



CITY OF SANDY

Sewer SDC Update

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September 2, 2026

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1 Project Overview

Background

The City of Sandy ("the City") is located in Clackamas County and serves almost 14,000 residents. The City is undergoing major improvements to its wastewater system to accommodate growth and to solve existing deficiencies.

In 2024, the City contracted with FCS to update its water and wastewater system development charges (SDCs). On March 17, 2025, the City adopted a higher wastewater SDC amount based on the updated methodology. On June 1, 2026, the City adopted a revised Wastewater Facility Plan Amendment that revised the project list along with its associated capacity estimates, and which provided a revised growth forecast. This update reflects the figures provided in that amendment.

Policy

SDCs are enabled by state statute, authorized by local ordinance, and constrained by the United States Constitution.

State Statutes

Oregon Revised Statutes (ORS) 223.297 to 223.316 enable local governments to establish SDCs, which are one-time fees on development that are paid at the time of development or redevelopment that creates additional demand for system facilities. SDCs are intended to recover a fair share of the cost of existing and planned facilities that provide capacity to serve future users (growth).

ORS 223.299 allows for two types of SDC:

- » A reimbursement fee that is designed to recover "costs associated with capital improvements already constructed, or under construction when the fee is established, for which the local government determines that capacity exists"
- » An improvement fee that is designed to recover "costs associated with capital improvements to be constructed"

ORS 223.304(1) states, in part, that a reimbursement fee must be based on "the value of unused capacity available to future system users or the cost of existing facilities" and must account for prior contributions by existing users and any gifted or grant-funded facilities. The calculation must "promote the objective of future system users contributing no more than an equitable share to the cost of existing facilities." A reimbursement fee may be spent on any capital improvement related to the system for which it is being charged (whether cash-financed or debt-financed).

ORS 223.304(2) states, in part, that an improvement fee must be calculated to include only the cost of projected capital improvements needed to increase system capacity for future users. In other words, the cost of planned projects that correct existing deficiencies or that do not otherwise increase capacity for future users may not be included in the improvement fee calculation. An improvement fee may be spent only on capital improvements (or portions thereof) that increase the capacity of the system for which it is being charged (whether cash-financed or debt-financed).

In addition to the reimbursement and improvement fees, ORS 223.307(5) states, in part, that “system development charge revenues may be expended on the costs of complying” with state statutes concerning SDCs, including “the costs of developing system development charge methodologies and providing an annual accounting of system development charge expenditures.”

Local Ordinance

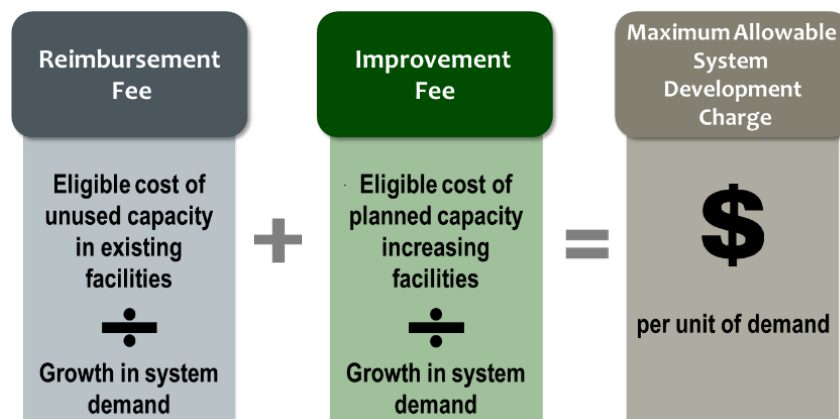
Chapter 15.28 of the Sandy Municipal Code authorizes and governs the imposition and expenditure of SDCs in Sandy.

United States Constitution

The United States Supreme Court has determined that SDCs, impact fees, or other exactions that comply with state and/or local law may still violate the United States Constitution if they do not meet requirements regarding nexus and proportionality to the impact of the development. The SDCs calculated in this report are designed to meet all constitutional and statutory requirements. Specifically, this report calculates the maximum allowable wastewater SDC based on an analysis of the impacts of future development on those systems (achieved via units of growth in system demand which will be assigned to each future development) and the costs of the infrastructure necessary to serve that growth. In so doing, this report ensures that the SDCs any given future development will be required to pay will have both nexus and proportionality to the impacts of that development.

Calculation Overview

In general, SDCs are calculated by adding an existing facilities fee component (called the reimbursement fee) and a future facilities fee component (called the improvement fee)—both with potential adjustments. Each component is calculated by dividing the eligible cost by growth in units of demand. The unit of demand becomes the basis of the charge. The diagram below summarizes the basic outline of an SDC calculation, and more detail is provided in the following bullets.



- **The eligible cost of capacity in existing facilities** is the cost of existing facilities that will serve growth. The cost of those facilities are usually found in a city’s schedule of fixed assets which records the original cost of assets purchased by the city. System capacity information, usually found in a comprehensive plan, can provide estimates of the available capacity in the system.

- **The eligible portion of capacity increasing projects** is the cost of future projects that will serve growth. Some projects are intended to only serve growth, some projects do not increase system capacity, and some serve the City's current *and* future populations. Only the share that is allocable to growth is includable.
- **The growth in system demand** is the anticipated growth in the demand associated with each system. Growth is measured in different ways for different systems. For example, growth for wastewater SDCs is often measured in meter capacity equivalents. The unit of growth becomes the charging basis for the SDC.

Finally, summing the reimbursement fee and the improvement fee with a small allowance for compliances costs yields the full SDC.

2 Sewer SDC Analysis

This section describes the detailed calculations of the maximum allowable sewer SDC for the City of Sandy based on the 2026 Wastewater Facility Plan Amendment.

Growth

The calculation of projected growth begins with defining the units by which current and future demand will be measured. Then, using the best available data, we quantify the current level of demand and estimate a future level of demand. The difference between the current level and the future level is the growth in demand that will serve as the denominator in the sewer SDC calculation.

Unit of Measurement

For sewer SDCs, the meter size necessary for a development is broadly used as a measure of its potential water demand, and thus the potential sewage flow. In order to compare meters and calculate the total demand of the system, meters are often compared by their flow rates and measured by their meter capacity equivalents (MCEs). In this system, the smallest meter employed by the City is one MCE, and every larger meter is a larger number of MCEs based on their relative flow rates. Flow rates are based on the American Water Works Association (AWWA) flow capacity assuming either a 5/8" meter or 3/4" base. As the City will install both 5/8" and 3/4" meters, a 5/8" base for the MCE calculations was selected for the sewer SDC calculation.

Growth in Demand

According to the 2026 Wastewater Facility Plan Amendment (upon which the results of this document are based), the population of Sandy is expected to grow to 22,600 by 2040 (the design year). Portland State University lists the 2023 population of the City as 12,986. It is assumed that as the population increases, so will sewer flow.

Based on the City's water meter records, there are an estimated 4,859 sewer MCEs in 2023. If MCEs grow proportional to population, the City will have 8,457 MCEs in the design year. That means that the total growth in demand will be 3,598 MCEs, which will serve as the denominator of the SDC calculation.

In addition, max month wet weather flow (MMWWF) will grow by 1.5 MGD from 2.0 MGD in 2023 to 3.5 MGD in the design year if the effects of growing inflow and infiltration (I&I) in the existing system are ignored. Removing the effects of increasing I&I isolates the change in MMWWF to just what occurs due to growth. Total MMWWF in the design year (including increased I&I) is 3.6 MGD, which means growth's contribution to the total MMWWF in the design year is 1.5 MGD divided by 3.6 MGD, or 41.67 percent, which will be relevant to the improvement fee.

Exhibit 2.1 below summarizes these calculations:

Exhibit 2.1 – Growth in MCEs and Max Month Wet Weather Flow

	2023	Design Year	Design Year	Growth (2023-	Growth Share
		Design Year	(with Added I&I)	Design)	(2023-Design)
Max Month Wet Weather Flow	2.0	3.5	3.6	1.50	41.67%
Population	12,986	22,600	22,600	9,614	42.54%
Estimated Sewer MCEs	4,859	8,457	8,457	3,598	42.54%

Source: 2026 Wastewater Facility Plan Amendment (flow); City staff (MCE estimates); Portland State University (population estimates)

It is important to note that the timing of when the City reaches 8,457 sewer MCEs is unimportant. Indeed, as the City is currently under a development moratorium, it is unclear when it will reach planned sewer MCEs of 8,457. In fact, the 2026 Wastewater Facility Plan Amendment anticipates that the City may reach this point at any time from 2040 to 2050. However, ORS 223.304(2) requires that the SDCs be “calculated to obtain the cost of capital improvements for the projected need for available system capacity for future users”. The need to expand capacity for future users (as planned for in the 2026 Wastewater Facility Plan Amendment) exists regardless of whether those future users arrive by 2040, 2050, or by some other year, and the cost per unit of growth similarly remains the same regardless of the timing of growth.

Improvement Fee

An improvement fee is the eligible cost of planned projects per unit of growth that such projects will serve. Since we have already calculated growth above, we will focus here on the improvement fee cost basis.

Eligibility

A project’s eligible cost is the product of its total cost and its eligibility percentage. The eligibility percentage represents the portion of the project that creates capacity for future users. Where possible, specific details about a project can provide an eligibility percentage. This section discusses the eligibility of each project on the City’s improvement fee cost basis, which is summarized in **Exhibit 2.2**

The City’s primary project is labelled the “Groundwater Discharge Improvements” which includes all of the elements and costs summarized under the “RO” (reverse osmosis) column of Table 10-1 in the 2026 Wastewater Facility Plan Amendment. These costs total to \$147 million. According to the description of this project provided in Section 10.8.5, this project is sized to serve 3.6 MGD of MMWWF. As discussed in the previous section, growth’s share of MMWWF is 1.5 MGD, meaning that growth’s share of this project is 41.67 percent.

The City’s “Basins 3, 9, and 10 Rehabilitation” project is described in Section 4.2 of Appendix A.2 in the 2026 Wastewater Facility Plan Amendment. It is described that the trunk sewer serving these basins is projected to be under capacity “due to increased flows from development.” As this project will reduce I&I in those areas, and because growth’s contribution to the MMWWF is 1.5 MGD out of a future 3.6 MGD, growth’s share of these projects were also assigned as 41.67 percent. Similar logic was applied to the “Northside Pump Station Upgrades” and the “Pump Station Condition and Capacity Upgrades” projects.

The other projects were determined not to add capacity for growth, and so their eligibility was set to 0 percent.

Note that each project has both an “eligible” portion and an “in-eligible” portion. Only the eligible portion – that is, the portion of the project that provides capacity for future users – is included in the improvement fee. The in-eligible portion is that portion related to providing capacity for existing users or curing existing deficiencies. For example, any projects or portions of projects which address deficiencies with the City’s current treatment plant which would need to be corrected (e.g. to comply with the City’s NPDES permit requirements or the requirements of the Consent Decree entered into between the City, EPA, and Oregon DEQ) even in the absence of any future growth are considered in-eligible and are not included in the calculation of the improvement fee.

In theory, the City could have sized the new plant to accommodate only the existing demand of 2.0 MGD; and thereby have provided no capacity for additional users. The eligibility percentage for the treatment plant upgrades under that condition would be 0 percent. However, the City is instead sizing it to accommodate 3.6 MGD, which is 1.6 MGD above existing demand. The portion of the project that provides capacity for future users

(1.5 MGD as a share of 3.6 MGD, or 41.67 percent) is included in the SDC, and the funding for the in-eligible portion (58.33 percent) must come from other sources.

Calculated Improvement Fee Cost Basis

Projects in the improvement fee cost basis were provided by Kennedy Jenks (the City's consulting engineer on the 2026 Wastewater Facility Plan Amendment) with further details taken from the plan. These projects are summarized in **Exhibit 2.2** below in 2026 dollars. The eligibility for each project is shown in the SDC Eligibility column based on the discussion of the previous section. Other funding will be needed to complete the project list, likely from utility rates or future grant awards. While the City is also expecting to issue debt to fund its improvements, it plans to use sewer SDCs to pay for that debt. Finally, the SDC-Eligible Cost column shows that the full amount of the improvement fee cost basis is approximately \$67 million.

Exhibit 2.2 – Improvement Fee Cost Basis

Project Type	Project	Completion Year	Project Costs (2026 Dollars)	SDC Eligibility	SDC-Eligible Cost
Treatment	Groundwater Discharge Improvements	2031	\$ 147,300,000	41.67%	\$ 61,375,000
Collection	Northside Pump Station Upgrades	2031	490,000	41.67%	204,167
Collection	Pump Station Capacity Evaluation	2026	170,000	0.00%	-
Collection	Flow Monitoring and Model Recalibration	2026	220,000	0.00%	-
Collection	Citywide Manhole Grouting	2028	440,000	0.00%	-
Collection	Basins 3, 9, 10 Rehabilitation	2035	10,800,000	41.67%	4,500,000
Collection	Pump Station Condition and Capacity Upgrades	2035	2,200,000	41.67%	916,667
Total			\$ 161,620,000		\$ 66,995,833

Source: 2026 Wastewater Facility Plan Update (SDC Eligibility); Kennedy Jenks (other project details)

Calculated Sewer SDC

For the sewer SDC, no reimbursement fee was calculated. The City is facing numerous capacity issues across its system, and as such has little if any unused capacity to include in a reimbursement fee. While capacity may exist in limited areas of town or for specific developments underway, the existing plans and discussions with City staff do not support the existence of overall system capacity. This section calculates the sewer SDC using the improvement fee cost basis and a small additional compliance cost basis of \$58,319 for the costs related to calculating the SDC and administering the SDC program. The estimate was based on the cost of the SDC methodology, assumed to occur once every five years from 2024 through 2040. **Exhibit 2.3** below summarizes the sewer SDC calculation.

Exhibit 2.3 – Calculated Sewer SDC

Calculated SDC	
Improvement Fee Cost Basis	\$ 66,995,833
Reimbursement Fee Cost Basis	-
Compliance Costs	58,319
Total	\$ 67,054,152
Growth in MCEs	3,598
Improvement Fee per MCE	\$ 18,623
Reimbursement Fee per MCE	-
Compliance Fee per MCE	16
Total SDC per MCE	\$ 18,639

Source: City (fund balances); FCS (compliance cost estimates); previous tables (other data)

As shown above, the maximum allowable SDC is \$18,639 per MCE. The City may adopt any SDC up to that amount. The rate per MCE can be applied to the City's different meter sizes using the schedule shown in **Exhibit 2.4** below.

Exhibit 2.4 – Sewer SDC Schedule

Meter Size (Inches)	MCEs	Calculated SDC
5/8	1.00	\$ 18,639
3/4	1.50	27,958
1	2.50	46,597
1.5	5.00	93,194
2	8.00	149,111
3	16.00	298,222
4	25.00	465,971
6	50.00	931,943

3 Implementation

This section addresses practical aspects of implementing SDCs and provides comparisons to other jurisdictions.

Setting the SDC

The maximum legally defensible sewer SDC is \$18,639 per MCE. The City has the liberty to set the SDC at any level up to the maximum defensible charge by resolution. The City may also decide to phase in SDCs to the maximum or a lower target charge over a period of time.

Indexing

ORS 223.304 allows for the periodic indexing of SDCs for inflation, as long as the index used is:

- (A) A relevant measurement of the average change in prices or costs over an identified time period for materials, labor, real property or a combination of the three;
- (B) Published by a recognized organization or agency that produces the index or data source for reasons that are independent of the system development charge methodology; and
- (C) Incorporated as part of the established methodology or identified and adopted in a separate ordinance, resolution or order.

In accordance with Oregon statutes, we recommend that the City index its charges to the *Engineering News Record* Construction Cost Index for the 20-City Average and adjust its charges annually. This will help to mitigate – if not fully eliminate – the burdens of construction cost inflation. The August 2026 value of that index was 14,350.29.

Comparisons

Exhibit 3.1 below shows a comparison of sewer SDCs calculated for single-family homes for some relevant jurisdictions. As shown, if the City adopted the maximum defensible SDC, its charge would exceed many of the relevant comparison jurisdictions.

Exhibit 3.1 – Sewer SDC Comparisons

