growth Capacity (Future Users)	415,926	1253	51%

- H. In order to equitably share the cost of improvements between current users and future users, the City has evaluated each project component to determine if it will benefit all users or if it will benefit future users only.

Most of the WWTP improvements benefit both current and future users. Since actual use is almost identical to the current WWTP design capacity, the city concludes that it is appropriate to proportionately assign 50% of the cost for upgrades to the existing WWTR to current users. Land application will provide some benefit to current users but the majority (65%) is assigned to future users. All other improvements at the WWTP for aeration and effluent filtration upgrades are required to meet demands generated by future users. The collection system improvements will be a 100% benefit to new users and should be paid for entirely by SDC's or by the developers.

Table 3 lists wastewater improvements will benefit future users. The city concludes that 74% of the identified system improvements in Table 3 are required to serve future development and may be financed with SDC charges.

Table 3  
**Allocation of Wastewater Improvement Costs  
to Current Users & Future Users**

Proposed Improvement		Current User		Future Growth		Project Cost
		Share	%	Share	%	
<b>Priority 1 -- Wastewater Treatment</b>						
4.1	Land Application	281,001	35%	521,859	65%	802,860
4.2	Chlorination / Dechlorination	174,950	49%	181,010	51%	355,960
4.3	Master Lift Station / Headworks	669,627	49%	692,823	51%	1,362,450
4.4	Upgrade Transfer Piping - Lagoons	89,598	49%	92,702	51%	182,300
4.5	Upgrade 10" to 24" Main			288,411	100%	288,411
4.6	Additional Aeration Capacity			120,200	100%	120,200
4.7	Effluent Filtration Upgrade			616,800	100%	616,800
<b>Priority 2 – Collection Future Growth Areas</b>						
5.1A	Pump Station West of 11 <sup>th</sup> Street			436,300	100%	436,300
5.1B	Collection – West of 11 <sup>th</sup> Street			356,500	100%	356,500
5.2	Collection – East of 1 <sup>st</sup> Street			159,200	100%	159,200
5.3	Sanitary Bypass – Delmar			195,570	100%	195,570
<b>Construction Subtotal</b>		<b>\$1,215,175</b>		<b>\$3,661,376</b>		<b>\$4,876,551</b>
Indirect Costs @ 35%		425,311		1,281,481		1,706,793
<b>Improvement Fee Subtotal</b>		<b>\$1,640,487</b>		<b>\$4,92,857</b>		<b>\$6,583,344</b>
<b>Reimbursement Fee Subtotal</b>		<b>367,185</b>		<b>591,484</b>		<b>958,669</b>
<b>Total Project Cost</b>		<b>\$2,007,671</b>	<b>27%</b>	<b>\$5,534,341</b>	<b>73%</b>	<b>\$7,542,013</b>

- I. The City of Aumsville projects future growth will be primarily residential, comprising 85%-90% of the new development activities. Currently, water connections consist of 92% residential and 8% non-residential users. Since water consumption mirrors the connection ratios future development is expected to be similar. Therefore, the cost of the required improvements should be proportionately shared between residential users (92%) and non-residential users (8%). It is the City's intent to use the equivalent dwelling unit (EDU) as the method to allocate the proportionate cost of wastewater system improvements to each residential user and a demand charge for non-residential users.

Table 3 shows that the total of cost of wastewater system improvements is \$7,542,013. Of this amount, \$5,534,341 can be attributed to new growth and may be used to calculate the wastewater system SDC. Table 4 allocates the SDC charges between residential and non-residential uses and shows the maximum SDC which can be charged by the City of Aumsville.

Table 4  
**Allocation of Project Costs  
 Residential & Non-Residential Uses  
 And  
 Calculation of Maximum Residential SDC**

	<b>Residential Share</b>	<b>Non-Residential Share</b>	<b>Total</b>
% Allocation	92%	8%	100%
Project Cost	\$ 5,091,594	\$ 442,747	\$ 5,534,341
# EDU's	1153	100	1253
Maximum SDC per Dwelling Unit (EDU)	\$ 4,418	Based on Demand	

- J. According to the methodology described above the maximum equitable wastewater systems development charge the City of Aumsville may impose is \$4,418 per equivalent dwelling unit (EDU).
- K. In order to equitably charge for the impacts of non-residential development the water meter size can be utilized based on the standard residential water meter as the equivalent unit (EDU); and relative water meter capacity as the multiplier.

**SECTION 5. FEE**

The wastewater systems SDC collected in accordance with Section 4 of Ordinance No. 387 shall be \$ 4,418 per equivalent dwelling unit (EDU) as the base SDC.

- A. All residential developments shall be charged the base SDC charge per dwelling unit.

Table 5  
**Residential SDC Charges**

	# of units	SDC Charge
SFR or MH Home	1	4,418
Duplex	2	8,836
Tri-plex	3	13,254
SDC per EDU for multi-family housing	#	# Units x \$4418

- B. Non-residential development will be charged based on the water meter size demand adjustment to EDU's based on the estimated water meter capacity and projected demand on the city's water and wastewater systems, as set forth in Table 6. The SDC is determined by multiplying the Volume Factor times the base residential SDC per each EDU. [Example: 2" Meter = 5.33 EDUs x \$4,418= \$23,552].
- C. The SDC fee for non-residential users who will place a greater demand on the system due to the quantity of discharge, or whose BOD/SS loading is substantially higher than residential uses shall be determined by the City Administrator. In setting the non-residential SDC, the city administrator may consult with the Public Works Director and City Engineer and may consider relevant information provided by the applicant.

Table 6  
**EDU Conversion by Meter Size  
Non-Residential Uses**

<u>Meter Size</u>	<u>EDU Ratio</u>	<u>Capacity(gpd)</u>	<u>SDC Charge</u>
5/8" x 3/4"	1.0	891	\$ 4,418
3/4"	1.0	1,337	\$ 4,418
1"	1.67	2,228	\$ 7,362
1 1/2"	2.40	3,208	\$ 10,600
2"	5.33	7,128	\$ 23,552
3"	10.00	13,365	\$ 44,160
4"	16.66	22,275	\$ 73,599
6"	33.32	44,550	\$ 147,199
8"	53.31	71,280	\$ 235,518
10"	95.83	128,126	\$ 423,345

**SECTION 6. REVENUE AND EXPENDITURES**

- A. All funds derived from these charges shall be segregated according to standard municipal accounting practices and credited to a wastewater systems development charge fund.

- B. All expenditures from this fund will be in accordance with the Systems Development Charge Ordinance No. 387, and will be expended only for wastewater system capital improvements to meet the demands for new and future growth of the City of Aumsville, for the costs of developing the wastewater SDC methodologies and for the costs of providing an annual accounting of system development charge expenditures.

**SECTION 7. EFFECTIVE DATE**

This resolution shall be in full force and effect from and after passage by the Aumsville City Council.

**SECTION 8. ANNUAL INDEXED ADJUSTMENT OF WASTEWATER SDC**

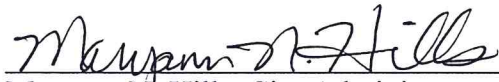
On January 1<sup>st</sup> of each year, the Wastewater SDC Charge listed in Section 5 of this resolution shall be increased or decreased based on the actual change in the Engineering News and Record index of construction costs for the prior 12-month period.

**SECTION 9. PERIODIC REVIEW**

This resolution, its methodology and conclusions as to the Wastewater SDC shall be reviewed periodically by the City Council of the City of Aumsville and shall be updated as needed, based on new improvement requirements and estimated costs thereof.

CONSIDERED AND PASSED BY THE AUMSVILLE CITY COUNCIL OF THE 19<sup>th</sup> DAY OF November, 2007.

  
Harold White, Mayor

ATTEST:   
Maryann N. Hills, City Administrator