

EXHIBIT A – As Amended: Sewer and Drainage Rates and Charges
Fiscal Year 2010-2011

183830

A. Sanitary Sewer System User Service Charges and Discounts

(authorized by City Code Sections 17.34.150, 17.36.070 and 17.36.110)

1. Residential Users
 - a. Sanitary Sewer Services \$6.92 per 100 cubic feet of water consumption
 - b. Low Income Discount \$25.57 per month for eligible ratepayers only
2. Non-Residential, Commercial, Industrial and Institutional Users
 - a. Special Meter Charge \$23.95 per special meter per bill
 - b. Sanitary Sewer Services \$7.045 per 100 cubic feet of water consumption
 - c. Clean Water Discharges \$0.736 per 100 cubic feet of discharged clean water to a storm sewer other than a combined sewer.
 - d. Publicly-Owned Drinking Fountain \$3.536 per 100 cubic feet of discharged water
3. Industrial Extra-Strength Discharger
 - a. Biochemical Oxygen Demand \$0.547 per pound (allowable concentration – 300 mg/liter)
 - b. Suspended Solids \$0.667 per pound (allowable concentration – 350 mg/liter)
 - c. Extra Strength Resample \$240.00 per composite sample

B. Drainage/Stormwater Management User Service Charges and Discounts

(authorized by City Code Sections 17.36.070 and 17.36.100, and Ordinance No. 183307)

1. Residential Users
 - a. Single Family and Duplexes \$21.79 per user account per month
 - b. 3-Plex and 4-Plex Residences \$9.08 per dwelling unit per month
 - c. Developments of 5 or more units \$9.08 per 1000 square feet of impervious area per month
2. Non-Residential Users \$9.66 per 1000 square feet of impervious area per month
3. Discounts

Clean River Rewards – user fee discounts of as much as 35% of the monthly stormwater management charge for private on-site facilities that manage stormwater runoff.

Treebates – one-time user fee discount for the planting of qualifying yard trees equal to 50% of the purchase price of each yard tree up to \$50 for eligible native trees, and \$40 for all other eligible trees.

C. Willamette River/Portland Harbor Superfund Charges

(authorized by City Code Section 17.36.070)

1. Sanitary Volume Component \$0.09 per 100 cubic feet of water consumption
2. Impervious Area Component \$0.34 per 1000 square feet of impervious area per month

Note: These rates apply to all users, residential and non-residential. The impervious area component is calculated for the following classes of residential user based on the following class-average values of impervious area:

Single Family and Duplex Residences	2,400 square feet of impervious area per parcel
3-Plex and 4-Plex Residences	1,000 square feet of impervious area per unit

EXHIBIT A – As Amended: Sewer and Drainage Rates and Charges
Fiscal Year 2010-2011

183830

D. Sewage System Development Charges

(authorized by City Code Sections 17.33.060, 17.36.040 and 17.36.050, and Ordinance No. 183684)

1. Sanitary System
 - a. Development Charge \$4,089.00 per equivalent dwelling unit
 - b. Line Charge \$1.20 per square foot within the zone of benefit
 - c. Branch Charge \$4,319.00 per branch used
 - d. Wyes and Tees \$241.00 per wye or tee used
2. Stormwater Management System
 - a. Single Family or Duplex Residence \$733.00 per parcel
 - b. 3-Plex Residential Development \$849.00 per parcel
 - c. 4-Plex Residential Development \$1164.00 per parcel
 - d. All Other Developments
 - i. Impervious Area Component \$154.00 per 1000 square feet of impervious area
 - ii. Frontage Component \$4.78 per linear foot of frontage
 - iii. Trip Generation Component \$2.51 per daily vehicle trip
3. Sanitary Sewer Conversion Charges
 - a. Simple Sewer Extensions \$1.83 per square foot
 - b. Complex Sewer Extensions \$4.08 per square foot
4. System Development Charge Exemptions
 - a. Affordable Housing

Qualified affordable housing developments will be exempt from all or part of required sanitary and stormwater system development charges.
 - b. Auxiliary Dwelling Units

Sanitary and stormwater development charges will be suspended for accessory dwelling units (ADU's) until June 30, 2013 provided:

 - i) the building permit submittal for the ADU is completed between July 1, 2010 and June 30, 2013, and
 - ii) an occupancy permit is obtained no later than June 30, 2014.

E. Building Plan Review Fees based on Type of Review

(authorized by City Code Section 17.36.120)

	Unit Fee	Minimum*
1. One or two family residential structures or each dwelling unit of a row house development.	\$140	\$140
a. Revisions/Recheck Fees for Residential Permits	\$70	
2. Structures auxiliary to or interior modifications of one or two family residential dwelling units submitted on a separate application	\$70	\$70
3. Tenant improvements in and additions to commercial buildings	\$140	\$140
4. Commercial Buildings (other than those listed in 1, 2, and 3 above)	\$281	\$281
a. Revisions/Recheck Fees for Commercial Permits	\$140	

EXHIBIT A – As Amended: Sewer and Drainage Rates and Charges
Fiscal Year 2010-2011

183830

5. Private stormwater facilities for development that does not include structures (such as private streets and parking lots)
 - a. For impervious areas up to 5,000 square feet \$140 \$140
 - b. For impervious areas over 5,000 square feet \$281 \$281
 - c. Hourly rate for complex plan review by agreement with applicant \$66
6. Additional Charge for plans reviewed by the Bureau of Environmental Services
 - a. Partial Review Fee (less than 30 minutes) \$32
 - b. Standard Review Fee (greater than 30 minutes but less than 1.5 hours) \$95
 - c. Complex Review Fee (greater than 1.5 hours; recheck fees do not apply, and total time is tracked and assessed per permit) \$65 per hour
 - d. Recheck Fee (incomplete corrections/revisions were made and an additional check sheet is generated) \$25 per check sheet
7. Fee for Major Projects Group (assigned by Bureau of Development Services) \$20,500

F. Land Use Review Fees

(authorized by City Code Section 17.36.120)

1. Adjustment Fee
 - a. Residential-Fences/Decks/Eaves Type II N/A
 - b. Residential-Lots w/existing single dwelling Type II \$96
 - c. All other residential adjustments Type II \$96
 - d. Non-residential or Mixed Use Type II \$143
2. Comprehensive Plan Map Amendment Type III \$717
3. Conditional Use
 - a. Type I Type I \$96
 - b. Minor Type II \$119
 - c. Major-New Type III \$383
 - d. Major-existing Type III \$191
4. Design Review
 - a. Major Type III \$717
 - b. Minor A Type I/II \$383
 - c. Minor B Type I/II \$191
 - d. Minor C Type I/II \$96
5. Environmental Review (EN)
 - a. Resource Enhancement/Property Line Adjustment Type I \$50
 - b. Residential Use (only) Type II \$574
 - c. Non-residential or Mixed Use Type II \$717
6. Environmental Review - Protection Zone Type III \$717
7. Environmental Violation Review
 - a. Type II required Type II \$383
 - b. Columbia South Shore Plan District (CSSPD) Type II \$383
 - c. CSSPD, undividable lot w/exist. Single dwelling Type II \$383
 - d. Type III required Type III \$383
 - e. Undividable lot w/exist. Single dwelling Type III \$383

EXHIBIT A – As Amended: Sewer and Drainage Rates and Charges
Fiscal Year 2010-2011

8. Final Plat		
a. Type I Land Division (LD) (no new street)	Type I	\$119
b. Type I/IIx Land Division (new street)	Type I	\$287
c. Type IIx Land Division (no new street)	Type I	\$143
d. Type III Land Division	Type I	\$574
9. Greenway		
a. Residential Use (only)	Type II	\$383
b. Non-residential or Mixed Use	Type II	\$574
c. River Review	N/A	\$574 (effective 01/01/11)
10. Impact Mitigation Plan – All Types	Types II/III	\$957
11. Land Division Review		
a. Type I	Type I	\$239
b. Type IIx	Type IIx	\$574
c. Type III	Type III	\$1,674
d. Land Division Subdivision w/Environmental Review	Type III	\$2,393
e. Land Division Subdivision w/Environmental Review	Type III	\$574
12. Land Division Amendment	Types I/II/III	\$119
13. Lot Consolidation	Type I	\$143
14. Master Plan		
a. Minor amendment	Type II	\$287
b. New/Major amendment	Type III	\$957
15. Non-Conforming Situation	Type II	\$96
16. Planned Development Review	Types IIx/III	\$1,196
17. Planned Development Amendment	Types IIx/III	\$191
18. Pre-Application Conference – All Types	N/A	\$574
19. Zoning Map Amendment	Type III	\$606
20. Other Unassigned Reviews		
a. Type I	Type I	\$71
b. Type II	Type II	\$143
c. Type III	Type III	\$239
21. Early Assistance		\$75
22. Lot Segregation (confirmation)		\$96 (suspended until 07/01/11)
23. Property Line Adjustment (PLA)		\$96
24. Lot Segregation w/PLA		\$143

EXHIBIT A – As Amended: Sewer and Drainage Rates and Charges
Fiscal Year 2010-2011

G. Industrial Waste Discharge – Annual Permit Fees

(authorized by City Code Sections 17.34.150 and 17.36.120)

1. Annual Fee based on Point Range
 - a. > 125 \$8,634
 - b. 75-124 \$4,488
 - c. 50-74 \$3,109
 - d. 25-49 \$2,084
 - e. 1-24 \$1,091
 - f. Categorical Non-Discharger \$0
2. Service Fee per Occurrence \$54
This fee is applied to such discharges not otherwise addressed in an industrial wastewater discharge permit, in addition to other applicable charges.

H. Septage Discharge Permit Fees

(authorized by City Code Section 17.35.070)

1. Qualified Septage Haulers Annual Permit Fee \$141.00
2. Discharge Rates per gallon of discharge \$0.139
3. Treatment Plant After-Hours Fee \$42.00

I. Street Use Permit Fees

(authorized by City Code Section 17.24.020)

	Unit Fee	Minimum*
1. Sewer Connection Fees Connections to existing laterals or extensions of laterals from sewer mains to property lines; sewer or lateral extensions more than 100 feet in length are deemed a public improvement under permit.	\$161	\$161
2. Sewer Tap Fees		
a. Mainline Sewer and Manhole Tap (rate per tap, all materials provided by the contractor)	\$297	\$297
b. Wye and Tee, and Standard Manhole (rate per installation, all materials provided by the contractor)	\$579	\$579
c. City Inspection of Insert-A-Tee installed by Permittee	\$80	\$80
3. Short Sewer Extension		
a. up to first 50 feet	\$600	\$600 (effective 01/01/11)
b. 51 to 100 feet	\$400	\$400 (effective 01/01/11)

* Minimum permit fee

EXHIBIT A – As Amended: Sewer and Drainage Rates and Charges
Fiscal Year 2010-2011

Exhibit B**City of Portland Bureau of Environmental Services
Sanitary and Stormwater System Development Charge Methodology
May 10, 2010****Purpose**

This document sets forth and discusses the methodology for calculating the Sanitary System Development Charge ("Sanitary SDC") and the Stormwater System Development Charge ("Stormwater SDC"). The calculation of both charges is intended to reflect the use of existing system facilities by development, and the recovery of an equitable share of the costs of these facilities from new development.

Consideration of ORS 223.304 Factors

The Sanitary and Stormwater SDCs are reimbursement fees as defined in ORS 223.299 (3):

... a fee for costs associated with capital improvements already constructed or under construction.

For purposes of this document, "capital improvements" and "facilities" will be used interchangeably. Sanitary sewer and stormwater facilities are defined as capital improvements necessary for the collection, conveyance, treatment, and disposal of sanitary sewage and stormwater runoff.

The intent of the Sanitary and Storm SDCs is to recover an equitable share of facilities costs from new development. The calculation methodology takes the costs of existing facilities and several additional factors into consideration in arriving at a cost basis for reimbursement. Factors considered in developing the calculation methodology include:

1. *The cost of existing facilities.* For purposes of the Sanitary and Stormwater SDCs, facilities costs are replacement costs. The replacement cost calculations employ the Engineering News Record Construction Cost Index to bring original facilities costs up to their present value.
2. *Rate making principles employed to finance publicly owned capital improvements.* Only the portion of facilities costs paid by current and past ratepayers is included in facilities costs eligible for SDC recovery (reimbursable facilities costs). For facilities funded by revenue bonds (essentially all facilities since 1985), replacement costs are prorated over the term of the bonds (either 20 or 25 years depending on the issue) to approximate the cumulative debt service paid on the bonds.
3. *Gifts or grants from federal or state government or private persons.* The portion of facilities costs paid for from these revenue sources are not included in the cost basis for Sanitary or Stormwater SDCs.
4. *Prior contributions by existing ratepayers.* A return on equity for the portion of facilities constructed with ratepayer funds is included in the calculation as a carrying cost for current and past ratepayers. The return on equity portion calculates simple interest foregone on each

year's original project cost using each year's annual average 6-month Treasury Bill secondary market rate.

5. *The value of unused capacity available for future system users.* The methodology used here values each unit of capacity equally. New development "buys into" the existing system on the same basis as current ratepayers.

To compute reimbursable facilities costs for the Sanitary SDC then, the original costs of sanitary sewer system facilities are adjusted by an index of construction costs to develop a present value replacement cost for those facilities. These costs are also adjusted to reflect a return on equity for existing ratepayers, who incurred the investment cost of constructing them. However, only that portion of facilities costs actually paid by ratepayers is included in the reimbursable cost total. For example, if a particular facility built five years ago was financed with 20-year revenue bonds, only one fourth of that facility's adjusted costs is included in as a reimbursable cost for purposes of the Sanitary SDC.

The calculation of reimbursable facilities costs is the same for the Storm SDC.

Sanitary SDC Calculations

Applying the above methodology to sanitary sewer facilities yield the following numbers:

Present Value Replacement Cost	\$11,188,385,508
Return on Equity	\$196,723,380
Total Cost	\$1,385,108,888

These costs specifically exclude Local Improvement District development projects, developer permit projects, and grant-funded facilities.

For each customer, the Sanitary SDC is calculated as an average cost per equivalent dwelling unit ("EDU") times the number of dwelling units. For purposes of the Sanitary SDC, one EDU corresponds to the sanitary flow from a single-family dwelling. The total system treatment capacity is 336,696 EDUs. Dividing the above total cost by this amount yields an average cost of \$4,114 per EDU. The customer's charge is therefore:

$$\text{Sanitary SDC} = \$4,114 \times \text{EDU}$$

EDU Calculations

Single-family dwellings are assigned an EDU value of one. Multi-family dwellings are assigned 0.8 EDU per unit. EDU equivalencies for non-residential customers are based on plumbing fixture units ("PFUs") and business type. For some developments, the Bureau of Environmental Services may use estimates of future sanitary flows to calculate EDUs, if the Bureau deems such estimates as more accurate predictors of sanitary flow than the plumbing fixture approach. There is a two-step process for calculating EDUs using plumbing fixture units:

Step 1: The number of PFUs for a particular development is calculated using the plumbing fixture equivalency factors in Table 7-3 of the Oregon Plumbing Specialty Code in effect at the time of permit application. Table 1 shows some common fixture types and their plumbing fixture equivalencies.

Step 2: The PFUs from Step 1 are converted to EDUs using a conversion ratio specified for that business type. Conversion ratios are set by the Bureau of Environmental Services and reflect the Bureau's assessment of sanitary water usage per PFU, by business type. Conversion ratios are shown in Table 2. The Bureau may update conversion ratios from time to time. The most current conversion ratios will be shown in the Administrative Rules for Sanitary System Development Charges.

The number of EDUs for non-residential customers is therefore calculated as:

$$\text{EDUs} = \frac{\text{PFUs}}{\text{Number of PFUs per EDU}}$$

For instances where BES uses measured flow to calculate EDUs, the calculation is:

$$\text{EDUs} = \frac{\text{Projected Sanitary Flow (in ccf)}}{6 \text{ ccf}}$$

Table 1. Fixture types and equivalency factors.

Fixture Type	Equivalency Factor
Bathtub or combination bath/shower	2.0
Dental unit or cuspidor	1.0
Clothes washer, commercial	6.0
Drinking fountain or water cooler (per head)	0.5
Dishwasher, commercial	2.0
Floor drain, emergency	0.0
Floor drain	2.0
Shower, single head	2.0
Multi-head, each additional head	1.0
Sink, commercial	2.0
Urinal	2.0
Wash basin, single	1.0
Wash basin in sets of two or three	2.0
Water closet, public	6.0
Water closet, private	4.0

Table 2. Dwelling unit equivalencies, by business type.

OCCUPANCY	NUMBER OF PFUs PER EQUIVALENT DWELLING UNIT
Fire Station	16.0
Automotive Retailers	
Repair Services	
Education/Cultural	
Churches/Clubs/Organizations	
Rental/Storage Services	
Construction Trade Services	
Retail Sales & Business without food service or public use facilities	12.0
Food Service	
Beauty and Barber Salons	
Clothing & Dry Goods Stores	
Warehouses used for storage	
Industry	7.0
All other occupancies	
Other Structures/Uses, Based on Measured Flow	600 Cubic Feet Per Month

Review

When a new occupancy involves industrial wastewater flows (if the occupancy requires an industrial wastewater discharge permit), the Bureau may measure actual flows within two years of occupancy. EDUs will be calculated based on observed flows for a six-month interval. If EDUs based on observed average flows exceed EDUs initially purchased by more than twenty percent, then the additional EDUs must be purchased at the rate in effect at the time.

Stormwater SDC

The calculation of the Stormwater SDC is intended to reflect the use of existing stormwater facilities by new development. This use has several dimensions, corresponding to the various functions of the system. These functions include:

1. Collection, conveyance, and treatment of stormwater flows from properties.
2. Collection, conveyance, and treatment of stormwater flows from public rights of way. This service includes access to individual properties on local streets and use of arterial streets, unimpeded by flooding. It also includes protection of individual properties from hazardous materials spills in the right of way, as well as protection from flows originating elsewhere.

The calculation of the Stormwater SDC is intended to provide a proportional measure of new development's direct use of services from public drainage facilities as well as its indirect uses of and benefits from those facilities.

The charge has two components: an on-site charge and an off-site charge. The on-site charge reflects direct usage of public stormwater facilities, corresponding to 1) above. Credits against this portion of the charge reflect the contributions made by developers in managing on-site flows. The off-site charge reflects the indirect uses and benefits, corresponding to 2) above. The measure of proportionality for this charge is intended to reflect the relationship between these uses and benefits and the particular characteristics of the development.

Calculations

Applying the above methodology to stormwater facilities yield the following numbers:

Present Value Replacement Cost	\$249,101,986
Return on Equity	\$45,876,819
Total Cost	\$294,978,805

These costs specifically exclude Local Improvement District projects, developer permit projects, and grant-funded facilities.

On-site/Off-site Costs

Total facilities costs are divided between on-site and off-site costs. On-site costs represent that portion of total costs for facilities handling stormwater flows from individual properties. Off-site costs represent the portion of total costs for facilities handling stormwater flows from rights of way. Even a development discharging no water directly to public facilities uses and benefits from facilities handling off-site flows in one or more of the following ways:

- access to properties unimpeded by stormwater-related flooding of rights of way,
- general use of the right of way unimpeded by stormwater-related flooding,
- protection from hazardous materials spills in the right of way, and
- protection from off-site flows.

The Bureau allocation between on-site and off-site costs is based on the relative amounts of impervious area on properties and in public rights of way. This ratio represents a reasonable lower bound on right-of-way contributions to system capacity requirements since stormwater facilities are typically located in rights of way, and since stormwater flows from properties will be buffered by on-site stormwater management facilities as well as pervious soils and vegetation where present. Estimates developed using Portland Department of Transportation inventory data for rights of way and Geographical Information System data for other impervious area show that 53% of the impervious area is in public rights of way, with the remaining 47% on properties:

Cost Category	Percentage of Total	Allocated Cost
On-site	47%	\$138,640,038
Off-site	53%	\$156,338,767

Access/Arterial Costs

Off-site costs are further split to reflect the various benefits received from facilities draining the right of way. There are two principal benefits: drainage of arterial streets, and access to individual properties. These costs are split according to the relative amounts of impervious area in each type of street, adjusting for the portion of arterial streets used for access to properties. According to the City of Portland Bureau of Transportation, arterial streets account for about 28% of total impervious area in rights of way, and local streets for about 72%. Part of street impervious area is in arterial streets serving as local streets, however, and should be reflected in the local access share. Adjusting the impervious area totals to reflect the portion of arterial streets also used for local access yields:

Cost Category	Percentage of Total	Allocated Cost
Local Access	92.4%	\$144,457,021
Arterial	7.6%	\$11,881,746

Of the \$294,978,805 in total costs, then, 47% or \$138,640,038 are on-site costs, 49% or \$144,457,021 are off-site costs allocated to local access, and the remaining 4%, or \$11,881,746 are off-site costs allocated to arterial streets.

Units of Service

The units of service for the three categories described are as follows:

Cost Category	Unit of Measurement	Total Units in Service Area	Unit Cost
On-site	Thousands of square feet of impervious area (excluding rights of way)	890,000	\$154 per thousand square feet
Off-site			
Local Access	Feet of frontage	30,517,393	\$4.78 per foot
Arterial	Daily vehicle trips	4,752,153	\$2.51 per trip

In the absence of mitigation measures, flow from an individual site will be roughly proportional to the impervious area on that site. Access to an individual site is made using the right of way fronting the site. Daily vehicle trips are a proportionate measure of use of arterial streets.

Calculation of Charge

For each customer, the cost for each category is the product of service units times unit cost. The total charge is the sum of costs for the three categories. Using data from the above table, this is:

$$\text{Storm SDC} = \$154.00 \times \text{SIA} + \$4.78 \times \text{SF} + \$2.51 \times \text{ST}, \text{ where}$$

SIA = net new impervious area on the site,

SF = site frontage,

ST = net new site vehicle trips. The Bureau of Transportation will calculate the trip data using the same methodology as that used in the calculation of the Transportation SDC.

Credits

Credits will be granted against the on-site portion of the Storm SDC in one of the following two cases:

1. Credits of 100% of the on-site portion will be granted for areas draining directly to the Willamette or Columbia Rivers, or to the Columbia Slough, provided that this discharge does not pass through reimbursable City facilities, and that the discharge meets all applicable water quality standards. Those applying for this credit must provide adequate documentation to demonstrate that stormwater flows from the site to those receiving bodies without passing through reimbursable City facilities.
2. Credits of 100% of the on-site portion will be granted for areas draining to facilities providing for facilities providing effective on-site retention for a 100 year storm event with a safety factor of two defined as a rainfall intensity of 8.28 inches per hour per square foot of impervious area. Those applying for this credit must provide adequate documentation to demonstrate this additional retention capacity, including testing of infiltration facilities, and that on-site flows are directed to these facilities.

No credits will be granted under 2) above for meeting minimum development standards. Public stormwater drainage facilities are designed to accommodate flows from rights of way and from adjacent properties, and their design assumes the existence of on-site facilities. Handling flows for a 10-year storm (the current design standard) does not imply that those flows remain on site under all conditions. Detention facilities may ultimately pass stormwater flows to public facilities, for example, and on-site flows from events exceeding a 10-year storm will make use of public facilities.

No credits will be granted against the off-site portion of the Storm SDC. The indirect uses of and benefits from public facilities will not vary with on-site stormwater facilities. The measures of proportionality used in calculating this portion of the charge reflect differences in indirect benefits by type of development.