

RESOLUTION NO. 3408

A RESOLUTION ADOPTING WATER AND WASTEWATER SYSTEM DEVELOPMENT CHARGES, METHODOLOGY REPORT, AND PROJECT LISTS, AND REPEALING RESOLUTION NO.3400

The City of Gresham Finds:

Chapter 11, Infrastructure, of the Gresham Revised Code, provides that the Council shall establish certain fees and charges by resolution.

On March 17, 2020, Council passed Resolution Number 3400 establishing Water and Wastewater System Development Charges, methodology report and project lists.

Periodic updating of project lists is required to address the changing infrastructure needs of the City as development occurs.

THE CITY OF GRESHAM RESOLVES:

Section 1. The fees and charges for Gresham Revised Code Chapter 11, Infrastructure relating to Wastewater System Development Charges (SDC) are established as shown in Exhibit A, and Water System Development Charges (SDC) are established as shown in Exhibit B, both of which are attached hereto and incorporated herein by reference.

1. With the exception of Exhibits B and C therein, the City hereby re-adopts without changes the Water and Wastewater SDC Methodology report, dated June 2016, attached as Exhibit C, and the methodology, assumptions, conclusions and findings in the report which refer to the determination of the Wastewater and Water SDC. This report is hereinafter referred to as "Methodology report."

2. A list of the capital improvement projects used to calculate the Wastewater Improvement Fee SDC, replacing Exhibit B of the Methodology Report, is attached as Exhibit D. The attached Exhibit D includes updates to project list from the list adopted in Resolution 3374 to address the changing infrastructure needs of the City.

3. A list of the capital improvement projects used to calculate the Water Improvement Fee SDC, replacing Exhibit C of the Methodology Report, is attached as Exhibit E. The attached Exhibit E includes updates to project list from the list adopted in Resolution 3374 to address the changing infrastructure needs of the City.

4. For the purposes of SDC calculations, the minimum water meter size shall be based upon the demand of all of the fixtures served by the water meter as determined by the Water Supply Fixture Unit (WSFU) table and the associated Demand Load charts of the Oregon Plumbing Specialty Code, as adopted by OAR Chapter 918.

A property owner or tenant may choose to be served by a water meter larger than the minimum size. If a property is served by a water meter larger than the minimum size, SDCs shall be based on the larger meter size installed for the property.

If a property's domestic water is provided by a well or other unmetered source, the wastewater SDC will be based upon the theoretical meter size as determined by the standard methodology described above.

Exhibit A

Wastewater System Development Charges

Gresham Revised Code (GRC) sections are for reference and are subject to change.

Wastewater System Development Charges (GRC 11.05)	Total	Improvement	Reimbursement
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Charged based on Water Meter Size.

3/4"	\$ 6,432.00	\$ 4,293.77	\$ 2,138.23
1"	\$ 10,718.00	\$ 7,154.35	\$ 3,563.65
1.5"	\$ 25,723.00	\$ 17,170.30	\$ 8,552.70
2"	\$ 40,729.00	\$ 27,186.56	\$ 13,542.44
3"	\$ 93,244.00	\$ 62,240.92	\$ 31,003.08
4"	\$ 160,763.00	\$ 107,310.92	\$ 53,452.08
6"	\$ 342,962.00	\$ 228,930.17	\$ 114,031.83
8"	\$ 600,180.00	\$ 400,625.55	\$ 199,554.45

Exhibit B

Water System Development Charges

Gresham Revised Code (GRC) sections are for reference and are subject to change.

Water System Development Charges (GRC 11.05)	Total	Improvement	Reimbursement
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Charged based on Water Meter Size.

3/4"	\$ 4,837.00	\$ 2,631.67	\$ 2,205.33
1"	\$ 8,060.00	\$ 4,384.86	\$ 3,675.14
1.5"	\$ 19,345.00	\$ 10,525.06	\$ 8,819.94
2"	\$ 30,627.00	\$ 16,663.64	\$ 13,963.36
3"	\$ 70,116.00	\$ 38,148.12	\$ 31,967.88
4"	\$ 120,890.00	\$ 65,772.81	\$ 55,117.19
6"	\$ 257,897.00	\$ 140,314.79	\$ 117,582.21
8"	\$ 451,318.00	\$ 245,549.66	\$ 205,768.34



City of Gresham
Department of Environmental Services

Water & Wastewater SDC Methodology
Update

Prepared by
Shaun Pigott Associates, LLC



June 2016

City of Gresham
2016 Water and Wastewater SDC Methodology Update
Table of Contents

Introduction and Summary	1
Process for Updating the SDC Methodologies	2
SDC Legal Authorization	4
SDC Cost Eligibility	4
Reimbursement Fee	4
Improvement Fee.....	5
SDC Credits.....	7
Other Considerations	8
Water SDC	9
Water Capital Improvement Plan	9
Water Customers Current and Future Demand	12
Estimated Demand per Equivalent Dwelling Unit (EDU)	12
Projected Demand	12
Reimbursement Fee Calculation	15
Improvement Fee Calculation	17
Water SDC Summary.....	19
Wastewater SDC	21
Wastewater Capital Improvement Plan	21
Wastewater Customers Current and Future Demand	24
Existing Wastewater Demand and Population Growth.....	24
Forecast of DUs.....	25
Reimbursement Fee Calculation	25
Improvement Fee Calculation	28
Wastewater SDC Model Summary	30

Introduction and Summary

The city of Gresham conducts periodic updates of its master plans for the water and wastewater utilities. The purpose of these plans is to evaluate the capital requirements for both systems, typically over a 20 year planning period. Growth/demand projections determine the current and future facility needs of these utilities in order to anticipate and plan for repairs, replacements and improvements to these systems. Capital costs are invariably significant, so an important consideration in this process is funding and specifically how these planned improvements will be a shared expense of both current and future utility customers. A key component to funding these public facilities is the City's system development charge (SDC) program. SDCs are one-time charges applied to new connections and are designed to recover the costs of infrastructure capacity needed to serve new development. The legal framework for SDCs is established in ORS 223.297 - .314. This legal context served as the basis for updating the City's water and wastewater SDCs.

Gresham's current SDCs for water and wastewater were last reviewed and updated in September of 2006. Aside from annual inflationary adjustments (curtailed in 2008), these SDC methodologies have remained unchanged. Shaun Pigott Associates was hired to review and update the water and wastewater SDCs with City staff who stated a number of objectives for this update:

- Review the basis for water and wastewater charges to ensure a consistent methodology;
- Address specific policy, administrative, and technical issues which have arisen from application of the existing water and wastewater SDCs;
- Determine the most appropriate and defensible fees, ensuring that development is paying its proportional share of capital costs;
- Consider possible revisions to the structure or basis of the charges which might improve equity, while improving consistency in the application of the SDCs;
- Provide clear, orderly documentation of the assumptions, methodology, and results, so that City staff could, by reference, respond to questions or concerns from the public.

This report summarizes the recommended SDC methodologies for the water and wastewater utilities. The report also reflects the combined effort of the "SDC Review Committee" which included both the consultant and City staff in evaluating options and establishing direction over six meetings. The result is a logical, proportionate, consistent and legally defensible SDC methodology for both utilities which reflects the City's historic investment in providing capacity to new connections and the future facility requirements necessary to accommodate growth. The SDC updates comply with ORS as well as Gresham Revised Code Sections 4.25 (wastewater SDCs) and 5.35 (water SDCs).

Table 1 summarizes the City's current and proposed SDCs for water and wastewater for a single family residence.

Note: These rates have been indexed or adjusted. See Exhibits A & B of Resolution 3408.

Table 1
Water SDC

Element	Current SDC	Updated SDC (2016)
Reimbursement Charge	\$ 732	\$ 2,038
Improvement Charge	\$ 3,421	\$ 2,432
Total SDC	\$ 4,153	\$ 4,470 (7.6% increase)

Wastewater SDC

Element	Current SDC	Updated SDC (2016)
Reimbursement Charge	\$1,072	\$ 1,976
Improvement Charge	\$3,984	\$ 3,968
Total SDC	\$5,056	\$ 5,944 (17.6% increase)

The SDC models (Excel format) developed as part of this project will be provided to the City for future updates of these calculations.

Process for Updating the SDC Methodologies

The foundation for all SDCs combines fixed asset schedules and adopted master plans. As stated in ORS 223.309:

“Prior to the establishment of a system development charge by ordinance or resolution, a local government shall prepare a capital improvement plan, public facilities plan, master plan or comparable plan that includes a list of the capital improvements that the local government intends to fund, in whole or in part, with revenues from an improvement fee and the estimated cost, timing and percentage of costs eligible to be funded with revenues from the improvement fee for each improvement.”

For this project, the consultant team has relied on a number of data sources. The primary sources have been the adopted water and wastewater system master plans and plan updates. This data has been supplemented with City utility billing records, certified census data, and other documents which support this update. Table 2 contains a bibliography of the documents/sources that were relied upon to develop this analysis and the resulting SDCs.

Table 2

Data Sources for the Calculation of Water and Wastewater SDCs

Utility	Data Sources
Water	<ul style="list-style-type: none"> • City of Gresham Water System Master Plan; July, 2012; Murray, Smith & Associates, Inc. Engineers/Planners & GSI Water Solutions, Inc. • City of Gresham Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2015 • City of Gresham Water System Fixed Asset Schedule; June 30, 2015; City records • City of Gresham Water System Construction Work in Progress Balances Work Papers; June 30, 2015; City records • City of Gresham Utility Billing records for fiscal 2011-12 through 2014-15 • City of Gresham Annual SDC Report • Water meters in service flow rates analysis per City Staff; February 17, 2016
Wastewater	<ul style="list-style-type: none"> • Wastewater Treatment Master Plan for the City of Gresham; 2012; Carollo Engineers; Supplemental capital improvement plan updates per City Staff • Wastewater Pump Stations Master Plan; 2008; Carollo Engineers • Wastewater Collection System Master Plan; 2011; Murray, Smith & Associates • City of Gresham Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2015 • 2015 Gresham Wastewater Facilities Plan Amendment and Capital Improvement Plan Update; July, 2015; Project Delivery Group • Gresham wastewater system fixed asset schedule; June 30, 2015; City records • City of Gresham Utility Billing System – wastewater system active accounts and Equivalent Dwelling Units in service report; June, 2015 • Portland State University, College of Urban Affairs, Population Research Center; Certified census for Gresham, Oregon; June, 2015

SDC Legal Authorization

Oregon Revised Statute (ORS) 223.297-314 provides the definition of system development charges, their application, and their accounting. In general, an SDC is a one-time fee imposed on new development (or expansion of an existing development), and assessed at the time of development approval or increased usage of the system. Overall, the statute is intended to promote equity between new and existing customers by recovering a proportionate share of the cost of existing and planned/future capital facilities that serve the developing property. Statute further provides the framework for the development and imposition of SDCs and establishes that SDC receipts may only be used for capital improvements and/or related debt service.

SDC Cost Eligibility

Reimbursement Fee

The reimbursement fee represents a buy-in to the cost of infrastructure capacity within the existing system. Generally, if a system were adequately sized for future growth, the reimbursement fee might be the only charge imposed, since the new customer would be buying existing capacity. However, staged system expansion is needed, and an improvement fee is imposed to allocate those growth related costs. Even in those cases, the new customer also relies on capacity within the existing system, and a reimbursement component is warranted.

In order to determine an equitable reimbursement fee to be used in conjunction with an improvement fee, two points should be highlighted. First, the cost of the system to the City's customers may be far less than the total plant-in-service value. This is due to the fact that elements of the existing system may have been contributed at no cost to the City, whether from developers, governmental grants, and other sources. Therefore, the net investment by the customer/owners is less. Second, the value of the existing system to a new customer is less than the value to an existing customer, since the new customer must also pay, through an improvement fee, for expansion of some portions of the system.

The method used for determining the reimbursement fee accounts for both of these points. First, the charge is based on the net investment in the system, rather than the gross cost. Therefore, donated facilities, typically including local facilities, and grant-funded facilities, would be excluded from the cost basis. Also, the charge should be based on investments clearly made by the current users of the system, and not already supported by new customers. Tax supported activities fail this test since funding sources have historically been from general revenues, or from revenues which emanate, at least in part, from the properties now developing. Second, the cost basis is allocated between used and unused capacity, and, capacity available to serve growth. In the absence of a detailed asset by asset analysis, it is appropriate to allocate the cost of existing facilities between used and available capacity proportionally based on the forecasted population as converted to equivalent dwelling units over the planning period. This approach reflects the philosophy, consistent with the City's Updated Master Plans, that facilities have been sized to meet the demands of the whole customer base within the established planning period.

Improvement Fee

For this SDC update, the improvement fee represents a proportionate share of the cost to expand the systems to accommodate growth. This charge is derived from the capital improvements contained in the master plans for water and wastewater services. The costs that can be applied to the improvement fees are those that can be reasonably allocated to growth. Statute requires that the capital improvements used as a basis for the charge be part of an adopted capital improvement schedule, whether as part of a system plan or independently developed, and that the improvements included for SDC eligibility be capacity or level of service expanding. The improvement fee is intended to protect existing customers from the cost burden and impact of expanding a system that is already adequate for their own needs in the absence of growth.

The key step in determining the improvement fee is identifying capital improvement projects that expand the system and the share of those projects attributable to growth. Some projects may be entirely attributable to growth, such as a wastewater collection line that exclusively serves a newly developing area. Other projects, however, are of mixed purpose, in that they may expand capacity, but they also improve service or correct a deficiency for existing customers.

The improvement portion of the SDC is based on the proportional approach toward capacity and cost allocation in that only those facilities (or portions of facilities) that either expand the respective system's capacity to accommodate growth or increase its respective level of performance have been included in the cost basis of the improvement fee. As part of this SDC update, City Staff and their engineering consultants were asked to review the planned capital improvement lists in order to assess SDC eligibility. The criteria in Figure 1 were developed to guide the City's evaluation:

Figure 1
SDC Eligibility Criteria

<p style="text-align: center;">City of Gresham Steps Toward Evaluating <u>Capital Improvement Lists for SDC Eligibility</u></p> <p><u>ORS 223</u></p> <ol style="list-style-type: none">1. Capital improvements mean the facilities or assets used for :<ol style="list-style-type: none">a. Water supply, transmission, storage and distributionb. Wastewater collection, transmission, treatment, and disposal<p>This definition DOES NOT ALLOW costs for operation or routine maintenance of the improvements;</p>2. The SDC improvement base shall consider the cost of projected capital improvements needed to increase the capacity of the systems for future growth;3. An increase in system capacity is also established if a capital improvement increases the “level of performance or service” provided by existing facilities or provides new facilities.
<p style="text-align: center;"><u>Under the City’ approach, the following rules will be followed</u></p> <ol style="list-style-type: none">1. Repair costs are not to be included;2. Replacement costs will not be included unless the replacement includes an upsizing of system capacity and/or the level of performance of the facility is increased;3. New regulatory compliance facility requirements fall under the level of performance definition and should be proportionately included;4. Costs will not be included which bring deficient systems up to established design levels.

In developing the improvement fee, the SDC Review Committee evaluated each of its CIP projects to exclude costs related to correcting existing system deficiencies or upgrading for historical lack of capacity. Only capacity increasing/level of performance costs were used as the basis for the SDC calculation, as reflected in the capital improvement schedules developed by the City. The improvement fee is calculated as a function of the estimated number of projected additional equivalent dwelling units for water and wastewater served by the City’s facilities over the planning horizon.

Once the future costs to serve growth have been segregated (i.e., the numerator), they can be divided into the total number of new EDUs that will use the capacity derived from those investments (i.e., the denominator).

SDC Credits

ORS 223.304 requires that a credit be allowed for the construction of a "qualified public improvement" which is required as a condition of development approval and in the capital improvement plan. The credit for a qualified public improvement may only be applied against an SDC for the same type of improvement, and may be granted only for the cost of that portion of an improvement which exceeds the minimum standard facility size or capacity needed to serve the particular project. For multi-phase projects, any excess credit may be applied against SDCs that accrue in subsequent phases of the original development project. In addition to these required credits, the City may, if it so chooses, provide a greater credit, establish a system providing for the transferability of credits, provide a credit for a capital improvement not identified in the capital improvement plan, or provide a share of the cost of an improvement by other means.

The City has adopted a policy for granting SDC credits, and has codified this policy in the Gresham Revised Code (GRC) §4.25.027 for wastewater, and in §5.35.027 for water.

GRC §4.25.027 for wastewater

- A. A credit shall be given for the cost of a qualified public improvement that is funded in the Capital Improvement Plan in effect when the notice to proceed for the improvement is issued. The credit provided for by this subsection shall be only for the improvement fee charged for the type of improvement being constructed and only in the amount the improvement is funded with SDC funds in the Capital Improvement Plan. Credit for qualified public improvements may be granted only for the cost of that portion of such improvement that exceeds the governmental unit's minimum standard facility size or capacity needed to serve the particular development project or property. The applicant shall have the burden of demonstrating that a particular improvement qualifies for credit.
- B. When the construction of a qualified public improvement gives rise to a credit amount greater than the improvement fee that would otherwise be levied against the project receiving development approval, the excess credit may be applied against improvement fees that accrue in subsequent phases of the original development project. Credits shall be used not later than 10 years from the date the credit is given. (Ord. No. 1602, Enacted, 04/01/2005)

GRC §5.25.027 for water

- A. A credit shall be given for the cost of a qualified public improvement that is funded in the Capital Improvement plan in effect when the notice to proceed for the improvements is issued. The credit provided for by this subsection shall be only for the improvement fee charged for the type of improvements being constructed and only in the amount the improvement is funded with SDC funds in the Capital Improvement Plan. Credit for qualified public improvements may be granted only for the cost of that portion of such improvement that exceeds the governmental unit's minimum standard facility size or capacity needed to serve the particular development project or property. The applicant shall have the burden of demonstrating that a particular improvement qualifies for credit.
- B. When the construction of a qualified public improvement gives rise to a credit amount greater than the improvement fee that would otherwise be levied against the project receiving development approval, the excess credit may be applied against improvement

fees that accrue in subsequent phases of the original development project. Credits shall be used not later than 10 years from the date the credit is given.

- C. Credits shall not apply to any local water system development charge or facility charge under GRC Article 5.40 established for properties that benefit from a specific reservoir project. (Ord. No. 1602, Enacted, 04/01/2005)

Other Considerations

The City has chosen to incentivize select new developments by the City paying some or all of the SDCs on behalf of the development. This practice has been used as an incentive for businesses to locate in Gresham. In Gresham's case, the SDC revenues that are not collected from new development are funded through allocations from the budgets of the programs/utilities that would have received the SDC revenues.

Water SDC

Water Capital Improvement Plan

The primary source document for the water capital improvement plan (CIP) was the 2012 Water System Master Plan. The projects contained in this Plan were reviewed as part of the SDC Review Committee's work and each project was evaluated opposite the criteria identified in Figure 1. The total cost of all 2012 master plan projects is \$58,428,145. Among these planned facilities, the Review Team identified several projects that were set for construction beyond the planning period identified for this SDC update. Therefore, the first step was to eliminate master plan projects that City Staff determined to be very long term facility requirements beyond the SDC planning period. The specific master plan projects eliminated through this process were:

<u>Assets/Projects Eliminated from CIP</u>	<u>Estimated Cost (in 2012 \$)</u>
<i>Long Term Storage Facilities (beyond 2031):</i>	
Grant Butte reservoir no. 2 (2.5 mg)	\$3,970,000
<i>Long Term Fire Flow Improvements (beyond 2031):</i>	
FF1 SW 27th Court	88,480
FF3 SE Kelly Avenue	103,520
FF4 SE Meadow Court	144,320
FF5 SE Beech Place	54,080
FF13 Cleveland Station Apartments	12,640
FF34 NE Hale Avenue	37,950
FF39 NW Victoria Avenue	101,440
FF48 NE Liberty Avenue	182,400
FF52 NE 17 Street	<u>69,760</u>
Subtotal long term fire flow improvement projects	\$794,590
<i>Total 2012 Master Plan CIP project costs eliminated for SDC calculation purposes</i>	<u>\$4,764,590</u>

The second step in the CIP review process was to eliminate from the improvement fee all costs for projects constructed since adoption of the 2012 Master Plan. These projects are now captured in the City's fixed asset schedule which is the basis for the reimbursement fee calculation.

These projects and costs are:

<u>Projects Constructed or Under Construction</u>	<u>Cost</u>
<i>Source of Supply</i>	
Exploratory well	\$250,000
<i>Pumping Facilities:</i>	
Linneman pump station (intermediate service level)	\$1,250,000
<i>Immediate and Short Term Fire Flow Improvements:</i>	
FF21 NE Francis Avenue	75,670
FF41 NW Fariss Road	201,480
FF24 NE 19 th Street	<u>94,400</u>
Subtotal immediate & short term fire flow improvements	\$371,550
<i>Immediate and Short Term Piping Improvements for System Expansion:</i>	
SW Pleasant View drive/190 th between SW 31 st & 40 th	414,000
SW Butler Road transmission from Butler reservoir to SW PV Drive	472,750
Extend SW 40 th street 12-inch west to SW PV Drive	<u>356,500</u>
Subtotal immediate & short term piping improvements	\$1,243,250
<i>Total</i>	<u><u>\$3,114,800</u></u>

Through this two-step review process, the SDC Review Committee has eliminated projects outside the SDC planning period and projects that have been constructed since the 2012 Master Plan. The remaining Master Plan projects were then evaluated in terms of the SDC eligibility criteria contained in Figure 1. The resulting master plan CIP now consists of future projects that comprise the SDC eligible project list. The resulting by-project SDC allocations are summarized in Table 3.

Table 3: SDC-eligible Project Costs

City of Gresham 2016 Water SDC Methodology Update 2012 Water Master Plan CIP Funding Allocation Worksheet Summary						
Capital Improvement Category/Subcategory	2012 Master Plan CIP Total	Funding Source				
		Rates	Contributed Capital	SDCs	LIDs	Other
<i>Gresham service area:</i>						
Supply/Treatment	-	-	-	-	-	-
Storage Facilities	1,250,000	-	-	1,250,000	-	-
Pumping Facilities	1,305,000	1,032,597	-	272,403	-	-
Subtotal Distribution Piping - immediate fire flow	989,525	752,242	-	237,283	-	-
Subtotal Distribution Piping - short term fire flow	2,196,930	1,077,599	-	1,119,331	-	-
Subtotal Distribution Piping - medium term fire flow	1,194,590	1,063,797	-	130,793	-	-
Subtotal Distribution Piping - long term fire flow	-	-	-	-	-	-
Subtotal immediate piping improvements for system expansion	-	-	-	-	-	-
Subtotal short term piping improvements for system expansion	804,555	636,614	-	167,941	-	-
Subtotal medium term piping improvements for system expansion	-	-	-	-	-	-
Subtotal Gresham service area	\$ 7,740,600	\$ 4,562,849	\$ -	\$ 3,177,751	\$ -	\$ -
<i>Pleasant Valley service area:</i>						
Supply/Treatment	-	-	-	-	-	-
Storage Facilities	5,511,000	-	-	5,511,000	-	-
Pumping Facilities	-	-	-	-	-	-
Subtotal Distribution Piping - immediate fire flow	-	-	-	-	-	-
Subtotal Distribution Piping - short term fire flow	-	-	-	-	-	-
Subtotal Distribution Piping - medium term fire flow	-	-	-	-	-	-
Subtotal Distribution Piping - long term fire flow	-	-	-	-	-	-
Subtotal immediate piping improvements for system expansion	2,685,525	-	-	2,685,525	-	-
Subtotal short term piping improvements for system expansion	3,671,020	-	-	3,671,020	-	-
Subtotal medium term piping improvements for system expansion	4,295,975	-	-	4,295,975	-	-
Subtotal Pleasant Valley service area	\$ 16,163,520	\$ -	\$ -	\$ 16,163,520	\$ -	\$ -
<i>Springwater service area:</i>						
Supply/Treatment	-	-	-	-	-	-
Storage Facilities	-	-	-	-	-	-
Pumping Facilities	-	-	-	-	-	-
Subtotal Distribution Piping - immediate fire flow	-	-	-	-	-	-
Subtotal Distribution Piping - short term fire flow	-	-	-	-	-	-
Subtotal Distribution Piping - medium term fire flow	-	-	-	-	-	-
Subtotal Distribution Piping - long term fire flow	-	-	-	-	-	-
Subtotal immediate piping improvements for system expansion	872,300	-	-	872,300	-	-
Subtotal short term piping improvements for system expansion	10,014,675	-	-	10,014,675	-	-
Subtotal medium term piping improvements for system expansion	4,037,050	-	-	4,037,050	-	-
Subtotal Springwater service area	\$ 14,924,025	\$ -	\$ -	\$ 14,924,025	\$ -	\$ -
<i>Regional Facilities service area:</i>						
Supply/Treatment	19,600,000	15,508,737	-	4,091,263	-	-
Storage Facilities	-	-	-	-	-	-
Pumping Facilities	-	-	-	-	-	-
Subtotal Distribution Piping - immediate fire flow	-	-	-	-	-	-
Subtotal Distribution Piping - short term fire flow	-	-	-	-	-	-
Subtotal Distribution Piping - medium term fire flow	-	-	-	-	-	-
Subtotal Distribution Piping - long term fire flow	-	-	-	-	-	-
Subtotal immediate piping improvements for system expansion	-	-	-	-	-	-
Subtotal short term piping improvements for system expansion	-	-	-	-	-	-
Subtotal medium term piping improvements for system expansion	-	-	-	-	-	-
Subtotal Regional Facilities service area	\$ 19,600,000	\$ 15,508,737	\$ -	\$ 4,091,263	\$ -	\$ -
2012 Master Plan CIP Totals	\$ 58,428,145	\$ 20,071,586	\$ -	\$ 38,356,559	\$ -	\$ -

Water Customers Current and Future Demand

Estimated Demand per Equivalent Dwelling Unit (EDU)

Single-family residential water services generally have a consistent daily pattern of water use whereas water demands for multifamily residences, commercial and industrial users may vary significantly from service to service depending on the number of multifamily units per service or the type of commercial enterprise. When projecting future water demands based on population change, the water needs of nonresidential and multi-family residential customers are represented by comparing the water use volume at these services to the average single-family residential water service. The water volume used by an average single-family residential service is referred to as an equivalent dwelling unit or EDU. The average daily water demand (ADD) associated with an EDU in the Gresham system is approximately 184 gallons per day (gpd) per EDU (gpd/EDU) based on 2011 AMI data for 5/8-inch x 3/4-inch or 3/4-inch meters which is the base residential meter size. Maximum day demand (MDD) is estimated as 1.8 times ADD.

Projected Demand

In the 2012 Master Plan, the estimated number of EDUs per acre for each land use type was established based on current water demand by customer class. Land use type is analogous to customer class, which is to say the land use or zoning of a particular property reflects the type of water service, such as residential or commercial, provided to that property. The estimated number of potential EDUs per acre is applied to developable land within the existing water service area, along with the Pleasant Valley and Springwater service areas, to estimate future water demand. Table 4 summarizes the Master Plan projected EDUs and water demands in million gallons per day (mgd) for each service area:

Table 4
2012 Water Master Plan Estimate of Current and Future Water EDUs

Plan Area	2011			2016			2021			2031			Build-Out		
	EDUs	ADD (mgd)	MDD (mgd)												
Existing Service Area	35,481	6.52	11.75	35,692	6.56	11.81	35,902	6.61	11.90	36,326	6.68	12.02	42,864	7.89	14.20
Pleasant Valley	-	-	-	-	-	-	1,366	0.25	0.45	2,732	0.50	0.90	2,732	0.50	0.90
Springwater	-	-	-	1,935	0.36	0.65	2,881	0.54	0.97	5,761	1.06	1.91	5,761	1.06	1.91
TOTAL	35,481	6.52	11.75	37,626	6.92	12.46	40,149	7.40	13.32	44,819	8.24	14.83	51,357	9.45	17.01

Notes:

1. Build-out Equivalent Dwelling Units (EDUs) are calculated based on available developable land, current zoning and an average number of EDUs per acre for each customer class. Customer class is considered to be analogous to a general zoning category. EDUs for each customer class are summarized in Table 2-5 of the July 2012 *City of Gresham Water System Master Plan*.
2. Average Daily Water Demand (ADD) in million gallons per day (mgd) is calculated based on an average per EDU demand of 184 gallons per day/EDU. Analysis used to determine this per EDU consumption rate is summarized on page 2-5 of the July 2012 *City of Gresham Water System Master Plan*.
3. Maximum Day Demand (MDD) in mgd is estimated as 1.8 times ADD.
4. The July 2012 *City of Gresham Water System Master Plan* analysis assumed that the Pleasant Valley Plan Area would begin developing in approximately 10 years and reach saturation development (build-out) in 20 years (2031). The analysis assumed that the Springwater Plan Area would begin developing immediately (2012) and reach build-out in approximately 20 years (2031).

The SDC Review Committee evaluated these Master Plan EDU projections and determined that the growth anticipated for the existing service area (meaning Gresham proper) through the planning period was well below the .09% annual growth rate expected for the City. The most problematic issue was the Master Plan’s relatively low growth forecast for the existing service area of only 845 EDUs through 2031. By applying the 0.9% annual growth rate to the Gresham service area, the number of EDUs at 2031 would be 42,444, or an increase of 6,963 EDUs through the planning period. The Pleasant Valley and Springwater planning areas are identified in the Plan as having 2,732 EDUs and 5,761 EDUs respectively through 2031. These figures are consistent with established growth projections.

Table 5 shows the modified growth projections used in this water SDC analysis:

Table 5
Modified Water EDU Forecast for the 2016 Water SDC Methodology

Year	Annual Growth Rate: 0.90%	Master Plan Existing Service Area	Master Plan Pleasant Valley	Master Plan Springwater	TOTAL	CAGR*
2011		35,481	-	-	35,481	
2012		35,800				
2013		36,122				
2014		36,447				
2015		36,775				
2016		37,106	-	1,935	39,041	
2017		37,440				
2018		37,777				
2019		38,117				
2020		38,460				
2021		38,806	1,366	2,881	43,053	
2022		39,155				
2023		39,507				
2024		39,863				
2025		40,222				
2026		40,584				
2027		40,949				
2028		41,318				
2029		41,690				
2030		42,065				
2031		42,444	2,732	5,761	50,937	1.824%

* CAGR - Compounded Annualized Growth Rate 2011 to 2031

Reimbursement Fee Calculation

As discussed earlier in this report, the reimbursement fee represents a buy-in to the cost, or value, of infrastructure capacity within the City's existing water system. In order to determine an equitable reimbursement fee calculation, a number of issues must be addressed;

- First, the cost of the system to the City's existing customers may be far less than the total plant-in-service value. This is due to the fact that elements of the existing system may have been contributed, whether from developers, governmental grants, and other sources.
- Second, the value of the existing system to a new customer is less than the value to an existing customer, since the new customer must also pay, through an improvement fee, for expansion of some portions of the system.
- Third, the accounting treatment of asset costs generally has no relationship to the capacity of an asset to serve growth. In the absence of a detailed asset by asset analysis detailed in the balance sheet (or fixed asset schedule), a method has to be used to allocate cost to existing and future users of the asset. Generally, it is industry practice to allocate the cost of existing facilities between used and available capacity proportionally based on the forecasted population as converted to equivalent dwelling units over the planning period.
- Fourth, the Oregon SDC statute has limitations on what type of assets can be included in the basis of the reimbursement fee. ORS 223.299 specifically states that a "capital improvement" does not include costs of the operation or routine maintenance of capital improvements. This means the assets on the balance sheet such as certain vehicles and equipment used for heavy repair and maintenance of infrastructure cannot be included in the basis of the reimbursement fee.

For this water SDC methodology update, the following calculation steps were followed to arrive at the recommended water reimbursement fee.

- Step 1: Calculate the original cost of water fixed assets in service. From this starting point, eliminate any assets that do not conform to the ORS 223.299 definition of a capital improvement. This results in the adjusted original cost of water fixed assets.
- Step 2: Subtract from the original cost of water assets in service any grant funding or contributed capital.
- Step 3: Subtract from the original cost any principal outstanding on long term debt used to finance those assets.
- Step 4: Subtract the fund balance held in the Water Reimbursement SDC Fund.
- Step 5: Divide the net water reimbursement original cost basis by the sum of existing and future EDUs to arrive at the net reimbursement fee before future interest expense.
- Step 6: Divide the total future interest expense on water system long term debt for SDC funded projects by the total number of projected growth EDUs over the planning period (20 years). This is the future interest expense fee.
- Step 7: Add the future interest expense fee to the net reimbursement fee to determine the total water reimbursement fee.

The data used to calculate the water reimbursement fee is shown in Table 6.

Table 6 - Calculation of the Water Reimbursement Fee

City of Gresham 2016 Water SDC Update Reimbursement Fee SDC Calculations - Water		<u>Original Cost</u>
Utility plant in service- original cost ¹		
Buildings		\$ 2,077,316
Easements		220,404
Groundwater wells		1,470,502
Land		1,152,531
Public improvement projects		891,947
Software		51,343
Utility equipment		1,303,226
Vehicles		<i>eliminated</i>
Water lines and systems		69,874,201
Water pump stations		4,258,323
Water reservoirs		24,190,137
Construction work-in-progress		<u>3,037,758</u>
Subtotal utility plant in service		\$ 108,527,688
Less: grants and contributed capital: ²		
Grants and developer contributions		\$ 7,104,874
Contributed capital - Portland		-
Contributed capital - Multnomah County		-
Subtotal grants and contributed capital		<u>\$ 7,104,874</u>
Less: principal outstanding on long term debt: ¹		
Notes payable:		
Water meter replacement notes - 3.00%		\$ 1,981,729
2015 full faith and credit water obligations		5,332,418
Revenue bonds:		
Series 2003 water system revenue bonds - 3.40% to 4.05% (refunded)		-
Subtotal principal outstanding on long term debt		<u>\$ 7,314,147</u>
Less: Reimbursement fee fund balance at June 30, 2015		-
Utility plant in service net of grants, contributed capital, principal outstanding on long term debt, and water reimbursement fee fund balance		\$ 94,108,668
Projected existing capacity available to serve all customers (expressed in EDUs):		50,937
Reimbursement fee before inclusion of future interest expense on debt outstanding		\$ 1,848
add: future interest expense on long term debt outstanding	\$ 2,936,238	
divided by growth EDUs	15,456	
Future interest expense fee		\$ 190
Total Reimbursement fee		<u>\$ 2,038</u>

¹ Source: City of Gresham Comprehensive Annual Financial Report for the year ended June 30, 2015

² Source: City of Gresham records

Improvement Fee Calculation

The improvement fee represents a proportionate share of the cost to expand the system to accommodate growth. This charge is based on the Water Master Plan capital improvement plan for the system and specifically on costs allocable to growth. Statute requires that the capital improvements used as a basis for the charge be part of an adopted capital improvement schedule, whether as part of a system plan or independently developed, and that the improvements be capacity expanding.

In allocating improvement costs between existing and future customers, a number of potential approaches were considered by the City:

- An incremental approach that assigns costs to existing customers based on the cost of the project needed to serve them, with any incremental costs to oversize the project assigned to growth.
- A proportional approach, such as a capacity basis, which assigns cost shares based on relative capacity requirements of existing and future customers who will use the system.
- An absolute approach, which assigns all costs to growth for any project induced by growth.

The improvement portion of the SDC is based on the proportional approach toward capacity and cost allocation in that only those facilities (or portions of facilities) that either expand the water system's capacity to accommodate growth or increase its level of performance have been included in the cost basis of the improvement fee. The SDC Review Committee evaluated each project to exclude costs related to correcting existing system deficiencies or upgrading for historical lack of capacity. Only capacity increasing/level of performance costs were used as the basis for the SDC calculation, as reflected in the capital improvement schedule contained in Table 7. The improvement fee is calculated as a function of the estimated number of projected additional EDUs to be served by the City's facilities over the planning horizon.

Under this methodology, three steps are required to arrive at the improvement fee:

- Step 1: Accumulate the future cost of planned improvements needed to serve growth. This arrives at the gross improvement fee basis.
- Step 2: Subtract from the gross improvement fee basis the fund balance held in the Water Improvement SDC Fund. This arrives at the net water improvement fee basis.
- Step 3: Divide the net water improvement fee basis by the forecasted number of growth EDUs over the planning period. This arrives at the total water improvement fee.

Water SDC Summary

The 2016 water SDC methodology update was done in accordance with ORS 223 and Gresham's Revised Code Chapter 5.35, and with the benefit of the adopted Water Master Plan. The analysis indicates the City can charge a maximum of \$4,470 for the standard ¾" residential water meter. A comparison of the proposed and current water SDCs for the average single family residential customer is shown below in Table 8.

Table 8

Proposed and Current Water SDCs for a ¾" Meter

City of Gresham 2016 Water SDC Update
Comparison of Current and Proposed SDCs by Fee Type
For a Standard Residential ¾" Meter

Line Item Description	Proposed	Current	Difference
SDC components:			
Reimbursement fee	\$ 2,038	\$ 732	\$ 1,306
Improvement fee:	2,432	3,421	(989)
Total	\$ 4,470	\$ 4,153	\$ 317

For water meters larger than ¾", a schedule of SDCs based on the design criteria for Sensus "smart meters" (used in the Gresham service area) was developed. The design specifications for the Sensus meters are:

Service Size	Meter Size	GPM
1 inch	¾ inch	30
1 inch	1.0 inch	50
2 inch	1.5 inch	120
2 inch	2.0 inch	190
4 inch	3.0 inch	435
4 inch	4.0 inch	750
6 inch	6.0 inch	1,600
8 inch	8.0 inch	2,800

The resulting schedule of water SDCs by meter size is shown in Table 9.

Table 9

Proposed Schedule of Water SDCs by Water Meter Size

City of Gresham 2016 Water SDC Update
Schedule of Proposed System Development Charges

Meter Size	City Calculated	Flow Factor	Proposed SDCs		Total
	Flow (GPM)*	Equivalence	Reimbursement	Improvement	
0.75"x 0.75" - Displacement or Multi-jet	30	1.00	\$ 2,038	\$ 2,432	\$ 4,470
1.00 inch - Displacement or Multi-jet	50	1.67	3,397	4,053	7,450
1.50 inch - Displacement Class I Turbine	120	4.00	8,152	9,728	17,880
2.00 inch - Displacement or Class I & II Turbine	190	6.33	12,907	15,403	28,310
3.00 inch - Compound	435	14.50	29,551	35,264	64,815
4.00 inch - Displacement or Compound	750	25.00	50,950	60,800	111,750
6.00 inch - Displacement or Compound	1,600	53.33	108,693	129,707	238,400
8.00 inch - Compound	2,800	93.33	190,213	226,987	417,200

* Source: City of Gresham Staff August 26, 2014

NOTE: These rates have been subsequently indexed, see Resolution 3408.

Wastewater SDC

Wastewater Capital Improvement Plan

As in the case of the water SDCs, the primary sources of data for the wastewater system CIP are the master plans for wastewater treatment, pumping stations, and collection systems (see Table 2 for bibliography). Each of these projects was reviewed by the SDC Review Committee to determine whether or to what extent the projects provided capacity for future growth. The results of this analysis are shown in the collection system CIP (Table 10) and the treatment & pump stations CIP (Table 11).

Table 10 - 2016 Wastewater Collection System CIP

	Funding Source						Beyond Planning Period
	Total Project	Contributed					
	Costs	Rates	Capital	SDCs	LIDs		
<i>Collection System Projects:</i>							
<i>Gresham</i>							
313500 Upper Kelly Creek Trunk Upgrade	\$ 1,857,596	\$ 928,798	\$ -	\$ 928,798	\$ -	\$ -	-
313600 Lower Kelly Creek Trunk Upgrade	2,020,050	1,353,433	-	666,617	-	-	-
314100 Johnson Creek - Springwater Trunk	992,589	-	-	992,589	-	-	-
314200 Johnson Creek - Heiney Trunk A	1,339,292	-	-	1,339,292	-	-	-
314300 Johnson Creek - Heiney Trunk B	106,800	-	-	106,800	-	-	-
314700 Upsize Johnson Creek Interceptor	203,505	203,505	-	-	-	-	-
319200 East Basin Trunk Upgrade Phase III	1,702,526	1,225,753	-	476,773	-	-	-
3UF001 1960s Pipe Replacement Program	41,073,140	41,073,140	-	-	-	-	-
3UF002 Collection System Trunk Assessment	2,000,000	-	-	-	-	-	-
3UF002 Collection System Trunk Replacement	95,393,615	95,393,615	-	-	-	-	-
<i>Pleasant Valley Plan Area</i>							
CIP X McKinley Road Trunk Upgrade	1,092,187	1,092,187	-	-	-	-	-
CIP X Crystal Springs Trunk	1,348,975	-	-	1,348,975	-	-	-
CIP X Lower Giese Road Trunk	1,078,449	-	-	1,078,449	-	-	-
CIP X Lower Kelley Creek Trunk	4,803,191	-	-	4,803,191	-	-	-
CIP X Upper Giese Road Trunk	710,842	-	-	710,842	-	-	-
CIP X Upper Kelly Creek Trunk	1,987,030	-	-	1,987,030	-	-	-
CIP X Foster Road Trunk	1,365,832	-	-	1,365,832	-	-	-
CIP X Cheldelin Trunk	1,326,025	-	-	1,326,025	-	-	-
<i>Kelly Creek Headwaters Trunk</i>							
CIP Y Roudlin Road Trunk	1,016,817	-	-	1,016,817	-	-	-
<i>Springwater Plan Area</i>							
CIP Z Telford Road Trunk	3,926,083	-	-	3,926,083	-	-	-
CIP Z Jeanette Road Trunk	2,206,667	-	-	2,206,667	-	-	-
CIP Z Orient Trunk	3,733,952	-	-	3,733,952	-	-	-
CIP Z Village Center Trunk	6,406,718	-	-	6,406,718	-	-	-
CIP Z Hogan Road Trunk	2,722,394	-	-	2,722,394	-	-	-
CIP Z Rugg Road Trunk	4,970,005	-	-	4,970,005	-	-	-
Subtotal collection system projects	\$ 185,384,280	\$ 143,270,431	\$ -	\$ 42,113,849	\$ -	\$ -	-

Table 11 - 2016 Wastewater Treatment & Pump Station CIP

	Funding Source					Beyond Planning Period
	Total Project Costs	Rates	Contributed Capital	SDCs	LIDs	
<i>Wastewater Treatment Plant & Pump Station Projects:</i>						
315400 Upper Plant Secondary Clarifier No. 5	13,411,845	-	-	13,411,845	-	-
316400 WWTP Solids Process Improvements	4,127,188	4,127,188	-	-	-	-
319300 Vactor Decant Station	1,000,000	1,000,000	-	-	-	-
319400 WWTP Lower Blower Building Refurbishment	1,204,221	1,204,221	-	-	-	-
319700 WWTP Lower Barscreens Replacement	1,552,500	1,552,500	-	-	-	-
- Linneman Parallel FM Phase 2	2,894,500	-	-	2,894,500	-	-
- Linneman PS Capacity Upgrade	1,000,000	-	-	1,000,000	-	-
- WASAC Pilot Testing	320,000	320,000	-	-	-	-
- WASAC Full Implementation	300,000	300,000	-	-	-	-
- Secondary Scum Improvements	400,000	400,000	-	-	-	-
- Flow Split Automation	80,000	80,000	-	-	-	-
- Preliminary Treatment Upgrades	900,000	-	-	900,000	-	-
- WWTP UV Disinfection	3,008,661	2,406,929	-	601,732	-	-
- Anaerobic Digester No. 3	12,967,500	-	-	12,967,500	-	-
- Class A Solids Upgrades	7,800,000	7,800,000	-	-	-	-
- Biosolids Storage Bay Expansion Phase 1	2,100,000	-	-	-	-	2,100,000
- Upper Primary Clarifier Expansion Phase 1	4,200,000	-	-	-	-	4,200,000
- Biosolids Storage Bay Expansion Phase 2	2,800,000	-	-	-	-	2,800,000
- Upper Primary Clarifier Expansion Phase 2	4,200,000	-	-	-	-	4,200,000
- Columbia River pH Study	60,000	60,000	-	-	-	-
- Lower PC Odor Control	800,000	800,000	-	-	-	-
- Lower AB Mixed Liquor Recycle Pumps	400,000	400,000	-	-	-	-
- Upper AB Expansion	7,500,000	-	-	-	-	7,500,000
- Biological Biogas Treatment	634,000	634,000	-	-	-	-
Subtotal wastewater treatment plant projects	\$ 73,660,415	\$ 21,084,838	\$ -	\$ 31,775,577	\$ -	\$ 20,800,000
Wastewater totals	<u>\$ 259,044,695</u>	<u>\$ 164,355,269</u>	<u>\$ -</u>	<u>\$ 73,889,426</u>	<u>\$ -</u>	<u>\$ 20,800,000</u>

Wastewater Customers Current and Future Demand

Existing Wastewater Demand and Population Growth

Current Gresham demand is documented in the 2012 Wastewater Treatment System Master Plan and based on average annual dry weather flows (AADWF) to the headworks of the treatment plant. These flows are expressed in million gallons per day (mgd). For the purpose of this wastewater SDC methodology update, the Review Committee translated these mgd figures into standard billing units used for charging SDCs. In this case, those standard billing figures are expressed in dwelling units (DUs). In the wastewater industry, a DU is typically defined as the amount of wastewater a single family residential customer contributes to the wastewater system during an average month in the winter, where winter is defined as November through April. Fortunately, in 2015, the City undertook a study to determine the winter average water consumption for the single family residential customer class. The results of that study indicated the average single family residential customer contributes 5.8 hundred cubic feet (CCF) of water to the wastewater system in the average winter month. This hundred cubic feet figure translates to 143 gallons per day. The data from that analysis is shown in Table 12.

Table 12

Winter Average Water Consumption by Gresham Single Family Residential Customers

City of Gresham 2015 Consumption Based Sewer Rates Feasibility Study Analysis of Gresham SFR Customers' Winter Water Consumption Patterns				
	Fiscal Year			Three Year
	2011-12	2012-13	2013-14	Flow Weighted Average
Ccf per month:				
Average monthly water sales per account (Nov-Apr)	5.83	5.82	5.76	5.80
Population standard deviation	3.37	3.44	3.34	3.38
Population median	5.28	5.24	5.19	5.24
Accounts:				
Total number of accounts in billing register	14,838	14,838	14,838	
Total number of accounts with water consumption (Nov-Apr)	14,431	14,508	14,496	
Number of accounts without metered consumption (Nov-Apr)	407	330	342	
Water sales in Ccf:				
Total SF water sold November through April	504,882	506,679	501,285	
Total annual billable SF water for SF sewer commodity charge	1,009,763	1,013,358	1,002,570	
Equivalent sewer dwelling units:				
Gresham only	14,430	14,509	14,500	

Forecast of DUs

Based on this historical consumption data, the SDC Review Committee was able to calculate the number of DUs relative to the AADWF data from the Wastewater Treatment Master Plan. The DU calculation methodology is shown in Table 13.

Table 13
Forecast of Current and Future Wastewater DUs

Gresham WWTP Master Plan Update Planing Criteria and Discharge Considerations Table 3.3 & Table 3.4				
	2015	2030	Growth	CAGR
Low Growth Flow Projections: Table 3.3				
Population	124,831	153,097	28,266	1.37%
Average Dry Weather Flow (ADWF) MGD	11.90	14.20	2.30	1.18%
High Growth Flow Projections: Table 3.4				
Population	127,704	164,444	36,740	1.70%
Average Dry Weather Flow (ADWF) MGD	12.10	15.10	3.00	1.49%
Average of Low and High Flow Projections				
Population	126,268	158,771	32,503	1.54%
Average Dry Weather Flow (ADWF) MGD	12.00	14.65	2.65	1.34%
less: Fairview actual ADW used	1.01	1.01	-	
less: Wood Village actual ADW used	0.39	0.39	-	
Estimated Gresham ADWF MGD	10.60	13.25	2.65	1.50%
Observed Gresham EDU (FY12, FY13, & FY14 ave)				
Ccf per month - Single Family Residential	5.80	5.80		
Gallons per month - SFR	4,342	4,342		
Gallons per day - SFR	143	143		
Estimated EDUs based on ADWF and observed Gresham SFR winter ave. metered water consumption	74,331	92,906	18,575	1.50%

A key modifying element in Table 13 is elimination of actual wastewater flows from the cities of Fairview and Wood Village. These wholesale wastewater treatment cities have purchased capacity in the Gresham plant and do not pay an SDC to Gresham for their new connections. Therefore, their actual flows have been eliminated from the SDC calculation.

Reimbursement Fee Calculation

The wastewater reimbursement fee methodology mirrors that used for the water reimbursement fee. The methodological steps in its construction are restated here.

- Step 1: Calculate the original cost of wastewater fixed assets in service. From this starting point, eliminate any assets that do not conform to the ORS 223.299 definition of a capital improvement. This results in the adjusted original cost of wastewater fixed assets.
- Step 2: Subtract from the original cost any grant funding or contributed capital.

- Step 3: Subtract any principal outstanding on long term debt used to finance those assets. This is basis for the gross wastewater reimbursement fee.
- Step 4: Subtract from the gross wastewater reimbursement fee basis the fund balance held in the Water Reimbursement SDC fund. This arrives at the net wastewater reimbursement fee basis.
- Step 5: Divide the net wastewater reimbursement fee basis by the sum of existing and future DUs to arrive at the unit net reimbursement fee before future interest expense.
- Step 6: Divide the total future interest expense on wastewater system long term debt for SDC funded projects by the total number of projected growth EDUs over the planning period (20 years). This is the future interest expense fee.
- Step 7: Add the future interest expense fee to the unit net reimbursement fee before future interest expense to arrive at the total wastewater reimbursement fee.

The data used to calculate the total wastewater reimbursement fee is shown in Table 14.

Table 14 - Calculation of the Water Reimbursement Fee

City of Gresham 2016 Wastewater SDC Update Reimbursement Fee SDC Calculations - Wastewater		Original Cost
Utility plant in service- original cost ¹		
Buildings and improvements		\$ 3,921,118
Computer equipment		\$ 30,563
Easements		442,369
Land and improvements		3,708,699
Public improvement projects		799,476
Wastewater treatment plant		294,661
Sewer lines and systems		157,952,588
Utility equipment		998,761
Vehicles		<i>eliminated</i>
Wastewater pump stations		13,805,005
Construction work-in-progress		7,056,834
Subtotal utility plant in service		<u>\$ 189,010,074</u>
Less: grants and contributed capital: ²		
Grants and developer contributions		5,964,208
Contributed capital - Portland		-
Contributed capital - Multnomah County		-
Subtotal grants and contributed capital		<u>5,964,208</u>
Less: principal outstanding on long term debt: ¹		
Loans:		
Secondary clarifier loan - DEQ SRF		323,917
2009 wastewater financing agreement - DEQ SRS		10,661,000
Revenue obligations:		
2015 full faith and credit obligations		<u>5,670,000</u>
Subtotal principal outstanding on long term debt		16,654,917
Less: Reimbursement fee fund balance at June 30, 2015		52,026
Utility plant in service net of grants, contributed capital, principal outstanding on long term debt, and wastewater reimbursement fee fund balance		\$ 166,338,923
Projected existing capacity available to serve all customers (expressed in EDUs):		92,906
Reimbursement fee before inclusion of future interest expense on debt outstanding		\$ 1,790
add: future interest expense on long term debt outstanding	\$ 3,455,856	
divided by growth EDUs	18,575	
Future interest expense fee		\$ 186
Total reimbursement fee		<u>\$ 1,976</u>

¹ Source: City of Gresham Comprehensive Annual Financial Report for the year ended June 30, 2015

² Source: City of Gresham records

Improvement Fee Calculation

The calculation of the wastewater improvement fee also follows the logic that was used to calculate the water improvement fee. As in the case of water, the wastewater SDC uses the proportionate approach and has relied on the capital improvement plans that are incorporated in the wastewater master plans for treatment, pump stations, and collection system. Under this methodology, only three steps are required to arrive at the improvement fee. These steps are:

- Step 1: Accumulate the future cost of planned improvements needed to serve growth. This arrives at the gross improvement fee basis.
- Step 2: Subtract from the gross improvement fee basis the fund balance held in the Wastewater Improvement SDC Fund. This arrives at the net wastewater improvement fee basis.
- Step 3: Divide the net wastewater improvement fee basis by the forecasted number of growth DUs over the planning period. This arrives at the total wastewater improvement fee.

The specific data that was used to calculate the total wastewater improvement fee is shown in Table 15.

Table 15 - Calculation of the Wastewater Improvement Fee

City of Gresham 2016 Wastewater SDC Update Improvement Fee SDC Calculations - Wastewater						
	Funding Source					Beyond Planning Period
	Wastewater CIP Total	Rates	Contributed Capital	SDCs	LIDs	
Collection System Projects:						
Gresham	\$ 146,689,113	\$ 142,178,244	\$ -	\$ 4,510,869	\$ -	\$ -
Pleasant Valley Plan Area	13,712,531	1,092,187	-	12,620,344	-	-
Kelly Creek Headwaters Trunk	1,016,817	-	-	1,016,817	-	-
Springwater Plan Area	23,965,819	-	-	23,965,819	-	-
Wastewater Treatment Plant & Pump Station Projects:	<u>73,660,415</u>	<u>21,084,838</u>	-	<u>31,775,577</u>	-	<u>20,800,000</u>
Wastewater system total	\$ 259,044,695	\$ 164,355,269	\$ -	\$ 73,889,426	\$ -	\$ 20,800,000
<i>Improvement fee basis:</i>				73,889,426		
less: improvement fee SDC fund balance				<u>185,161</u>		
Adjusted improvement fee basis				\$ 73,704,265		
<i>Growth EDUs</i>				18,575		
<i>Unit Improvement Fee SDCs - \$/EDU</i>				\$ 3,968		

Wastewater SDC Model Summary

The 2016 wastewater SDC methodology update was done in accordance with ORS and Gresham Revised Code Chapter 4.25 along with the benefit of adopted master plans and plan updates for wastewater services. The analysis indicates the City can charge a maximum of \$5,944 for the standard ¾" residential water meter. A comparison of the proposed and current water SDCs for the average single family residential customer is shown below in Table 16.

Table 16
Proposed and Current Wastewater SDCs for a ¾" Meter
 City of Gresham 2016 Wastewater SDC Update
 Comparison of Current and Proposed SDCs by Fee Type
 For a Standard Residential ¾" Meter

Line Item Description	Proposed	Current	Difference
Proposed SDC components:			
Reimbursement fee	\$ 1,976	\$ 1,072	\$ 904
Improvement fee:	3,968	3,984	(16)
Total	\$ 5,944	\$ 5,056	\$ 888

For meters larger than ¾", the schedule of wastewater SDC uses the same flow factors that were developed for the water SDCs (City staff provided capacity values for the Sensus iPerl and C2 meters). The complete proposed schedule of wastewater SDCs by potential meter size are shown in Table 17

Table 17 - Proposed Schedule of Wastewater SDCs by Water Meter Size
 City of Gresham 2016 Wastewater SDC Update
 Schedule of Proposed System Development Charges

Meter Size	City Calculated	Flow Factor	Proposed SDCs		
	Flow (GPM)*	Equivalence	Reimbursement	Improvement	Total
0.75" x 0.75" - Displacement or Multi-jet	30	1.00	\$ 1,976	\$ 3,968	\$ 5,944
1.00 inch - Displacement or Multi-jet	50	1.67	3,294	6,613	9,907
1.50 inch - Displacement Class I Turbine	120	4.00	7,906	15,872	23,778
2.00 inch - Displacement or Class I & II Turbine	190	6.33	12,518	25,130	37,648
3.00 inch - Compound	435	14.50	28,659	57,535	86,193
4.00 inch - Displacement or Compound	750	25.00	49,411	99,198	148,609
6.00 inch - Displacement or Compound	1,600	53.33	105,411	211,623	317,033
8.00 inch - Compound	2,800	93.33	184,469	370,340	554,809

* Source: City of Gresham Staff August 26, 2014

NOTE: These rates have been subsequently indexed, see Resolution 3408.

Exhibit B
 City of Gresham 2016 SDC Update
 Improvement Fee SDC Calculations - Wastewater

	Total Project Costs	Funding Source				Beyond Planning Period
		Rates	Contributed Capital	SDCs	LIDs	
<i>Collection System Projects:</i>						
<i>Gresham</i>						
Upper Kelly Creek Trunk Upgrade	\$ 1,857,596	\$ 928,798	\$ -	\$ 928,798	\$ -	\$ -
Lower Kelly Creek Trunk Upgrade	2,020,050	1,353,433	-	666,617	-	-
Johnson Creek - Springwater Trunk	992,589	-	-	992,589	-	-
Johnson Creek - Heiney Trunk A	1,339,292	-	-	1,339,292	-	-
Johnson Creek - Heiney Trunk B	106,800	-	-	106,800	-	-
Upsize Johnson Creek Interceptor	203,505	203,505	-	-	-	-
East Basin Trunk Upgrade Phase III	1,702,526	1,225,753	-	476,773	-	-
1960s Pipe Replacement Program	41,073,140	41,073,140	-	-	-	-
Collection System Trunk Assessment	2,000,000	2,000,000	-	-	-	-
Collection System Trunk Replacement	95,393,615	95,393,615	-	-	-	-
<i>Pleasant Valley Plan Area</i>						
McKinley Road Trunk Upgrade	1,092,187	1,092,187	-	-	-	-
Crystal Springs Trunk	1,348,975	-	-	1,348,975	-	-
Lower Giese Road Trunk	1,078,449	-	-	1,078,449	-	-
Lower Kelley Creek Trunk	4,803,191	-	-	4,803,191	-	-
Upper Giese Road Trunk	710,842	-	-	710,842	-	-
Upper Kelly Creek Trunk	1,987,030	-	-	1,987,030	-	-
Foster Road Trunk	1,365,832	-	-	1,365,832	-	-
Cheldelin Trunk	1,326,025	-	-	1,326,025	-	-
<i>Kelly Creek Headwaters Trunk</i>						
Roudlin Road Trunk	1,016,817	-	-	1,016,817	-	-
<i>Springwater Plan Area</i>						
Telford Road Trunk	3,926,083	-	-	3,926,083	-	-
Jeanette Road Trunk	2,206,667	-	-	2,206,667	-	-
Orient Trunk	3,733,952	-	-	3,733,952	-	-
Village Center Trunk	6,406,718	-	-	6,406,718	-	-
Hogan Road Trunk	2,722,394	-	-	2,722,394	-	-
Rugg Road Trunk	4,970,005	-	-	4,970,005	-	-
Subtotal collection system projects	\$ 185,384,280	\$ 143,270,431	\$ -	\$ 42,113,849	\$ -	\$ -
<i>Wastewater Treatment Plant & Pump Station Projects:</i>						
Upper Plant Secondary Clarifier No. 5	13,411,845	-	-	13,411,845	-	-
WWTP Solids Process Improvements	4,127,188	4,127,188	-	-	-	-
Vactor Decant Station	1,000,000	1,000,000	-	-	-	-
WWTP Lower Blower Building Refurbishment	1,204,221	1,204,221	-	-	-	-
WWTP Lower Barscreens Replacement	1,552,500	1,552,500	-	-	-	-
Linneman Parallel FM Phase 2	2,894,500	-	-	2,894,500	-	-
Linneman PS Capacity Upgrade	1,000,000	-	-	1,000,000	-	-
WASAC Pilot Testing	320,000	320,000	-	-	-	-
WASAC Full Implementation	300,000	300,000	-	-	-	-
Secondary Scum Improvements	400,000	400,000	-	-	-	-
Flow Split Automation	80,000	80,000	-	-	-	-
Preliminary Treatment Upgrades	900,000	-	-	900,000	-	-
WWTP UV Disinfection	3,008,661	2,406,929	-	601,732	-	-
Anaerobic Digester No. 3	12,967,500	-	-	12,967,500	-	-
Class A Solids Upgrades	7,800,000	7,800,000	-	-	-	-
Biosolids Storage Bay Expansion Phase 1	2,100,000	-	-	-	-	2,100,000
Upper Primary Clarifier Expansion Phase 1	4,200,000	-	-	-	-	4,200,000
Biosolids Storage Bay Expansion Phase 2	2,800,000	-	-	-	-	2,800,000
Upper Primary Clarifier Expansion Phase 2	4,200,000	-	-	-	-	4,200,000
Columbia River pH Study	60,000	60,000	-	-	-	-
Lower PC Odor Control	800,000	800,000	-	-	-	-
Lower AB Mixed Liquor Recycle Pumps	400,000	400,000	-	-	-	-
Upper AB Expansion	7,500,000	-	-	-	-	7,500,000
Biological Biogas Treatment	634,000	634,000	-	-	-	-
Subtotal wastewater treatment plant projects	\$ 73,660,415	\$ 21,084,838	\$ -	\$ 31,775,577	\$ -	\$ 20,800,000
Wastewater totals	\$ 259,044,695	\$ 164,355,269	\$ -	\$ 73,889,426	\$ -	\$ 20,800,000

Replaced by Exhibit E of Resolution 3408

Exhibit C			
City of Gresham 2013 Water SDC Methodology Update			
2012 Water Master Plan CIP Funding Allocation Worksheet			
Capital Improvement Category/Subcategory	Total	Rates \$	SDCs \$
Supply/Treatment			
Initial exploratory well drilling (5 wells)	1,000,000	791,262	208,738
Production well development (7 wells)	17,500,000	13,847,087	3,652,913
Additional exploratory well drilling (4 wells)	1,100,000	870,388	229,612
Subtotal Supply/Treatment	19,600,000	15,508,737	4,091,263
Storage Facilities			
Grant Butte reservoir no. 2 (2.5 mg)	-	-	-
Pleasant Valley reservoir (4.4 mg)	5,511,000	-	5,511,000
Hunters Highland reservoir no. 2 (0.4 mg)	1,250,000	-	1,250,000
Subtotal Storage Facilities	6,761,000	-	6,761,000
Pumping Facilities			
Linneman pump station (intermediate service level)	-	-	-
Hunters Highland pump station no. 2	1,000,000	791,262	208,738
Standby power facilities	305,000	241,335	63,665
Subtotal Pumping Facilities	1,305,000	1,032,597	272,403
Distribution Piping			
Immediate fire flow improvements			
FF8 SE Marie street alley	69,120	69,120	-
FF10 SW Eastman parkway	38,080	38,080	-
FF15 NE Victory avenue	-	-	-
FF18 North side of Oregon Trail shopping center parking lot	121,920	121,920	-
FF18 SE Burnside road at SE 1st street	4,800	4,800	-
FF18 NE Country Club avenue at NE Division street	3,200	3,200	-
FF21 NE Francis avenue	-	-	-
FF25 NE 15th street	48,000	48,000	-
FF25 Kelly Creek apartments east of NE Village Squire court	154,400	154,400	-
FF25 Kelly Creek Crossing at Kelly Creek condos	98,720	98,720	-
FF30 SE Lusted road	95,360	95,360	-
FF41 NW Fariss road	-	-	-
FF49 Highland Park apartments	225,285	75,095	150,190
FF51 NE Division street	130,640	43,547	87,093
Subtotal Distribution Piping - immediate fire flow	989,525	752,242	237,283
Short term fire flow improvements			
FF7 Powell Vista Manor retirement center	70,240	70,240	-
FF17 Oregon Trail shopping center parking lot	55,040	55,040	-
FF22 NE 18th court	15,520	15,520	-
FF23 NE Country Club avenue	139,040	139,040	-
FF24 NE 19th street	-	-	-
FF27 SE Fleming Ave.	108,160	108,160	-
FF27 SE 10th street	99,840	99,840	-
FF35 Nestani-A Grecian villa condos fire line	82,800	41,400	41,400
FF37 NW 15th street	57,440	57,440	-
FF38 NW 14th place	50,240	50,240	-
FF47 NE 185th drive	299,460	99,820	199,640
FF50 NE Kane drive	432,860	144,287	288,573
FF54 SE Cherry Park road/NE 242nd drive	786,290	196,573	589,718
Subtotal Distribution Piping - short term fire flow	2,196,930	1,077,599	1,119,331
Medium term fire flow improvements			
FF2 SW 24th drive	162,080	162,080	-
FF9 NW Bella Vista drive	200,480	200,480	-
FF12 Town Fair shopping center parking lot	27,680	27,680	-
FF14 SE Cleveland Ave.	30,080	30,080	-
FF19 NE 7th court	4,320	4,320	-
FF20 NE 8th street	156,160	156,160	-
FF26 NE 4th street	267,840	267,840	-
FF31 NE Rene avenue - north of NE 27th drive	1,600	1,600	-
FF32 NE Rene avenue - SE Stark street	75,680	75,680	-
FF45 W Powell boulevard	72,480	72,480	-
FF53 SE Stark street	196,190	65,397	130,793
Subtotal Distribution Piping - medium term fire flow	1,194,590	1,063,797	130,793
Long term fire flow improvements			
FF1 SW 27th court	-	-	-
FF3 SE Kelly avenue	-	-	-
FF4 SE Meadow court	-	-	-
FF5 SE Beech place	-	-	-
FF13 Cleveland Station apartments	-	-	-
FF34 NE Hale avenue	-	-	-
FF39 NW Victoria avenue	-	-	-
FF48 NE Liberty avenue	-	-	-
FF52 NE 17th street	-	-	-
Subtotal Distribution Piping - long term fire flow	-	-	-

Capital Improvement Category/Subcategory	Total	Rates \$	SDC \$
Immediate piping improvements for system expansion			
Pleasant Valley future piping improvements:			
SW Butler road transmission from Butler reservoir	1,189,500	-	1,189,500
SW Pleasant Valley drive to SW Eastwood Ave.	1,496,025	-	1,496,025
Springwater future piping improvements:			
South Hills SE Butler road transmission from South Hills	872,300	-	872,300
Subtotal immediate piping improvements for system expansion	3,557,825	-	3,557,825
Short term piping improvements for system expansion			
Hunters Highland service level expansion loop:			
Extend SW 40th street 12-ince west to SW Pleasant View	-	-	-
SW Pleasant View drive/190th between SW 31st & 40th	460,430	316,845	83,585
Hunters Highland reservoir no. 2 transmission	404,125	319,769	84,356
Pleasant valley future piping improvements:			
SW Pleasant View drive/190th between SW 26th & 31st	-	-	-
SW 31st street between SE 182nd Ave.	334,650	-	334,650
SE 182nd avenue between SW 30th & 31st streets	103,500	-	103,500
SW Pleasant View drive/190th between PV1 and SE Richey	91,500	-	91,500
SE Giese road between SE 182nd Ave. and SW Pleasant View	667,950	-	667,950
SE Richey road between SE 182nd and SW Pleasant View	517,960	-	517,960
SE 182nd Ave. between SW 31st St. and Richey road	582,360	-	582,360
SW Pleasant View drive/190th between Richey road	701,500	-	701,500
Extend main west along SE McKinley road	671,600	-	671,600
Springwater future piping improvements:			
SE Hogan road/242nd between SE Butler road and SE Rugg	895,175	-	895,175
SE Rugg road between SE Hogan road/242nd	812,825	-	812,825
SE 252nd Ave. between SE McNutt road and SE Rugg road	596,275	-	596,275
SE McNutt road between SE Hogan road/242nd Ave.	820,450	-	820,450
Extend proposed South Hills distribution piping - Butler	1,087,325	-	1,087,325
Extend proposed South Hills distribution piping - SE 252nd	594,750	-	594,750
Extend proposed South Hills distribution piping - SE Hogan	1,215,425	-	1,215,425
Extend intermediate distribution from SE 30th street	991,250	-	991,250
SE Orient drive alignment Anderson and Wheeler reservoir	1,201,700	-	1,201,700
SE Anderson road/267th between SE Orient and SE Jeanette	606,950	-	606,950
SE Jeanette road alignment between Anderson and Wheeler reservoir	1,192,550	-	1,192,550
Subtotal short term piping improvements for system expansion	14,490,250	636,614	13,853,636
Medium term piping improvements for system expansion			
Pleasant valley future piping improvements:			
SE Cheldelin road between SE 182nd and SW Pleasant View	789,950	-	789,950
Extend proposed SE 182nd Ave. main (PV4) from SE Richey to SE Cheldelin	570,400	-	570,400
SE Giese road between SE 172nd ... 182nd avenues	886,025	-	886,025
SE 172nd avenue between SE Giese road and SE Richey road	611,525	-	611,525
SE 172nd avenue between SE Richey and SE Cheldelin	724,375	-	724,375
SE Cheldelin road between SE 172nd and 182nd avenues	713,700	-	713,700
Springwater future piping improvements:			
SE Telford road between proposed intermediate dist. piping on SE 252nd	1,884,900	-	1,884,900
SE McNutt road between proposed intermediate dist. piping on SE 252nd	464,600	-	464,600
Barnes road loop extension	446,200	-	446,200
SE 247th Ave. between proposed South Hills dist. piping	588,650	-	588,650
SE 247th avenue between intermediate dist. piping & SE Hogan road	652,700	-	652,700
Subtotal medium term piping improvements for system expansion	8,333,025		8,333,025
2012 Master Plan CIP Totals	58,428,145	20,071,586	38,356,559

Exhibit D

Table 1: Wastewater SDC Eligible Collection System Projects

SDC ID	Project Name	Master Plan ID	Total Project Cost Indexed	SDC Eligible Cost Indexed
Gresham				
1	Upper Kelly Creek Trunk Upgrade	KC1	\$ 1,743,111	\$ 871,556
2	Lower Kelly Creek Trunk Upgrade	KC2	\$ 4,110,555	\$ 2,055,278
3	Johnson Creek - Springwater Trunk	JC1	\$ 1,160,938	\$ 580,469
22	Upper Johnson Creek Upgrade	JC4	\$ 2,726,325	\$ 1,363,163
23	Regner Rd Trunk	JC3	\$ 2,535,938	\$ 2,535,938
6	East Basin Trunk Upgrade Phase III	E1	\$ 2,202,477	\$ 1,101,238
Pleasant Valley				
21	McKinley Road Trunk	PV1	\$ 769,913	\$ 769,913
8	Lower Giese Road Trunk	PV3	\$ 634,026	\$ 634,026
9	Lower Kelley Creek Trunk	PV4	\$ 7,119,143	\$ 7,119,143
11	Upper Kelley Creek Trunk	PV6	\$ 2,149,519	\$ 2,149,519
12	Foster Road Trunk	PV7	\$ 752,108	\$ 752,108
Kelley Creek Headwaters				
24	Rodlun Road Trunk	KCH1	\$ 240,719	\$ 240,719
Stark Basin				
25	Stark Basin Line	SB1	\$ 694,196	\$ 694,196
Springwater Area				
15-A	Telford Road Trunk	SW1	\$ 1,948,082	\$ 1,948,082
15-B	Telford Road Trunk Creek Crossings	SW13	\$ 311,508	\$ 311,508
16-A	Jeanette Road Trunk	SW2	\$ 552,495	\$ 552,495
16-B	Jeanette Rd Hwy Creek Crossing	SW9	\$ 1,155,430	\$ 1,155,430
17-A	Orient Trunk	SW3	\$ 1,666,010	\$ 1,666,010
17-B	Orient Road Trunk Creek Crossing	SW8	\$ 1,140,160	\$ 1,140,160
18-A	Village Center Trunk	SW4	\$ 361,377	\$ 361,377
18-B	Village Center Trunk North Creek Crossing	SW11	\$ 254,500	\$ 254,500
18-C	Village Center Trunk South Creek Crossing	SW12	\$ 690,204	\$ 690,204
20	Rugg Road Trunk	SW6	\$ 1,534,352	\$ 1,534,352
Seismic				
26	Johnson Creek Flyovers		\$ 1,527,000	\$ 226,301
27	Johnson Creek Large Diameter Mains		\$ 12,820,692	\$ 1,900,027
28	185th Bridge Crossing		\$ 197,492	\$ 29,268
29	Tier 2 Upgrades		\$ 60,697,324	\$ 8,995,343
30	Tier 1 Upgrades		\$ 25,137,474	\$ 3,725,374
Environmental				
31	Adv. Wetland, Stream & Floodplain Mitigation		\$ 200,000	\$ 200,000
Total Collection System Projects:			\$ 136,833,068	\$ 45,557,696

Table 2: Wastewater Treatment Plant & Pump Station Projects

SDC ID	Project Name	Total Project Cost Indexed	SDC Eligible Cost Indexed
WWTP 1	Upper Plan Secondary Clarifier No. 5	\$ 14,508,595	\$ 14,508,595
WWTP 2	Linneman Parallel FM Phase 2	\$ 3,131,198	\$ 3,131,198
WWTP 3	Linneman Pump Station Capacity Upgrade	\$ 1,081,775	\$ 1,081,775
WWTP 4	Preliminary Treatment Upgrades	\$ 973,597	\$ 973,597
WWTP 5	WWTP UV Disinfection	\$ 3,254,694	\$ 650,939
WWTP 6	Anaerobic Digester No. 3	\$ 14,027,915	\$ 14,027,915

Total Wastewater Treat Plant Projects: \$ 36,977,774 \$ 34,374,019

Wastewater Totals (Table 1 & Table 2): \$ 173,810,842 \$ 79,931,715

Exhibit E

Table 1: SDC-Eligible Costs for Existing City Water SDC

SDC ID #	Project Name	Total Project Cost Indexed	SDC Eligible Cost Indexed
Supply and Treatment			
ST1	Initial exploratory well drilling (5 wells)	\$ 1,081,775	\$ 225,808
ST2	Production well development (7 wells)	\$ 18,931,058	\$ 3,951,629
ST3	Additional exploratory well drilling (4 wells)	\$ 1,189,952	\$ 248,388
SUBTOTAL =		\$ 21,202,785	\$ 4,425,825
Storage Facilities			
SF1	Grant Butte Reservoir No.2 (2.5 MG)	\$ -	\$ -
SF2	Pleasant Valley Reservoir (4.4 MG)	\$ 5,961,660	\$ 5,961,660
SF3	Hunters Highland Reservoir No. 2 (0.4 MG)	\$ 1,352,219	\$ 1,352,219
SUBTOTAL =		\$ 7,313,879	\$ 7,313,879
Pumping Facilities			
PF1	Linneman Pump Station (intermediate service level)	\$ -	\$ -
PF2	Hunters Highland pump station No. 2	\$ 1,081,775	\$ 225,808
PF3	Standby power facilities	\$ 329,941	\$ 68,871
SUBTOTAL =		\$ 1,411,716	\$ 294,679
Mitigation			
MIT1	Advanced Wetland, Stream & Floodplain Mitigation	\$ 200,000	\$ 200,000
SUBTOTAL =		\$ 200,000	\$ 200,000
Distribution Piping - Immediate Fire Flow Improvements			
FF8	SE Marie street Alley	\$ 74,772	\$ -
FF10	SW Eastman Parkway	\$ 41,194	\$ -
FF15	NE Victory Avenue	\$ -	\$ -
FF18	North side of Oregon Trail shopping center parking lot	\$ 131,891	\$ -
FF18	SE Burnside Road at SE 1st street	\$ 5,193	\$ -
FF18	NE Country Club Avenue at NE Division street	\$ 3,462	\$ -
FF25	NE 15th Street	\$ 51,925	\$ -
FF25	Kelly Creek apartments east of NE Village Squire Court	\$ 167,027	\$ -
FF25	Kelly Creek Crossing at Kelly Creek condos	\$ 106,793	\$ -
FF30	SE Lusted Road	\$ 103,158	\$ -
FF49	Highland Park apartments	\$ 243,708	\$ 162,472
FF51	NE Division Street	\$ 141,324	\$ 94,216
SUBTOTAL =		\$ 1,070,447	\$ 256,688

SDC ID #	Project Name	Total Project Cost Indexed	SDC Eligible Cost Indexed
Distribution Piping - Short Term Fire Flow			
FF7	Powell Vista Manor retirement center	\$ 75,984	\$ -
FF17	Oregon Trail shopping center parking lot	\$ 59,542	\$ -
FF22	NE 18th Court	\$ 16,790	\$ -
FF23	NE Country Club Avenue	\$ 150,411	\$ -
FF27	SE Fleming Ave	\$ 117,006	\$ -
FF27	SE 10th Street	\$ 108,005	\$ -
FF35	Nestani-A Grecian villa condos fire line	\$ 89,572	\$ 44,786
FF37	NW 15th Street	\$ 62,138	\$ -
FF38	NW 14th Place	\$ 54,348	\$ -
FF47	NE 185th Drive	\$ 323,949	\$ 215,966
FF50	NE Kane Drive	\$ 468,258	\$ 343,853
FF54	SE Cherry Park Road/NE 242nd Drive	\$ 850,589	\$ 637,941
SUBTOTAL =		\$ 2,376,592	\$ 1,242,547

Distribution Piping - Medium Term Fire Flow			
FF2	SW 24th Drive	\$ 175,334	\$ -
FF9	NW Bella Vista Drive	\$ 216,875	\$ -
FF12	Town Fair shopping center parking lot	\$ 29,944	\$ -
FF14	SE Cleveland avenue	\$ 32,540	\$ -
FF19	NE 7th Court	\$ 4,674	\$ -
FF20	NE 8th Street	\$ 168,931	\$ -
FF26	NE 4th Street	\$ 289,743	\$ -
FF31	NE Rene Avenue - north of NE 27th Drive	\$ 1,731	\$ -
FF32	NE Rene avenue - SE Stark Street	\$ 81,870	\$ -
FF45	W Powell Blvd	\$ 78,407	\$ -
FF53	SE Stark Street	\$ 212,234	\$ 141,489
SUBTOTAL =		\$ 1,292,283	\$ 141,489

Table 2: SDC-Eligible Costs for Pleasant Valley and Springwater Plan Areas			
Immediate piping improvements for system expansion			
Pleasant Valley future piping improvements			
PV1	SW Butler Road transmission from Butler reservoir	\$ 1,286,771	\$ 1,286,771
PV2	SW Pleasant Valley drive to SW Eastwood Ave.	\$ 1,618,362	\$ 1,618,362
Springwater future piping improvements			
SW1	South Hills SE Butler Road transmission from S. Hills	\$ 943,632	\$ 943,632
SUBTOTAL =		\$ 3,848,765	\$ 3,848,765

SDC ID #	Project Name	Total Project Cost Indexed	SDC Eligible Cost Indexed
Short term piping improvements for system expansion			
Hunters Highland service level expansion loop			
HH1	SW 40th St west of Brookside, Ph 3 to SE 190th, north to SW 33rd	\$ 480,662	\$ 480,662
HH2	Butler Road HH Res No. 2 Transmission	\$ 437,173	\$ 437,173
Pleasant Valley future piping improvements			
PV3 - A	SW Pleasant View Drive between SW 26th & 31st	\$ -	\$ -
PV3 - B	SW 31st Street extension, between Van Buren Farms and SE 182nd Ave	\$ 362,016	\$ 362,016
PV3 - C	SE 182nd Avenue between SW 30th & 31st streets	\$ 111,964	\$ 111,964
PV4 - A	SW Pleasant View Drive between PV1 and SE Richey	\$ 98,983	\$ 98,983
PV4 - B	SE Giese Rd. btw SE 182nd Ave. and SW Pleasant View	\$ 722,572	\$ 722,572
PV4 - C	SE Richey Rd. btw SE 182nd and SW Pleasant View	\$ 560,316	\$ 560,316
PV4 - D	SE 182nd Ave. between SW 31st St. and Richey Road	\$ 629,982	\$ 629,982
PV5	SW Pleasant View drive/190th between Richey Road	\$ 758,865	\$ 758,865
PV6	Extend main west along SE McKinley Road	\$ 726,520	\$ 726,520
Springwater future piping improvements			
SW2 - A	SE Hogan Road between SE Butler Road and SE Rugg	\$ 968,378	\$ 968,378
SW2 - B	SE Rugg Road between SE Hogan Road/242nd	\$ 879,294	\$ 879,294
SW2 - C	SE 252nd Ave between SE McNutt Rd and SE Rugg Rd	\$ 645,036	\$ 645,036
SW2 - D	SE McNutt road between SE Hogan road/242nd Ave.	\$ 887,542	\$ 887,542
SW3 - A	Extend South Hills distribution piping - Butler	\$ 1,176,241	\$ 1,176,241
SW3 - B	Extend South Hills distribution piping - SE 252nd	\$ 643,386	\$ 643,386
SW8 - A	Extend South Hills distribution piping - SE Hogan	\$ 1,314,817	\$ 1,314,817
SW8 - B	Extend intermediate distribution from SE 30th Street	\$ 1,009,466	\$ 1,009,466
SW4 - A	SE Orient Drive align Anderson and Wheeler reservoir	\$ 1,299,970	\$ 1,299,970
SW4 - B	SE Anderson Rd. between SE Orient and SE Jeanette	\$ 656,584	\$ 656,584
SW4 - C	SE Jeanette Rd. align btw Anderson and Wheeler Res.	\$ 1,290,072	\$ 1,290,072

SUBTOTAL = \$ 15,659,839 \$ 15,659,839

Medium term piping improvements for system expansion			
Pleasant Valley future piping improvements			
PV7 - A	SE Cheldelin Rd. btw SE 182nd and SW Pleasant View	\$ 854,549	\$ 854,549
PV7 - B	SE 182nd Ave. from SE Richey to SE Cheldelin	\$ 617,045	\$ 617,045
PV8 - A	SE Giese Road between SE 172nd & 182nd avenues	\$ 958,480	\$ 958,480
PV8 - B	SE 172nd Ave. btw SE Giese Road and SE Richey Road	\$ 661,533	\$ 661,533
PV8 - C	SE 172nd Ave. btw SE Richey and SE Cheldelin	\$ 583,612	\$ 583,612
PV8 - D	SE Cheldelin Rd. Btw SE 172nd and 182nd avenues	\$ 67,065	\$ 67,065

SDC ID #	Project Name	Total Project Cost Indexed	SDC Eligible Cost Indexed
Springwater future piping improvements			
SW5 - A	SE Telford Road between SW3 and SE Stone Rd	\$ 2,039,038	\$ 2,039,038
SW5 - B	SE McNutt Road between SW3 and SE Telford Rd.	\$ 502,593	\$ 502,593
SW6	Barnes Road loop extension	\$ 482,689	\$ 482,689
SW7	SE 247th Avenue between SW3 and SE McNutt Rd.	\$ 636,788	\$ 636,788
SW9	SE 247th Avenue between SW8 and SE Hogan Rd.	\$ 706,076	\$ 706,076
SUBTOTAL =		\$ 8,109,468	\$ 8,109,468

OVERALL TOTAL (TABLE 1 & TABLE 2) = \$ 62,285,774 \$ 41,493,179