



CLACKAMAS

**WATER
ENVIRONMENT
SERVICES**

GREGORY L. GEIST | DIRECTOR

Water Quality Protection
Surface Water Management
Wastewater Collection & Treatment

August 14, 2025

BCC Agenda Date/Item: _____

Board of County Commissioners
Acting as the Governing Body of Water Environment Services
Clackamas County

**Approval of a Resolution adopting the System Development Charge methodology and establishing sanitary sewer and stormwater System Development Charge fees.
No County General Funds are involved.**

Previous Board Action/Review	The Water Environment Services (WES) December 2024 Wastewater & Stormwater System Development Charge Update ("Report") was presented to the Board in policy sessions on April 1 and April 29, 2025.		
Performance Clackamas	Build public trust through good government.		
Counsel Review	Yes	Procurement Review	N/A
Contact Person	Erin Blue	Contact Phone	503-742-4585

EXECUTIVE SUMMARY: The attached resolution adopts an updated System Development Charge (SDC) methodology for WES and establishes sanitary sewer and stormwater SDC fees, effective October 1, 2025.

WES completed an update to its Wastewater and Stormwater System Development Charge methodology based on updated population projections and the FY 2025/26–2029/30 Capital Improvement Plan adopted by the Board in February 2025.

The updated methodology and fees were developed in accordance with ORS 223.304 and reflect input from the WES Advisory Committee, development community, and the Board. Based on this input, the updated fees will be phased in.

The attached resolution has been reviewed and approved by County Counsel.

RECOMMENDATION: WES staff recommends the Board, acting as the governing body of Water Environment Services, approve the resolution adopting the System Development Charge Methodology and establishing SDC fees.

Respectfully submitted,

Ron Wierenga
Deputy Director, WES

Attachments: December 2024 Wastewater & Stormwater
System Development Charge Update attached as
Exhibit A

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**BEFORE THE BOARD OF COUNTY COMMISSIONERS
OF CLACKAMAS COUNTY, STATE OF OREGON**

A Resolution Adopting the System
Development Charge Methodology
and Establishing Sanitary Sewer
and Stormwater System
Development Charge Fees for
Water Environment Services

RESOLUTION NO. _____

This matter comes before the Board of County Commissioners of Clackamas County, Oregon, acting as the governing body of Water Environment Services (the "Board").

WHEREAS, in order for Water Environment Services ("WES") to collect a System Development Charge ("SDC"), ORS Chapter 223.304 requires the governing body to adopt a methodology that aligns to certain statutory principles; and

WHEREAS, WES has previously adopted wastewater and stormwater SDC methodologies, the most recent by Resolution No. 2017-78 in 2017; and

WHEREAS, periodic review and updates to the SDC methodology are needed to ensure that the changing infrastructure needs of WES are met; and

WHEREAS, WES adopted the Fiscal Year 2025/26 – 2029/30 Capital Improvement Plan ("CIP"), which includes the sanitary sewer and stormwater projects necessary to serve projected growth in the service area; and

WHEREAS, the attached Exhibit A, the draft December 2024 Wastewater & Stormwater System Development Charge Update ("Report"), presents the updated SDC methodology and fee calculations; and

WHEREAS, input from the Board, WES Advisory Committee, and development community supported phasing in the fee increases; and

WHEREAS, notice of the proposed methodology and fees was issued pursuant to ORS 223.304 to interested parties and advertised on WES' website on May 7, 2025; and

WHEREAS, upon adoption of this Resolution, the draft Report shall be final and referred to as the "Adopted" Report; and

WHEREAS, WES Rules and Regulations allow for the adoption of an SDC methodology and establishment of fees by resolution or order of the Board.

BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS, ACTING AS THE GOVERNING BODY OF WATER ENVIRONMENT SERVICES, THAT:

1. The resolution is hereby adopted, updating the System Development Charge methodology to be used by Water Environment Services, as shown in the attached Exhibit A, which by this reference is made a part of this resolution; and
2. Effective October 1, 2025, a Sanitary Sewer SDC for Rate Zones 1 and 2 of \$9,375.00 per Equivalent Dwelling Unit (EDU) is established, consisting entirely of an improvement fee.

**BEFORE THE BOARD OF COUNTY COMMISSIONERS
OF CLACKAMAS COUNTY, STATE OF OREGON**

3. Effective October 1, 2025, a Stormwater SDC for Rate Zone 2 of \$265.00 per Equivalent Service Unit (ESU) is established, consisting of an improvement fee of \$251.00 per ESU and a reimbursement fee of \$14.00 per ESU.
4. WES staff is directed to publish the updated SDC fees where appropriate, in accordance with this resolution.

ADOPTED this 14th day of August, 2025.

Water Environment Services

Chair

Recording Secretary

Presented by:



December

2024

Wastewater & Stormwater System Development Charge Update

Draft Report

Prepared for:



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2024 Wastewater & Stormwater SDC Methodology Update

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Introduction/History of the Project

Water Environment Services (WES) conducts periodic updates to its master plans and capital improvement plan to provide orderly and sustainable growth of wastewater and stormwater infrastructure. A key component to funding the projects in these plans is the system development charge (SDC) program. SDCs are one-time charges for new development—designed to recover the costs of infrastructure capacity needed to serve new development. This section describes the policy context and project scope upon which the body of this report is based. It concludes with a numeric overview of the calculations presented in subsequent sections of this report for wastewater and stormwater SDCs.

The current schedule of SDCs were last reviewed in the summer of 2019. Since that time, WES has completed new capital improvement plans for wastewater and stormwater services. No changes have been made to the methodology that is used to calculate the SDCs. The current SDC methodology for wastewater and stormwater was adopted by the WES Board of Directors in 2008.

With this review and update, WES has stated a number of objectives:

- Incorporate project lists from latest, approved 5-year capital improvement plan;
- Review the basis for charges to ensure a consistent methodology;
- Provide clear, orderly documentation of the assumptions, methodology, and results, so that WES staff could, by reference, respond to questions or concerns from the public.

This report provides the documentation of that effort and was done in close coordination with WES staff and available planning documents. The SDC update complies with WES Rules and Regulations regarding SDCs Section 5.4.

Table 1 gives a component breakdown for the current and proposed residential equivalent SDCs for wastewater collection and treatment services.

Table 2 gives a component breakdown for the current and proposed residential equivalent SDCs for stormwater services.

Table 1 - Component Breakdown of the Proposed Residential Equivalent Wastewater SDCs

	Calculated SDCs	SDCs as of July 1, 2024
WES Total:		
Reimbursement fee	572	-
Improvement fee	11,128	9,100
Compliance fee*	585	-
Total WES SDC	\$ 12,285	\$ 9,100
* note: compliance fees are based on assumed flat 5% fee on total calculated reimbursement and improvement fees		

Table 2 - Component Breakdown of the Proposed Residential Equivalent Stormwater SDCs

	Calculated SDCs	SDCs as of July 1, 2024
Retail (Charged to Rate Zone 2):		
Reimbursement fee	207	
Improvement fee	251	
Compliance fee*	22	
Total retail SDC	\$ 480	\$ 246.50
* note: compliance fees are based on assumed flat 5% fee on total calculated reimbursement and improvement fees		

SDCs in Neighboring Communities

Figures 1 and 2 show the current SDCs charged in neighboring communities for wastewater and stormwater. The SDCs charged are as of December 2024.

Figure 1 – Neighboring Communities' SDC – Wastewater as of December 2024

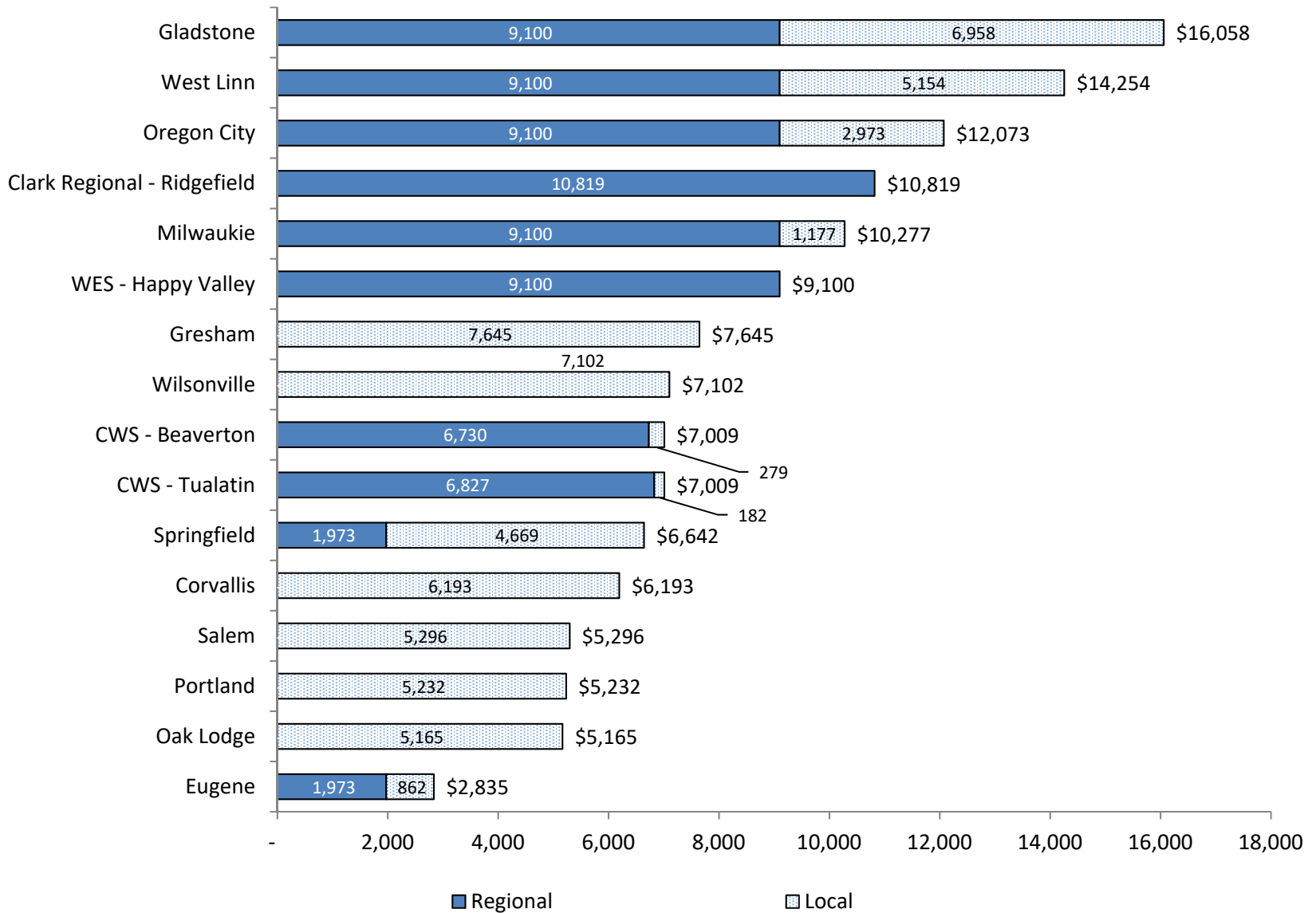
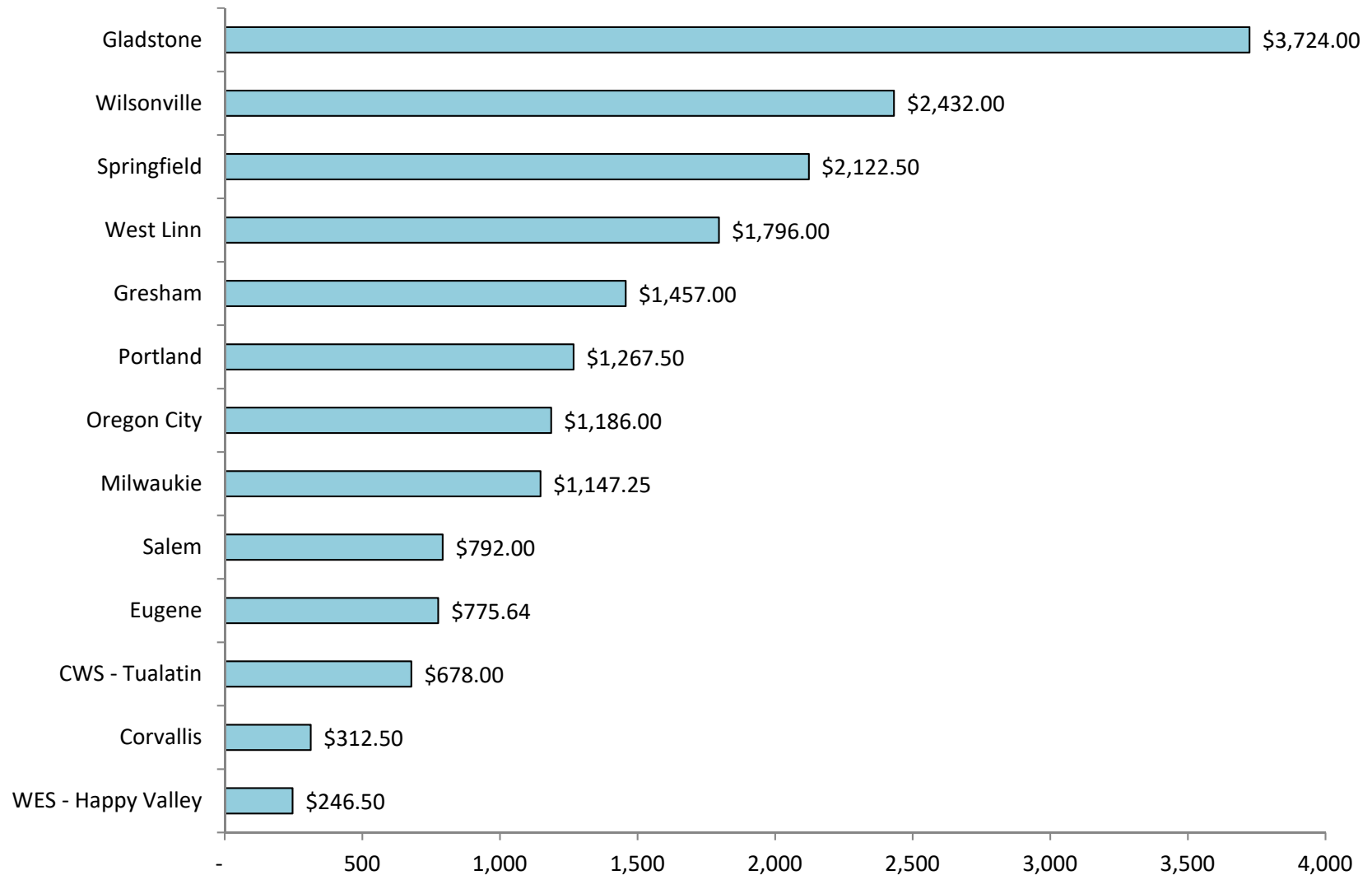


Figure 2 – Neighboring Communities' SDC – Stormwater as of December 2024



Analytical Process for the SDC Updates

This study is an update of the System Development Charge (SDC) methodology analysis that was completed by WES in June 2019. This update addresses the levels and structure of SDCs needed to support current and future regional infrastructure investments managed by WES. This study also considers the recommendations of the recently completed five-year wastewater and stormwater capital improvement plan. This plan calls for combined future investments of \$243.8 million over the five year forecast by WES.

WES is a municipal partnership created in November 2016 through an Oregon Revised Statute (ORS) 190 agreement (the Agreement) between Clackamas County Service District No. 1 (CCSD No. 1) (sewer and surface water management) and the Tri-City Service District (TCSD) (sewer services). The Agreement was amended in May of 2017 to also include the Surface Water Management Agency of Clackamas County (SWMACC) (surface water management). Each of CCSD No. 1, SWMACC and TCSD are separate legal entities organized under the provisions of ORS Chapter 451. This enabling legislation established County service districts as independent municipal corporations authorized to provide a specific service within specified boundaries. These entities jointly partnered in the delivery of services to customers by forming WES. The governing body for WES is the Board of County Commissioners of Clackamas County, Oregon, and the County Administrator serves as the Administrator of the partnership.

The Agreement that formed WES established rate zones for each of WES's service areas. Rate Zone 1 is coterminous with the boundaries of TCSD. Rate Zone 2 is coterminous with the boundaries of CCSD No. 1, and Rate Zone 3 is coterminous with SWMACC. The scope of this SDC update is limited to the wastewater SDCs charged by WES in Rate Zones 1 and 2 and stormwater services delivered by WES in Rate Zone 2.

In April of 2023, the WES Board of Directors updated its Rules and Regulations that authorize the calculation, collection, accounting, and expenditure of SDCs for wastewater and stormwater. This authority is codified in Section 5.4 of the updated rules and regulations. The specific authority to charge wastewater and stormwater SDCs within the jurisdictional boundaries of WES are as follows per the updated rules and regulations:

5.4.1 Sanitary Sewer System Development Charge Imposed

Unless otherwise exempted by the provisions of these Rules and Regulations or other local or state law, a SDC is hereby imposed on all development within WES's boundaries that increases usage of the sanitary sewer facilities owned, managed, or maintained by WES.

*The sewer SDC shall be calculated based on the equivalent dwelling unit (EDU) ratios defined in **Table 2**. SDCs shall be established and may be revised by resolution or order of the Board.*

A consumption-based monthly sewer user charge is based on the equivalent cubic feet of metered water consumption. For terms that are not defined in these Rules and Regulations, the District has discretion in determining how a classification is applied, including referencing definitions from the codes of the County or the city in which the project is taking place.

5.4.2 Surface Water System Development Charge Imposed

Unless otherwise exempted by the provisions of these Rules and Regulations or other local or state law, a SDC is hereby imposed on all development within WES's boundaries that increases usage of the storm system or surface water facilities owned, managed, or maintained by WES.

*The surface water SDC shall be calculated based on the equivalent service unit (ESU) ratios defined in **Table 3**. SDCs shall be established and may be revised by resolution or order of the Board.*

The essential ingredient in the development of an SDC methodology is valid sources of data. For this project, the consultant team has relied on a number of data sources. The primary sources have been the newly formulated and adopted capital improvement plans for wastewater and stormwater. These data sources are supplemented with WES utility billing records, certified census data, and other documents that were deemed helpful, accurate, and relevant to this study. Table 3 contains a references to the key documents/sources that WES relied on to facilitate the analysis and hence the resulting SDCs.

Table 3 - Data Sources for the Calculation of SDCs

Service	Master Plan Document and/or Corroborating Source Documentation
Wastewater	• WES Capital Improvement Plan, Fiscal Years 2025/26 – 2029/30; September 5, 2024 • WES Comprehensive Annual Financial Report for the Fiscal Years Ended June 30, 2024, and 2023 • WES wastewater system fixed asset schedule; June 30, 2024; WES records • WES Utility Billing System – wastewater system active accounts and Equivalent Dwelling Units in service report; December 2024 • US Department of the Census; Census.gov; Explore Census Data • Oregon Metro Populations and Households Data Sets • WES Long-Range Financial Plan - Wastewater Fiscal 2024-2025 forecast dated November 26, 2024 • WES 2022 Population Study, FCS Group, December 2022
Stormwater	• WES Capital Improvement Plan, Fiscal Years 2025/26-2029/30; September 5, 2024 • WES Comprehensive Annual Financial Report for the Fiscal Years Ended June 30, 2024, and 2023 • WES stormwater system fixed asset schedule; June 30, 2024; WES records • Storm System Master Plan; Otak, Inc.; October 2022 • WES Utility Billing System – stormwater system active accounts and Equivalent Dwelling Units in service report; December 2024 • WES Long-Range Financial Plan - Stormwater; Fiscal 2024-2025 forecast dated August 2, 2024 • WES 2022 Population Study, FCS Group, December 2022

The data sources shown in Table 3 were used to formulate the two (2) components of the SDCs: the *reimbursement and improvement* fees. This update affirms WES' existing methodology for calculating these two components, incorporating data consistent with WES' regional service area. A brief definition of the two components are:

- *The reimbursement fee* considers the cost of existing facilities, prior contributions by existing users of those facilities, the value of the unused/available capacity, and generally accepted ratemaking principles. The objective is future system users contribute no more than an equitable share to the cost of existing facilities. The reimbursement fee can be spent on capital costs or debt service related to the systems for which the SDC is applied.
- *The improvement fee* portion of the SDC is based on the cost of planned future facilities that expand the system's capacity to accommodate growth or increase its level of performance. In developing an analysis of the improvement portion of the fee, each project in the respective service's capital improvement plan is evaluated to exclude costs related to correcting existing system deficiencies or upgrading for historical lack of capacity. Per statutory requirements the improvement fee must also provide a credit for construction of a qualified public improvement.

SDC Legal Authorization and Background

SDCs are authorized by Oregon Revised Statute (ORS) 223.297-314. The statute is specific in its 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 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.

Finally, two cost basis adjustments are potentially applicable to both reimbursement and improvement fees: fund balance and compliance costs. In this study, the project team has paid attention to this detail to align future infrastructure costs to those responsible for paying those costs. The reasons for this attention are as follows:

- *Fund Balances* - To the extent that SDC revenue is currently available in fund balance, that revenue should be deducted from its corresponding cost basis. For example, if WES has wastewater improvement fees that it has collected but not spent, then those unspent improvement fees should be deducted from the wastewater system's improvement fee cost basis to prevent charging twice for the same capacity.
- *Compliance Costs* - ORS 223.307(5) authorizes the expenditure of SDCs on "the costs of complying with the provisions of ORS 223.297 to 223.314, including the costs of developing system development charge methodologies and providing an annual accounting of system development charge expenditures." To avoid spending monies for compliance that might otherwise have been spent on growth-related projects, this report includes an estimate of compliance costs in its SDCs.

Reimbursement Fee Methodology

The reimbursement fee represents a buy-in to the cost, or value, 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 WES 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. 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 growth as converted to equivalent dwelling units over the planning period. This approach reflects the philosophy, consistent with WES's updated master plans, that facilities have been sized to meet the demands of the customer base within the established planning period.

Improvement Fee Methodology

There are three basic approaches used to develop improvement fee SDCs: "standards-driven," "improvements-driven," and "combination/hybrid" approaches. The "standards-driven" approach is based on the application of Level of Service (LOS) standards for facilities. Facility needs are determined by applying the LOS standards to projected future demand, as applicable. SDC-eligible amounts are calculated based on the costs of facilities needed to serve growth. This approach works best where level of service standards have been adopted but no specific list of projects is available. The "improvements-driven" approach is based on a specific list of planned capacity-increasing capital improvements. The portion of each project that is attributable to growth is determined, and the SDC-eligible costs are calculated by dividing the total costs of growth-required projects by the projected increase in projected future demand, as applicable. This approach works best where a detailed master plan or project list is available, and the benefits of projects can be readily apportioned between growth and current users. Finally, the combination/hybrid-approach includes elements of both the "improvements-driven" and "standards-driven" approaches. Level of Service standards may be used to create a list of planned capacity-increasing projects, and the growth required portions of projects are then used as the basis for determining SDC eligible costs. This approach works best where levels of service have been identified and the benefits of individual projects are not easily apportioned between growth and current users.

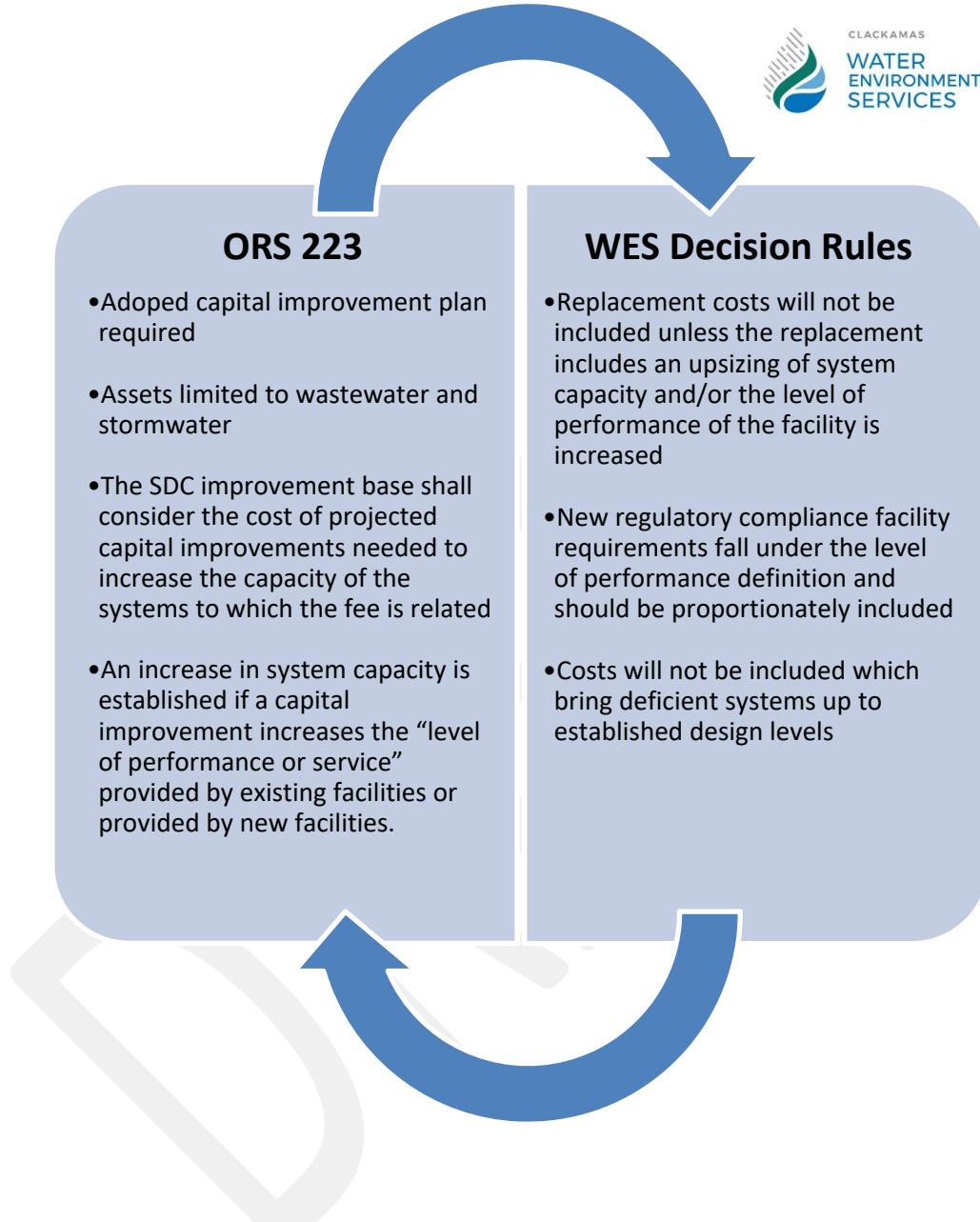
In the past, WES has utilized the "improvements-driven" approach for the calculation of SDCs. This study continues to use this method and has relied on the capital improvement plan based on WES' wastewater and stormwater master plans.

For this SDC methodology update, the improvement fee represents a proportionate share of the cost to expand the systems to accommodate growth. This charge is based on the newly adopted capital improvement plan established by WES for wastewater and stormwater services. The costs that can be applied to the improvement fees are those that can reasonably be 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 included for SDC eligibility be capacity or level of service expanding. The improvement fee is intended to insulate 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. An example might be a pump station project that both expands future capacity and corrects a chronic capacity issue for existing users. In this case, a rational allocation basis must be defined.

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 fee. As part of this SDC update, WES Staff reviewed the planned capital improvement lists in order to assess SDC eligibility. The criteria in Figure 3 were developed to guide WES's evaluation:

Figure 3 - SDC Eligibility Criteria



In developing the improvement fee, the project team in consultation with WES staff 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 WES. The improvement fee is calculated as a function of the estimated number of projected additional Equivalent Dwelling Units for wastewater and Equivalent Service Units for stormwater over the planning horizon. Once the future costs to serve growth have been segregated (i.e., the numerator), they can be divided by the total number of new units that will use the capacity derived from those investments (i.e., the denominator).

Methodology for the Granting of Credits, Discounts, and Exemptions

SDC Credits Policy

ORS 223.304 requires that credit be allowed for the construction of a "qualified public improvement" which is required as a condition of development approval, is identified in the Capital Improvement Plan, and either is not located on or contiguous to property that is the subject of development approval or is located on or contiguous to such property and is required to be built larger or with greater capacity than is necessary for the particular development project. 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, WES may, if it 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.

WES has adopted a policy for granting SDC credits and has codified this policy in the WES Rules and Regulations; last update April 2023. The adopted SDC credit policy consists of five (5) items as follows:

5.4.7 Credits

The District may grant a credit against the SDC otherwise assessed a new development for constructing a Qualified Public Improvement.

For a Qualified Public Improvement located on, or contiguous to, the site of the development, only the over-capacity portion of Qualified Public Improvement is eligible for a SDC credit. There is a rebuttable presumption that the over-capacity portion of such a Qualified Public Improvement is limited to the portion constructed larger, or of greater capacity, than the District's minimum standard facility capacity or size needed to serve the particular development.

Credit shall be only for the improvement fee charged for the type of improvement being constructed. 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.

All credit requests must be in writing and filed with the District before the issuance of a building permit. The amount of any credit shall be determined by the District and based upon the subject improvement construction contract documents, or other appropriate information provided by the applicant for the credit. Upon a finding by the District that the contract amounts exceed the prevailing market rate for a similar project, the credit shall be based upon market rates. The credit shall state the actual dollar amount that may be applied against the improvement fee of the SDC imposed against the subject property. The applicant has the burden of demonstrating qualification for a credit.

Any credits are assignable; however, they shall apply only to that property subject to the original condition for land use approval upon which the credit is based or any partitioned or subdivided parcel or lots of such property to which the credit has been apportioned. Credits are limited to the amount of the fee attributable to the development of a specific lot or parcel for which the credit is sought. Credits shall not be a basis for any refund.

Credits shall be used by the applicant within ten (10) years of their issuance by the District.

SDC Discount Policy

WES, at its sole discretion, may discount the SDC rates by choosing not to charge a reimbursement fee for excess capacity, or by reducing the portion of growth-required improvements to be funded with SDCs. A discount in the SDC rates may also be applied on a pro-rata basis to any identified deficiencies, which must be funded from sources other than improvement fee SDCs. The portion of growth-required costs to be funded with SDCs must be identified in the CIP. Because discounts reduce SDC revenues, they increase the amounts that must come from other sources, such as user fees, in order to acquire the facilities identified in the updated master plan(s).

Partial and Full SDC Exemption

WES may exempt certain types of development from the requirement to pay SDCs. Exemptions reduce SDC revenues and, therefore, increase the amounts that must come from other sources, such as user fees. As in the case of SDC credits, WES has articulated a policy relative to partial and full SDC exemption. This SDC exemption policy is codified in the WES Rules and Regulations section 5.4.6, and is as follows:

5.4.6 Exemptions

SDCs shall not be collected in the following situations:

- A. Sanitary Sewer SDC and Surface Water SDC will not apply for pre-existing structures and uses of the sewer or storm system or stormwater management facility. Additional Sanitary Sewer SDCs and Surface Water SDCs may apply, if there is any alteration, and/or increase of use of the system(s), which would increase the EDU and/or ESU unit assignment in accordance with the Rules above the SDC charges previously collected.
- B. Surface Water SDC for properties within Rate Zone 3, unless a CIP for that area is adopted pursuant to Section 5.4.5 above.
- C. Surface Water SDC for properties within certain unincorporated areas of Hoodland, Boring and Fischer Forest Park portions of Rate Zone 2, unless a CIP for that area is adopted pursuant to Section 5.4.5 above.
- D. Sanitary Sewer SDC within Rate Zone 2–Boring area, no SDC shall be assessed for those properties within the original boundaries of Assessment District 84 unless a CIP for that area is adopted pursuant to Section 5.4.5 above.
- E. Sanitary Sewer SDC within Rate Zone 2–Hoodland area, no SDC shall be assessed for those properties within the original boundaries of Assessment District 1-80 unless a CIP for that area is adopted pursuant to Section 5.4.5 above.

Wastewater SDCs

Wastewater Capital Improvement Plan

The principal source of data for the wastewater system CIP is the wastewater comprehensive plan, consolidating recommendations from the following planning efforts: Willamette Facility Plan (2022), Boring Facility Plan (2020), Sanitary Sewer Master Plan (2019) and the Hoodland Master Plan (2017). With the assistance of WES Staff, the project team has summarized the FY 2025/26 – 2029/30 wastewater system CIP for this SDC methodology update. The five-year wastewater system CIP is shown

in Table 4. For this report, the project costs shown in Table 4 are organized in total by WES capital category by fiscal year with subsidiary breakouts for the following subcategories:

- Wastewater local collection capital costs by fiscal year
- Wastewater treatment and regional collection capital costs by fiscal year

Each project in the FY 2025/26 – 2029/30 CIP has been reviewed by the project team in consultation with WES staff to eliminate projected costs for correcting existing system deficiencies or upgrading for historical lack of capacity. Table 5 shows the costs by year and by project category for capacity increasing/level of performance costs (i.e., SDC-eligible costs).

DRAFT

Table 4 – FY 2025/26 – 2029/30 Wastewater System CIP

Total Capital Costs by Fiscal Year

Project Type		25/26	26/27	27/28	28/29	29/30	5 YEAR CIP TOTAL
Tri-City WRRF		\$ 15,900,000	\$ 10,900,000	\$ 13,267,500	\$ 16,350,000	\$ 18,287,500	\$ 74,705,000
Water Quality Lab		1,275,000	-	425,000	1,275,000	-	2,975,000
Kellogg Creek WRRF		2,750,000	1,750,000	1,750,000	1,000,000	3,000,000	10,250,000
Hoodland WRRF		300,000	-	-	-	500,000	800,000
Boring Treatment System		-	-	-	-	-	-
Fischer Forest Park Treatment System		-	-	-	-	-	-
Collection System		20,450,000	40,705,000	28,150,000	18,600,000	5,800,000	113,705,000
Recurring Projects	Flow Metering Program	-	-	50,000	-	-	50,000
	Pipe/Manhole R&R	1,500,000	1,000,000	1,000,000	1,000,000	1,000,000	5,500,000
	Pump Stations	100,000	100,000	100,000	100,000	100,000	500,000
	Development Review	100,000	100,000	100,000	100,000	100,000	500,000
	Fleet	700,000	470,000	605,000	665,000	515,000	2,955,000
	WQL Equipment	-	42,500	-	42,500	-	85,000
	WRRF: Small Projects	800,000	800,000	800,000	800,000	800,000	4,000,000
Total		\$ 43,875,000	\$ 55,867,500	\$ 46,247,500	\$ 39,932,500	\$ 30,102,500	\$ 216,025,000

Local Collection Capital Costs by FY

Project Type		25/26	26/27	27/28	28/29	29/30	5 YEAR CIP TOTAL
Tri-City WRRF		\$ -	\$ -	\$ 191,250	\$ 637,500	\$ -	\$ 828,750
Water Quality Lab		-	-	-	-	-	-
Kellogg Creek WRRF		-	-	-	-	-	-
Hoodland WRRF		-	-	-	-	-	-
Boring Treatment System		-	-	-	-	-	-
Fischer Forest Park Treatment System		-	-	-	-	-	-
Collection System		-	-	-	-	-	-
Recurring Projects	Flow Metering Program	-	-	25,000	-	-	25,000
	Pipe/Manhole R&R	1,500,000	1,000,000	1,000,000	1,000,000	1,000,000	5,500,000
	Pump Stations	50,000	50,000	50,000	50,000	50,000	250,000
	Development Review	100,000	100,000	100,000	100,000	100,000	500,000
	Fleet	560,000	376,000	484,000	532,000	412,000	2,364,000
	WQL Equipment	-	-	-	-	-	-
	WRRF: Small Projects	-	-	-	-	-	-
Total		\$ 2,210,000	\$ 1,526,000	\$ 1,850,250	\$ 2,319,500	\$ 1,562,000	\$ 9,467,750

Treatment and Regional Collection Capital Costs by FY

Project Type		25/26	26/27	27/28	28/29	29/30	5 YEAR CIP TOTAL
Tri-City WRRF		\$ 15,900,000	\$ 10,900,000	\$ 13,076,250	\$ 15,712,500	\$ 18,287,500	\$ 73,876,250
Water Quality Lab		1,275,000	-	425,000	1,275,000	-	2,975,000
Kellogg Creek WRRF		2,750,000	1,750,000	1,750,000	1,000,000	3,000,000	10,250,000
Hoodland WRRF		300,000	-	-	-	500,000	800,000
Boring Treatment System		-	-	-	-	-	-
Fischer Forest Park Treatment System		-	-	-	-	-	-
Collection System		20,450,000	40,705,000	28,150,000	18,600,000	5,800,000	113,705,000
Recurring Projects	Flow Metering Program	-	-	25,000	-	-	25,000
	Pipe/Manhole R&R	-	-	-	-	-	-
	Pump Stations	50,000	50,000	50,000	50,000	50,000	250,000
	Development Review	-	-	-	-	-	-
	Fleet	140,000	94,000	121,000	133,000	103,000	591,000
	WQL Equipment	-	42,500	-	42,500	-	85,000
	WRRF: Small Projects	800,000	800,000	800,000	800,000	800,000	4,000,000
Total		\$ 41,665,000	\$ 54,341,500	\$ 44,397,250	\$ 37,613,000	\$ 28,540,500	\$ 206,557,250

Table 5 – FY 2025/26 – 2029/30 Wastewater System CIP SDC-Eligible Costs

Total SDC-Eligible Capital Costs by Fiscal Year

Project Type		25/26	26/27	27/28	28/29	29/30	5 YEAR SDC TOTAL
Tri-City WRRF		\$ 3,960,000	\$ 6,800,000	\$ 7,750,000	\$ 6,500,000	\$ 8,000,000	\$ 33,010,000
Water Quality Lab		-	-	-	-	-	-
Kellogg Creek WRRF		-	-	-	-	-	-
Hoodland WRRF		300,000	-	-	-	250,000	550,000
Boring Treatment System		-	-	-	-	-	-
Fischer Forest Park Treatment System		-	-	-	-	-	-
Collection System		11,600,000	23,275,000	16,550,000	8,000,000	3,900,000	63,325,000
Recurring Projects	Flow Metering Program	-	-	-	-	-	-
	Pipe/Manhole R&R	750,000	500,000	500,000	500,000	500,000	2,750,000
	Pump Stations	-	-	-	-	-	-
	Development Review	-	-	-	-	-	-
	Fleet	-	-	-	-	-	-
	WQL Equipment	-	-	-	-	-	-
	WRRF: Small Projects	-	-	-	-	-	-
Total		\$ 16,610,000	\$ 30,575,000	\$ 24,800,000	\$ 15,000,000	\$ 12,650,000	\$ 99,635,000

Local Collection SDC-Eligible Capital Costs by FY

Project Type		25/26	26/27	27/28	28/29	29/30	5 YEAR SDC TOTAL
Tri-City WRRF		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water Quality Lab		-	-	-	-	-	-
Kellogg Creek WRRF		-	-	-	-	-	-
Hoodland WRRF		-	-	-	-	-	-
Boring Treatment System		-	-	-	-	-	-
Fischer Forest Park Treatment System		-	-	-	-	-	-
Collection System		-	-	-	-	-	-
Recurring Projects	Flow Metering Program	-	-	-	-	-	-
	Pipe/Manhole R&R	750,000	500,000	500,000	500,000	500,000	2,750,000
	Pump Stations	-	-	-	-	-	-
	Development Review	-	-	-	-	-	-
	Fleet	-	-	-	-	-	-
	WQL Equipment	-	-	-	-	-	-
	WRRF: Small Projects	-	-	-	-	-	-
Total		\$ 750,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 2,750,000

Treatment and Regional Collection SDC-Eligible Capital Costs by FY

Project Type		25/26	26/27	27/28	28/29	29/30	5 YEAR SDC TOTAL
Tri-City WRRF		\$ 3,960,000	\$ 6,800,000	\$ 7,750,000	\$ 6,500,000	\$ 8,000,000	\$ 33,010,000
Water Quality Lab		-	-	-	-	-	-
Kellogg Creek WRRF		-	-	-	-	-	-
Hoodland WRRF		300,000	-	-	-	250,000	550,000
Boring Treatment System		-	-	-	-	-	-
Fischer Forest Park Treatment System		-	-	-	-	-	-
Collection System		11,600,000	23,275,000	16,550,000	8,000,000	3,900,000	63,325,000
Recurring Projects	Flow Metering Program	-	-	-	-	-	-
	Pipe/Manhole R&R	-	-	-	-	-	-
	Pump Stations	-	-	-	-	-	-
	Development Review	-	-	-	-	-	-
	Fleet	-	-	-	-	-	-
	WQL Equipment	-	-	-	-	-	-
	WRRF: Small Projects	-	-	-	-	-	-
Total		\$ 15,860,000	\$ 30,075,000	\$ 24,300,000	\$ 14,500,000	\$ 12,150,000	\$ 96,885,000

Wastewater Customers Current and Future Demographics

Existing Wastewater Demand and Population Growth

WES bills customers on the basis of Equivalent Dwelling Units (EDU) rather than on metered water consumption. WES' Rules and Regulations defines the EDU as follows:

A unit of measurement of sewer usage that is assumed to be equivalent to the usage of an average dwelling unit. EDU has the following definition for the purposes listed below:

- A. User Charge. A unit, based on water consumption and strength of sewage of a single dwelling unit, by which all users of the sanitary sewers may be measured. Where unit equivalency must be computed it shall be equivalent to (a) 1,000 cubic feet of water consumption per month; (b) 0.449 pounds of BOD per day; and (c) 0.449 pounds of suspended solids per day.*
- B. System Development Charge (SDC). A unit, based upon a single dwelling*

Existing wastewater service demand was derived from consultations with WES engineering and finance staff. Based on this data, it is estimated that as of fiscal 2024-25, WES served a total of 87,619 EDUs. After establishing existing demand conditions, the next step was to forecast future demand. To facilitate this demand forecasting effort, in 2022, WES retained FCS Group, Inc. to provide population forecasting services. The resulting demand forecast data was incorporated into WES's planning documents.

For this SDC update, the project team used the FCS Group, Inc. population growth forecast as the basis for estimating the future growth in EDUs. Over the twenty (20) year forecast, the project team calculated the compounded annualized growth rates in population and applied these growth rates to the known fiscal 2024-25 existing billable EDUs to arrive at future EDU totals. The resulting forecast of WES treatment EDUs is shown Table 6.

Table 6 - Forecast of Current and Future Wastewater EDUs

Source: WES FY24-25 Budget Forecast - November 26, 2024

	Actual 2023	Actual 2024	Projected 2025	Forecast				
				2026	2027	2028	2029	2030
Customer Profile (expressed in EDUs):								
<i>Rate zone 1</i>								
Wholesale Customers:								
Oregon City	16,365	16,868	17,069	17,272	17,478	17,686	17,896	18,109
West Linn	10,544	10,538	10,574	10,611	10,648	10,685	10,723	10,760
Gladstone	4,433	4,266	4,274	4,283	4,291	4,300	4,308	4,317
Total wholesale customers	31,342	31,672	31,917	32,166	32,417	32,671	32,927	33,186
Retail Customers:	532	535	535	535	535	535	535	535
Total rate zone 1 customers	31,874	32,207	32,452	32,701	32,952	33,206	33,462	33,721
<i>Rate zone 2</i>								
Wholesale Customers:								
Milwaukie	11,520	11,897	11,940	11,983	12,026	12,069	12,113	12,156
Johnson City	278	278	278	278	278	278	278	278
Total wholesale customers	11,798	12,175	12,218	12,261	12,304	12,347	12,391	12,434
Retail Customers:								
Unincorporated	33,149	32,234	32,521	32,810	33,102	33,397	33,694	33,995
Happy Valley	9,163	10,165	10,428	10,698	10,975	11,259	11,551	11,850
Total retail customers	42,312	42,399	42,949	43,508	44,077	44,656	45,245	45,845
Total rate zone 2 customers	54,110	54,574	55,167	55,769	56,381	57,003	57,636	58,279
Total wastewater treatment customers	85,984	86,781	87,619	88,470	89,333	90,209	91,098	92,000
Annual change in wastewater treatment customers expressed in EDUs		797	838	851	863	876	889	902
Annual percent change in wastewater treatment customers expressed in EDUs				0.97%	0.98%	0.98%	0.99%	0.99%

Reimbursement Fee Calculations

As discussed earlier in this report, the reimbursement fee represents a buy-in to the cost, or value, of infrastructure capacity within the existing system. In order to determine an equitable reimbursement, key rate equity issues are accounted for:

- First, the cost of the system to 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 in the 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 growth as converted to equivalent dwelling units over the planning period.
- Fourth, the Oregon SDC statute has strict 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 wastewater SDC methodology update, the following discrete calculation steps were followed to arrive at the recommended wastewater reimbursement fee.

- 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 adjusted original cost of wastewater fixed assets in service the accumulated depreciation of those fixed assets. This arrives at the **modified book value of wastewater fixed assets in service**.
- Step 3: Subtract from the modified book value of wastewater assets in service any grant funding or contributed capital. This arrives at the **modified book value of wastewater fixed assets in service net of grants and contributed capital**.
- Step 4: Subtract from the modified book value of wastewater fixed assets in service net of grants and contributed capital any principal outstanding on long term debt used to finance those assets. This arrives a **gross wastewater reimbursement fee basis**.
- Step 5: Subtract from the gross wastewater reimbursement fee basis the fund balance held in the Wastewater Reimbursement SDC fund (if available). This arrives at the **net wastewater reimbursement fee basis**.
- Step 6: Divide the net wastewater reimbursement fee basis by the sum of existing and future EDUs to arrive at the **unit net reimbursement fee**.

The actual data that was used to calculate the total wastewater reimbursement fee is shown below in Table 7.

Table 7 - Calculation of the Wastewater Reimbursement Fee

	Treatment and Regional Collection	Local Collection	WES Total
Utility plant in service- adjusted original cost ¹			
Collection Plant	\$ 45,451,283	\$ 126,195,277	\$ 171,646,560
General Plant	32,812,784	2,546,666	35,359,450
Intangible plant	1,913,127	-	1,913,127
Land	3,203,116	676,599	3,879,715
Pumping Plant	37,161,259	-	37,161,259
Treatment Plant	261,456,205	-	261,456,205
Construction Work-in-Progress	31,763,830	487,438	32,251,268
Subtotal utility plant in service adj. original cost	\$ 413,761,604	\$ 129,905,980	\$ 543,667,584
Less: accumulated depreciation ¹			
Collection Plant	\$ 27,488,013	\$ 62,379,283	\$ 89,867,296
General Plant	18,180,741	1,709,900	19,890,641
Intangible plant	1,904,615	-	1,904,615
Land	-	-	-
Pumping Plant	25,517,576	-	25,517,576
Treatment Plant	187,335,847	-	187,335,847
Construction Work-in-Progress	-	-	-
Subtotal accumulated depreciation	\$ 260,426,792	\$ 64,089,183	\$ 324,515,975
Book value of utility plant-in-service	\$ 153,334,812	\$ 65,816,797	\$ 219,151,609
Less: book value of donated and grant-funded assets:	7,005,524	39,592,684	46,598,208
Adjusted book value of utility plant-in-service	\$ 146,329,288	\$ 26,224,113	\$ 172,553,401
Less: principal outstanding on long term debt: ²			
DEQ Clean Water State Revolving Loan R06224	-	902,783	902,783
DEQ Clean Water State Revolving Loan R95030	34,402,300	-	34,402,300
Revenue Refunding Obligations Series 2016	63,905,000	-	63,905,000
Revenue Obligations Series 2021	33,485,000	-	33,485,000
Original Issue Premium Outstanding:			-
Revenue Refunding Obligations Series 2016	(6,313,867)	-	(6,313,867)
Revenue Obligations Series 2021	(6,454,277)	-	(6,454,277)
Subtotal principal outstanding on long term debt	119,024,156	902,783	119,926,939
Adjusted basis for reimbursement fee SDC	27,305,132	25,321,330	52,626,462
Existing and future EDUs			92,000
Reimbursement fee SDC - \$/EDU			572

¹ Source: Clackamas Water Environment Services records

² Source: Clackamas Water Environment Services Comprehensive Annual Financial Reports for the year ended June 30, 2024

Note: some data imported from "6-30-2024 Net Book Value (12 16 2024_SDC Figures).XLS; data file available for inspection upon request

Improvement Fee Calculations

The calculation of the wastewater improvement fee is more streamlined than the process used to calculate the wastewater reimbursement fee. This study continues to use the improvements-driven method and has relied on the FY 2025/26-2029/30 wastewater system capital improvement plan. 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 EDUs over the planning period. This arrives at **the total wastewater improvement fee**.

The actual data that was used to calculate the total wastewater improvement fee is shown below in Table 8.

Table 8 - Calculation of the Wastewater Improvement Fee

Capital Program/Asset Class		SDC Eligible Costs from CIP		
		Treatment and Regional Collection	Local Collection	Total
Tri-City WRRF		\$ 33,010,000	\$ -	\$ 33,010,000
Water Quality Lab		-	-	-
Kellogg Creek WRRF		-	-	-
Hoodland WRRF		550,000	-	550,000
Boring Treatment System		-	-	-
Fischer Forest Park Treatment System		-	-	-
Collection System		63,325,000	-	63,325,000
Recurring Projects	Flow Metering Program	-	-	-
	Pipe/Manhole R&R	-	2,750,000	2,750,000
	Pump Stations	-	-	-
	Development Review	-	-	-
	Fleet	-	-	-
	WQL Equipment	-	-	-
	WRRF: Small Projects	-	-	-
2024 gross improvement fee basis		96,885,000	2,750,000	99,635,000
less: Improvement fee SDC fund balance		35,600,122	15,280,849	50,880,971
Improvement fee adjusted basis		61,284,878	(12,530,849)	48,754,029
Total growth EDUs over the planning period				4,381
Improvement fee SDC total WES				11,128

	Wholesale	Retail	Total
Allocation of SDC fund balances @ June 30, 2024:			
Based upon book value of utility plant-in-service	\$ 35,600,122	\$ 15,280,849	\$ 50,880,971
	70%	30%	100%

Wastewater SDC Model Summary and Conclusions

The 2024 wastewater SDC methodology update was done in accordance with WES Rules and Regulations, based on the adopted capital improvement plan. The analysis indicates WES can charge a maximum of \$12,285 per EDU in Rate Zones 1 and 2. A comparison of the proposed and current wastewater SDCs for the average single-family residential customer is shown below in Table 9.

Table 9 - Calculated and Current Wastewater SDCs per EDU

	Calculated SDCs	SDCs as of July 1, 2024
WES Total:		
Reimbursement fee	572	-
Improvement fee	11,128	9,100
Compliance fee*	585	-
Total WES SDC	\$ 12,285	\$ 9,100

* note: compliance fees are based on assumed flat 5% fee on total calculated reimbursement and improvement fees

Stormwater SDCs

Stormwater Capital Improvement Plan

The principal source of data for the stormwater system CIP is the Storm System Master Plan (SSMP). With the assistance of WES Staff, the project team has summarized the FY 2025/26 – 2029/30 stormwater system CIP for this SDC methodology update. The five-year stormwater system CIP is shown in Table 10. Unlike wastewater, the stormwater service delivery model is entirely retail and only applies to customers and developers in rate zone 2. For this reason, the cost data shown in Table 10 are in summary totals without subcategories for wholesale and retail services.

Table 10 – FY 2025/26 – 2029/30 Stormwater System CIP

Project Type		25/26	26/27	27/28	28/29	29/30	5-YEAR CIP TOTAL
SW Capital Projects		\$ 6,017,357	\$ 2,324,000	\$ 3,838,000	\$ 4,212,000	\$ 2,140,000	\$ 18,531,357
Tri-City WRRF		-	-	82,500	450,000	262,500	795,000
Water Quality Lab		225,000	-	75,000	225,000	-	525,000
Recurring Projects	Restoration and Property Acquisition	650,000	650,000	823,200	823,200	823,200	3,769,600
	Stormwater Pond Repair and Rehabilitation Program	411,000	411,000	411,000	411,000	411,000	2,055,000
	Water Quality Retrofit Program	100,000	198,300	198,300	198,300	151,000	845,900
	Small Drainage Project Program	100,000	100,000	100,000	100,000	100,000	500,000
	Emergency Repairs	100,000	100,000	100,000	100,000	100,000	500,000
	UIC Decommissioning / Retrofit Program		53,000	53,000	53,000	53,000	212,000
	WQL - Equipment		7,500		7,500		15,000
Total		\$ 7,603,357	\$ 3,843,800	\$ 5,681,000	\$ 6,580,000	\$ 4,040,700	\$ 27,748,857

The SDC eligibility of the future project costs shown in Table 10 is very low because most of the costs are budgeted to remediate existing system deficiencies and for replacement of undersized infrastructure. Out of the total five-year cost of \$27,748,857 only \$3,820,000 is SDC-eligible. There are three projects that will serve growth to some extent and therefore account for the total SDC-eligible costs. The projects in question, their SDC-eligibility percentages, total five-year cost, and five-year SDC-eligible costs are as follows:

1. *NCRA Stormwater Master Plan* – 50% SDC-eligible; total five-year total cost \$600,000; total five-year SDC-eligible cost \$300,000.
2. *Regional Stormwater Pond for Happy Valley* – 100% SDC-eligible; total five-year cost \$3,500,000; total five-year SDC-eligible cost \$3,500,000.
3. *Small Drainage Projects SDC-Eligible Portion* – 4% SDC-eligible; total five-year cost \$500,000; total five-year SDC-eligible cost \$20,000.

Stormwater Customers Current and Future Demographics

Existing Stormwater Demand and Population Growth

WES bills customers for stormwater services on the basis of Equivalent Service Units (ESU). WES' Rules and Regulations defines the ESU as follows:

Equivalent Service Unit (ESU). A configuration of development resulting in impervious surfaces on a parcel, estimated to contribute an amount of runoff to the stormwater system that is approximately equal to that created by the average single-family residential parcel. One ESU is equal to 2,500 square feet of impervious surface area.

As in the case of wastewater, existing stormwater service demand was derived from consultations with WES engineering and finance staff. Based on this data, it is estimated that as of fiscal 2024-25, WES served a total of 56,697 ESUs in rate zone 2, including: 43,888 in unincorporated Clackamas County, and 12,809 in Happy Valley. The five-year forecast of ESUs was developed based on the same land use and population studies data from the 2022 FCS Group, Inc. work. The resulting forecast of WES stormwater ESUs is shown Table 11.

Table 11 - Forecast of Current and Future Stormwater ESUs

Source: WES FY24-25 Budget Forecast - August 2, 2024

	Actual 2023	Estimated 2024	Projected 2025	Forecast				
				2026	2027	2028	2029	2030
Customer Profile (expressed in ESUs):								
<i>Rate zone 2</i>								
Unincorporated	43,522	43,604	43,888	44,278	44,672	45,070	45,471	45,875
Happy Valley	12,523	12,546	12,809	13,141	13,481	13,830	14,188	14,556
Total rate zone 2 customers	56,045	56,150	56,697	57,419	58,153	58,900	59,659	60,431
<i>Rate zone 3</i>								
Retail	3,722	3,752	3,752	3,752	3,752	3,752	3,752	3,752
Total rate zone 3 customers	3,722	3,752	3,752	3,752	3,752	3,752	3,752	3,752
Total surface water customers	59,767	59,902	60,449	61,171	61,905	62,652	63,411	64,183
Annual change in surface water customers expressed in ESUs		135	547	722	734	747	759	772
	Actual 2023	Estimated 2024	Budget 2025	Forecast				
				2026	2027	2028	2029	2030
Customer Profile Growth Rates:								
<i>Rate zone 2</i>								
Unincorporated	44,201	44,783	45,330	0.89%	0.89%	0.89%	0.89%	0.89%
Happy Valley	11,844	12,000	12,000	2.59%	2.59%	2.59%	2.59%	2.59%
Total rate zone 2 customers	56,045	56,783	57,330					
<i>Rate zone 3</i>								
Retail	3,722	3,741	3,741	0.00%	0.00%	0.00%	0.00%	0.00%
Total rate zone 3 customers	3,722	3,741	3,741					
Total surface water customers	59,767	60,524	61,071					
Annual change in surface water customers expressed in ESUs		757	547					

Reimbursement Fee Calculations

The derivation of the stormwater reimbursement fee follows the same construction logic as used for the wastewater reimbursement fee. Rather than restating that text here we direct the reader to that section of this report. The data that was used to calculate the total stormwater reimbursement fee is shown below in Table 12.

Table 12 - Calculation of the Stormwater Reimbursement Fee

	WES Total
Utility plant in service- adjusted original cost ¹	
Collection plant	\$ 48,052,098
General plant	474,289
Intangible plant	29,762
Land	4,922,869
Pumping plant	22,056
Treatment plant	341,919
Construction Work-in-Progress	2,000,958
Subtotal utility plant in service adj. original cost	55,843,951
Less: accumulated depreciation ¹	
Collection plant	\$ 28,433,834
General plant	287,873
Intangible plant	16,449
Land	-
Pumping plant	12,684
Treatment plant	57,018
Construction Work-in-Progress	-
Subtotal accumulated depreciation	28,807,858
Book value of utility plant-in-service	27,036,093
Less: book value of donated and grant-funded assets:	13,705,277
Adjusted book value of utility plant-in-service	13,330,816
Less: principal outstanding on long term debt: ²	
DEQ Clean Water State Revolving Loan R95031	826,379
Subtotal principal outstanding on long term debt	826,379
Adjusted basis for reimbursement fee SDC	\$ 12,504,437
Existing and future EDUs	60,431
Reimbursement fee SDC - \$/EDU	\$ 207

¹ Source: Clackamas Water Environment Services records

² Source: Clackamas Water Environment Services Comprehensive Annual Financial Reports for the year ended June 30, 2024

Improvement Fee Calculations

The calculation of the stormwater improvement fee also follows the logical construction that was used to calculate the wastewater improvement fee. However, since all of the stormwater program is retail and currently limited to customers and developers in rate zone 2, there is no allocation between wholesale and retail services. All stormwater programming is retail. The data that was used to calculate the total stormwater improvement fee is shown below in Table 13.

Table 13 - Calculation of the Stormwater Improvement Fee

Capital Program/Asset Class	Project Funding Sources		
	Rates	SDCs	Total
SW Capital Projects	\$ 14,731,357	\$ 3,800,000	\$ 18,531,357
Tri-City WRRF	795,000	-	795,000
Water Quality Lab	525,000	-	525,000
Restoration and Property Acquisition	3,769,600	-	3,769,600
Stormwater Pond Repair and Rehabilitation Program	2,055,000	-	2,055,000
Water Quality Retrofit Program	845,900	-	845,900
Small Drainage Project Program	480,000	20,000	500,000
Emergency Repairs	500,000	-	500,000
UIC Decommissioning / Retrofit Program	212,000	-	212,000
WQL - Equipment	15,000	-	15,000
2024 gross improvement fee basis	\$ 23,928,857	\$ 3,820,000	\$ 27,748,857
less: Improvement fee SDC fund balance @ 6-30-2024		<u>2,883,946</u>	
Improvement fee adjusted basis		\$ 936,054	
Retail improvement fee SDC calculation:			
SDC eligible costs		\$ 936,054	
Growth EDUs (rate zone 2)		3,735	
Retail improvement fee SDC - \$/EDU		\$ 251	

Stormwater SDC Model Summary and Conclusions

The 2024 stormwater SDC methodology update was done in accordance with WES Rules and Regulations, and with the benefit of adopted capital improvement plans and plan updates for stormwater services. The analysis indicates WES can charge a maximum of \$480 per ESU in rate zone 2. A comparison of the proposed and current stormwater SDCs for the average single-family residential customer is shown below in Table 14.

Table 14 - Calculated and Current Stormwater SDCs per ESU

	Calculated SDCs	SDCs as of July 1, 2024
Retail (Charged to Rate Zone 2):		
Reimbursement fee	207	
Improvement fee	251	
Compliance fee*	22	
Total retail SDC	\$ 480	\$ 246.50

* note: compliance fees are based on assumed flat 5% fee on total calculated reimbursement and improvement fees