



City of Winston

DOUGLAS COUNTY, OREGON

Wastewater System Development Charges

Methodology

November 2022



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1 EXECUTIVE SUMMARY

1.1 Background

In 2022, the City of Winston authorized Civil West Engineering Services to update the City's system development charge (SDC) wastewater methodology. This methodology will replace the City's existing SDCs for wastewater. Providing new infrastructure capacity is necessary to accommodate the expected development, and revisions to the City's SDC program are critical for ensuring that new users of City's infrastructure pay for an equitable portion.

The Collection System Master Plan for the system were used when developing this program. These reports were used to establish the projects and costs used for the SDC calculations contained in this methodology and are included in Appendix A.

This methodology was prepared to present and summarize the methods and systems that have been used to establish wastewater SDCs for the City. The SDC methodologies and calculations presented herein are consistent with the framework set forth by the Oregon SDC legislation contained within Oregon Revised Statutes (ORS) 223.297 to ORS 223.314.

1.2 Overview of SDC Methodology

The methodology used to establish the Water System SDC is based on the 2016 Wastewater Collections Master Plan prepared by SHN. Based on an analysis of anticipated project costs and the percentage of the project that accommodated growth, a total SDC eligible project cost has been established.

Population estimates and the City's projected growth rates were used to determine the future number of EDU's that will require additional capacity in the system. The Wastewater System SDC was established by dividing the SDC eligible project costs by the total projected growth in the system. Credits were also calculated to eliminate the potential for double charges that could result from a new user paying both increased user fees in support of a loan to construct new facilities in addition to paying SDC fees for the same facility.

A summary of the SDC methodology for the water system is provided in Table 1-1. The Water System SDC methodology is discussed in detail in Section 3.

TABLE 1-1: WATER SYSTEM SDC SUMMARY

Water System SDC Summary	
SDC Component	SDC Amount
Improvement Fee (per EDU)	\$5,260
Reimbursement Fee (per EDU)	\$239
Subtotal of Water System SDC Fees (per EDU)	\$5,499
SDC Credit Summary	
Upper Range Credit (100% Financing)	\$1,373
Mid Range Credit (75% Financing Credit)	\$1,029
Mid Range Credit (50% Financing Credit)	\$686
Low Range Credit (25% Financing Credit)	\$343

1.2.1 Compliance Costs

Oregon law allows a utility service provider to use SDC revenues to pay for costs associated with complying with and administering SDC programs. While this is not a separate category, it is acceptable to assess a “compliance charge” when collecting SDC fees.

Acceptable compliance cost activities include accounting and auditing costs, SDC methodology updates and plans, master planning costs, CIP administration costs, and other costs that are determined to be necessary to support and properly manage an SDC program.

It was estimated that the City will face an annual compliance cost of \$9,820 related to administration of the SDC programs and maintaining updated infrastructure planning documents. A summary of the estimated SDC compliance expenses is provided below in Table 1-2.

TABLE 1-2: SDC COMPLIANCE EXPENSE SUMMARY

Compliance Activity	Estimated Cost	SDC Eligibility	Frequency (Years)	Annual Cost
General Accounting/Administrative Costs				
Auditing/Accounting	\$2,000	100%	1	\$2,000
SDC Methodology Administration & Annual Adjustments	\$5,000	100%	1	\$5,000
SDC Methodology Update	\$21,000	100%	10	\$2,100
Water System Compliance Costs				
Wastewater Collections Master Planning	\$80,000	18.0%	20	\$720
Subtotal Annual Compliance Costs	\$108,000			\$9,820

Collection of funds to pay for these annual SDC compliance costs should be in the form of a percentage surcharge on all SDC's collected. Therefore, an estimate must be made of the revenue that the City is projecting to collect over the planning period. Using the average growth rate over the planning period, Table 1-3 summarizes the anticipated revenues that are expected for all SDC sectors.

TABLE 1-3: SDC REVENUE ESTIMATE SUMMARY

Estimates of SDC Revenues	Added EDU's EDU's/yr	SDC Charge per EDU	Annual Revenue
Estimated Annual Water SDC Revenues	24.70	\$7,500	\$185,250
Total Estimated SDC Revenues			\$185,250
Compliance Cost Charge (Annual Cost/Annual Revenue)			5.30%

Based on this analysis, an SDC Compliance Charge of 5.3% should be placed on all SDC's to collect adequate funds to properly administer the SDC program for the City of Winston.

Section 4 of this methodology includes information and details on the establishment of SDC compliance costs.

1.2.2 Sample SDC Assessment

Residential Customers

Therefore, a total SDC for an average new residential dwelling would be \$5,499. This does not include any potential reductions for SDC credits that may be appropriate, depending on how the City undertakes the various CIP projects in the future.

Non-Residential Customers

Non-residential development requires a case-by-case assessment process. Each section within this methodology includes a discussion of the methods that are to be used to assess new residential and non-residential customers.

Appendix B is a spreadsheet listing various potential land uses in the community, including commercial and residential properties. It shows the SDC charges that may be imposed on the different land uses based on this methodology. Appendix B is intended to provide examples and potential charges. It should not be used as the definitive SDC charges for any one type of land use.

The City may also allow some new nonresidential customers to appeal their assessment and allow the customer to pay some of the assessment while a study is completed of their actual impact to the system. An example of a potential appeal process is provided in Section 3.11 of this methodology. The burden of paying and making the case for an appeal should rest on the new customer making the appeal.

1.2.3 SDC Ordinance and Methodologies

The SDC program in Winston is established through the municipal ordinance process. The ordinance provides the legal force necessary to govern the administration and operation of the program. A new resolution will be established to set the charge and other details for each SDC infrastructure sector. This approach will allow the City to easily update SDC charges on a regular basis by simply passing a new resolution for the SDC program they wish to adjust. There will be no need to adjust the SDC ordinance in the future. Information on updating and adjusting SDC's is provided in Section 2 of this methodology.

2 INTRODUCTION

2.1 Background and Need

The City of Winston owns and maintains a public infrastructure system that includes the following:

- A wastewater collection system consisting of gravity and pressure sewer pipe, 3 pumping stations, a siphon, and a shared treatment plant.
- A parks system with 3 parks and a skatepark
- Gravity stormwater system.
- A network of arterial and collector streets

The City of Winston previously amended their SDC methodology in XXXX. This update is only focused on the wastewater portion of the SDC.

2.1.1 Summary of SDC Charge Structure in Winston

The method currently used by the City was Last updated in 2XXX and was adopted per ordinance xxxxx The City assessed the following SDC's:

1. Wastewater System SDC: The Wastewater System SDC was \$3465.00 per EDU.

This information is provided so that the City may compare the final recommendations in this methodology to typical charges prior to the SDC update.

2.2 Oregon SDC Law

The State of Oregon has established statutory law for the development, assessment, and administration of SDC's for local governments, utility districts, and similar agencies. Oregon Revised Statutes (ORS) 223.297 - 223.314 authorizes local governments and service districts to assess SDC's for various infrastructure sectors including sewer, water, storm drainage, streets, and others.

In addition to specifying the infrastructure systems for which SDC's may be assessed, the SDC legislation provides guidelines on the calculation and modification of SDC's accounting

requirements to track SDC revenues, and the adoption of administrative review procedures. A summary of the statutory SDC provisions is provided below:

2.2.1 SDC Structure

SDC's are typically developed around two separate modes or philosophies of SDC logic. They are:

1. Reimbursement SDC
2. Improvement SDC

SDC's can also be assessed based on a combination of reimbursement and improvement charges. In addition to these charges, the statute allows agencies to recover administrative costs that are necessary to establish, comply with, and administer SDC programs. This methodology refers to these costs as compliance costs.

Reimbursement SDC. A reimbursement SDC is designed to recover capital costs for projects that have already been undertaken. These capital projects must have remaining capacity. Current legislation requires that the reimbursement SDC be established by an ordinance or resolution that sets forth the methodology used to calculate and assess the charge. The methodology must consider several factors when determining an appropriate SDC cost including:

1. The cost of existing facilities when they were constructed or implemented
2. Remaining capacity available for growth or development use
3. Prior contributions from existing users
4. The value of unused capacity
5. Ratemaking principles employed to finance the capital improvements
6. Grants or other funding sources that must be subtracted from the eligible costs, and
7. Other relevant factors

The objective of a reimbursement SDC is that future system users contribute an equitable portion of the capital costs of recently completed (those projects which are still financed) facilities with excess capacity.

An example of how a reimbursement SDC could be utilized is with a recently upgraded or constructed booster pump station. Booster pump stations are designed for a future (20 year) projected capacity. The additional cost required for the construction of a new booster station that can not only handle existing flows, but future projected flows become the SDC eligible portion of the project cost. For example, if a booster was built five years ago, but has additional capacity available for future growth, the value of the remaining unused capacity of the station can be calculated and assessed as a reimbursement SDC eligible project cost to all new customers who wish to utilize some of the remaining capacity during the remainder of the design period.

Improvement SDC. The improvement fee is designed to recover costs of planned capital improvements as they appear on an adopted capital improvement list or capital improvement plan. The improvement fee must also be specified in an ordinance or resolution and is subject to the following conditions:

1. The costs of projected capital improvements will increase the capacity of the system.
2. Projects must appear on an approved and adopted CIP list or be added to the list through development review and approval.
3. Projects must serve more than the development for which the SDC is being charged. Specifically, to be considered a “qualified public improvement”:
 - a. The project is not located on, or contiguous to property that is being developed, or
 - b. The project is in whole or in part, located on or contiguous to property that is the subject of development approval and required to be built larger or with greater capacity than is necessary for the development project to which the improvement fee is related.

Revenues generated from improvement fees must be dedicated to capacity increasing capital improvements or the repayment of debt on such improvements. An increase in capacity is established if an improvement increases the level of service provided by existing facilities or provides new facilities. The portion of such improvements funded by improvement fees must be related to current or projected development.

Combined SDC. In most cases, growth needs due to development will be met through a combination of existing available capacity (Reimbursement SDC) and future capacity enhancing improvements (Improvement SDC). The sum of reimbursement and improvement SDC's is commonly referred to as a combined SDC; however, when utilizing a combined SDC, the methodology must demonstrate that the charge is not based on providing the same capacity-increasing result due to both SDC's. In short, an agency cannot "double-dip" when using a combined SDC. This is usually accomplished by structuring the fee to reflect the weighted average cost of existing and new facilities.

Compliance Costs. Oregon law allows SDC revenue to be used by the assessing agency for costs incurred to comply, administer, study, and update an SDC program. Compliance costs include, but are not necessarily limited to:

1. Auditing and accounting costs
2. Master/Facilities planning costs and planning updates
3. SDC methodology development costs and updating of SDC plans
4. Maintenance of a capital improvement plan (CIP) list

Compliance costs are typically assessed based on a percentage of the overall or maximum anticipated or projected annual SDC revenue. These revenues must be used to maintain or administer an active SDC program. Compliance costs are discussed in Section 4.

2.2.2 SDC Credits

Oregon law requires that an SDC credit be provided against any assessed improvement fee for the construction of "qualified public improvements." Qualified improvements, as discussed above, are improvements that are required as a condition of development approval, are included on the CIP list, and are either:

1. Not located on or contiguous to the property being developed; or
2. Located in whole or in part, on or contiguous to, property that is the subject of development approval and required to be built larger or with greater capacity than is necessary for the particular development project to which the improvement fee is related.

For example, if a new wastewater lift station appears on a CIP list and is required for a specific development to be undertaken, the owner of the development can construct the new lift station and receive an SDC credit for the SDC-eligible portion of the project costs, assuming that the new lift station is needed to serve more customers than are represented by the development alone.

An additional credit must be included in the methodology for the present worth of financing payments that may occur in the future for an undertaken improvement. In short, new users cannot be required to pay SDC's for specific improvements as well as pay increased user rates to pay back loans that were required to construct the improvements. This form of "double-dipping" is overcome by establishing a credit based on the present worth of a potential increase in monthly user rates over a specified period.

2.2.3 Update and Review Requirements

SDC methodology is public information and must be made available for public review.

The SDC ordinance must include procedures and practices for not only the establishment but the modifying and updating of SDC fees. Public agencies must maintain a list of persons and organizations who have made a written request for notification prior to the adoption or amendment of any new or updated SDC fees; however, changes to the SDC rates resulting from:

1. Changes to costs in materials, labor, or real property as applied to projects in the required project list; or
2. Application of a cost index that considers average change in costs of materials, labor, or real property and is published for purposes other than SDC rate setting (i.e., ENR Construction Cost Index)

are not considered "modifications" to the SDC. As such, the local agency is not required to adhere to the notification provisions.

If changes to the SDC methodology or assessment amounts do represent a modification, the notification provisions in the Oregon law require a 90-day written notice period prior to the first public hearing, with the new SDC methodology available for review at least 60 days prior to the public meeting.

2.2.4 Other SDC Statutory Provisions

Other provisions of the Oregon legislation require:

1. Development of a capital improvement program/plan (CIP) or comparable planning effort that lists the improvements that may be funded with improvement fee revenues and the estimated timing and cost of each improvement. This is usually accomplished through a master planning effort.
2. Deposit of SDC revenues into dedicated and individual accounts and the annual accounting of revenues and expenditures. The annual accounting effort must include a list detailing the amount spent on each project funded, in whole or in part, by SDC revenues, including costs attributed to complying with the SDC legislation.
3. Creation of an administrative appeals procedure, in accordance with the legislation, whereby a citizen or other interested party may challenge any expenditure of SDC revenues.
4. Preclusion against challenging the SDC methodology after 60 days from the enactment of or revision to the SDC ordinance or resolution.

The provisions of the legislation are invalidated if they are construed to impair the local government's bond obligations or the ability of the local government to issue new bonds or other financing. Furthermore, the establishment or modification of an SDC or a project list is not a land use decision issue.

2.3 Capacity Replacement Protocol

It is common to have a system in place that allows new land use or development to replace existing land use and provide an adjustment to SDC's.

For example, if someone buys an older house, tears it down, and constructs a new residential home in its place, no new flows or demands are added to the system, and no new capacity is required to service the new residence. Therefore, it would be appropriate to waive SDC fees in this instance.

If someone tears down several old homes to build a new apartment complex, the project must be carefully considered, and an adjustment made, depending on how many new units there will be, how much more impervious surface, etc. compared to the previous land use.

Capacity replacement issues must be handled on a case-by-case basis and a process developed to allow a fair adjustment when existing capacity use is replaced with a similar land use.

2.4 Public Education and Input to Methodology

A successful SDC methodology update must incorporate a public education and public input component that effectively conveys information to interested and affected groups in the community and allows them a forum to ask questions, voice concerns, and seek resolutions.

2.4.1 SDC Meetings and Public Education

Two public meetings were planned as part of the SDC methodology update process.

1. This section will be completed after all the meetings are held to record what discussions were held.

2.5 Annual Update

Per section 2.2.3, the change in SDC costs can be adjusted periodically by the application of a cost index. It is recommended that the City update the SDC fees through an annual resolution to maintain relevant costs as indexed to the ENR Construction Cost Index. The baseline ENR of 13,174.98 for November 2022, was used in this report.

2.6 Report Organization

The following sections comprise this Winston Wastewater SDC Methodology as presently constituted:

- **Section 1 – Executive Summary.** This section provides a brief overview and summary of the SDC Plan and is intended to provide the reader with the important facts and findings contained in the plan.

- **Section 2 – Introduction.** This section provides information on the background of SDC's in the City, related efforts for other infrastructure areas, and the legal and statutory background for the establishment of SDC's within the State of Oregon.
- **Section 3 – Wastewater System SDC Methodology.** This section provides a detailed accounting of the Wastewater System SDC methodology.
- **Section 8 – Compliance Costs.** This section provides a detailed accounting and methodology for the establishment of a compliance cost for the maintenance of SDC programs for all the SDC methodologies.
- **Appendix.** The Appendix includes information that is referenced in this study but is not included in the referenced planning documents.

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3 WASTEWATER SYSTEM SDC METHODOLOGY

3.1 Introduction

This section describes in detail the methodology and SDC calculation for the collection wastewater system for Winston. This section describes the existing and future demand requirements of the system, the projects and project costs developed to address deficiencies and satisfy future demand needs, existing and future equivalent dwelling units for the assessment of the SDC's, and a calculation of the maximum defensible SDC's per EDU.

3.2 Wastewater System Overview

The City's Collection System Master Plan (March 2016, SHN, Inc) has been used in part to establish present and future water demand, system capacity, improvement project development, project costs, and other information that will be used in this methodology.

Completion of this study will enable City staff to prepare more appropriately for future growth and for wastewater system improvements needed to address existing issues related to sewer pipes, pumping stations, manholes, force mains and the City's portion of the wastewater treatment plant.

This section summarizes information about the collection system at the time this methodology was prepared.

3.2.1 Overall Wastewater System Description

The wastewater treatment and conveyance system include several separate elements to collect, pump, and treat wastewater and discharge it into the Umpqua River. A brief overview of the different system elements is provided below.

Sewer Pipe. The City owns over 25 miles of gravity sewer pipe, constructed from a variety of materials.

Manholes. The City also owns nearly 700 manholes constructed of concrete that join pipe together and allow changes of direction and grade.

Force Main Pipe. Over 2.8 miles of pressure piping from pump stations is own, along with a siphon that runs under the Umpqua river to reach Green Sanitary District.

Pumping Station: The City owns 3 pumping stations to lift wastewater to a higher elevation so it can continue flowing downhill towards its destination.

3.2.2 Population and Population Projections

The water consuming population in Winston includes primarily residential customers with a few commercial accounts that include short term stays. The City currently provides water to facilities inside of the Urban Growth Boundary (UGB).

Population growth projections were completed using information from multiple sources. According to the 2022 Portland State University Population Research Center (PSU PRC) Coordinated Population Forecast for Douglas County, the County is projected to experience an annual average growth rate of 0.2% per year until 2047. The PSU PRC Coordinated Population Forecast also provides projected average annual growth rates for the Winston UGB. For 2022 through 2047, the City itself is projected to experience an average annual growth rate of 1.0% followed by a decrease in the growth rate to 0.8% until 2072.

According to the PSU PRC, the population in the actual City limits UGB in 2022 was 5679. The projected population for 2047 is estimated to be 7283. Historic population data and annual population projections for the City of Winston UGB are presented in Table 3-1.

TABLE 3-1: HISTORIC AND PROJECTED POPULATION INFORMATION FOR THE CITY OF WINSTON

Year	Population	Growth from Previous Year (%)
2010	5,379	
2011	5,385	0.11
2012	5,385	0.00
2013	5,400	0.28
2014	5,410	0.19
2015	5,410	0.00
2016	5,410	0.00
2017	5,410	0.00
2018	5,480	1.29
2019	5,550	1.28
2020	5,625	1.35
2021	5,700	1.33
2022	5,679	-0.37
2023	5,736	1.00
2024	5,793	1.00
2025	5,851	1.00
2026	5,910	1.00
2027	5,969	1.00
2028	6,028	1.00
2029	6,089	1.00
2030	6,150	1.00
2031	6,211	1.00
2032	6,273	1.00
2033	6,336	1.00
2034	6,399	1.00
2035	6,463	1.00
2036	6,528	1.00
2037	6,593	1.00
2038	6,659	1.00
2039	6,726	1.00
2040	6,793	1.00
2041	6,861	1.00
2042	6,929	1.00

3.3 EDU Methodology and Projected Growth

Local water system capacity is commonly defined using a system that seeks to reduce or convert all customer categories, including residential and non-residential categories, to a common denominator referred to as an equivalent dwelling unit or EDU. An equivalent dwelling unit represents the demand or quantity of water required daily by an average residential connection within the system. The cumulative demand or impact on the system generated by all the users can therefore be expressed in terms of a multiple of EDU's.

An example of using the EDU method to describe non-residential water use follows:

A restaurant is a non-residential water customer that uses more water than a typical household. A review of the water records for a particular restaurant may show that, over a period (a typical yearly operation), the restaurant used as much water as 14 average residential customers in the community. Therefore, it can be said that the restaurant's water use or water demands are equivalent to 14 residential dwellings. More simply, the restaurant is equal to 14 EDU's. This value can be used to calculate and compare the regular water use at the restaurant, or any non-residential customer, to the water use in the residential sector of the system.

To project growth in the number of EDU's it is assumed that the EDU growth rate will equal the population growth rate. This logic assumes that all sectors in the community will grow at a rate equal to that of the residential population. Under this assumption, it is anticipated that, for example, commercial enterprises will expand in response to population growth and job creation to service a growing population.

EDU calculations for the Collections System Master Planning effort (SHN, 2016) were based on data from an earlier Comprehensive Plan and data shared with Winston-Dillard Water District.

Winston has 2222 EDU's that are all located inside the City as of 2015. Using population growth as a proportional representation from the 2.53 persons per EDU in the Collections System Master Plan, the current EDUs would be 2328.

Projecting increase in EDU's was accomplished by using the population growth of Winston and the persons per single family dwelling, 2.53. Based on this analysis approach, it is projected that an additional 494 EDU's will be added to the water system over the planning period. The complete calculations of the water system EDU growth projections are presented in [Appendix C](#).

3.4 Capital Improvement Project List and Project Costs

An integral component in this Wastewater System SDC methodology is the establishment of a Water System Capital Improvement Project (CIP) list. The CIP List includes past and future projects along with their actual or estimated project costs. Projects on the CIP List that have been completed form the basis for reimbursement SDC's as defined in Section 2. Projects that remain to be completed will form the basis for the improvement of SDC's.

Wastewater projects in the Collections System Master Plan have mostly been inaccurate. This document created a new CIP list based on follow-ups from television inspection and aged pipe.

The project lists include the concrete pipe, asbestos cement pipe, manholes which are connected to the pipe, clay tile pipe, pump station upgrades, and PVC pipe which has been televised more recently and contains deficiencies.

TABLE 3-2: WASTEWATER SYSTEM CAPITAL IMPROVEMENT PIPE PROJECTS

Project No.	Project Description	Project Cost Estimate	ENR Index Date	ENR Cost Index Number
C1	Abraham Avenue	\$1,649,482	2022	13174.98
C2	Redd Drive	\$155,113	2022	13174.98
C3	Reed Street	\$50,597	2022	13174.98
C4	Hwy 99	\$220,588	2022	13174.98
C5	Hwy 42 Concrete	\$425,560	2022	13174.98
C6	Cary Street	\$538,268	2022	13174.98
C7	Lookingglass Drive	\$221,843	2022	13174.98
C8	Terracotta	\$133,903	2022	13174.98
C9	Glenchart Avenue	\$123,290	2022	13174.98
C10	Center/Thompson	\$138,980	2022	13174.98
C11	Gregory Drive	\$2,778,777	2022	13174.98
C12	Darrell Avenue	\$1,305,861	2022	13174.98
C13	Park Street	\$291,879	2022	13174.98
C14	Grape Avenue	\$653,160	2022	13174.98
C15	Evergreen Avenue	\$462,254	2022	13174.98
C16	Thompson Avenue PVC	\$447,228	2022	13174.98
C17	Civil Bend Avenue	\$460,040	2022	13174.98
C18	Siphon Interceptor	\$4,332,392	2022	13174.98
C19	Ford Street	\$780,642	2022	13174.98
C20	Morgan Avenue	\$532,511	2022	13174.98
C21	Rose Street	\$1,564,383	2022	13174.98
C22	Rose South	\$977,673	2022	13174.98
C23	Center Street	\$374,535	2022	13174.98
C24	NE Baker Street	\$314,875	2022	13174.98
C25	Grape Street North	\$566,105	2022	13174.98
C26	Hwy 42 West	\$664,421	2022	13174.98
Total		\$20,164,359		

In addition to the CIP from the, SDC needs to address other capacity at the wastewater treatment plant in Green. Although the capacity has been expanded in the last 10 years, additional capacity will be needed as growth in the City and nearby areas has occurred. The City is responsible for 50% of all costs incurred. Table 3.3 creates several new projects including those items.

TABLE 3-3: SDC FACILITIES IMPROVEMENT LIST

Project No.	Project Description	Adjusted Cost Estimate	Reimbursement SDC Eligible (Y/N)	Improvement SDC Eligible (Y/N)
P1	Wastewater Treatment Plant Expansion	\$5,000,000	2022	13174.98
P2	Lookingglass Pump Station	\$480,000	2022	13174.98
P3	Siphon Replacement	\$270,000	2022	13174.98
Total		\$5,750,000		

3.5 Project SDC Eligibility

The SDC methodology must include a discussion of the percentage of each project's cost that can be attributed as necessary for growth and is SDC eligible. SDC's must be based on a project's costs or the portion of a project's cost that is necessary to add system capacity in response to or in anticipation of growth.

When determining what percentage of a project should be considered SDC eligible, the existing capacity needs must be compared to the anticipated future capacity needs. For example, if a project is developed to provide a 50% increase in capacity to an element of the treatment or conveyance system, 50% of the project costs would be considered SDC eligible. If a project is developed to provide service to a new area not currently served by municipal wastewater and where development is expected to occur, the project could be 100% SDC eligible.

Using this approach, all the projects presented in Section 3.4 were reviewed to determine SDC eligibility. For projects already completed, the actual project costs were used to determine eligible SDC reimbursement costs. For projects that have not been completed, costs have been increased from the estimated dollar amount presented in the original planning document to current (2022) dollars using the ENR Construction Cost Index. The SDC eligibility determination for each project included on the Wastewater System CIP List is included below.

Project C1 – Abraham Avenue

Recommended SDC Eligibility for Project C1: 18.0%

The gravity lines moving south along Abraham to Snow Pump Station are old AC pipe. The pipe and manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C1 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Abraham Avenue			
Item	Units	Price	Extended
Mobilization	100%	112000	\$ 112,000.00
Construction Facilities and Temporary Controls	100%	56000	\$ 56,000.00
Demo and Site Prep	100%	36960	\$ 36,960.00
12" Sanitary Sewer PVC	1,197	175	\$ 209,475.00
15" Sanitary Sewer PVC	1,473	200	\$ 294,600.00
21" Sanitary Sewer PVC	1,090	250	\$ 272,500.00
Landscape Restoration	100%	28000	\$ 28,000.00
Manholes	12	9000	\$ 108,000.00
	Subtotal		\$ 1,117,535.00
Contingency	20%		\$ 223,507.00
Admin	3%		\$ 33,526.05
Engineering	20%		\$ 274,913.61
	Total		\$ 1,649,481.66

Project C2 – Redd Drive

Recommended SDC Eligibility for Project C2: 18.0%

The 8" concrete pipe just to the west of Redd Drive has been identified with deficiencies. The pipe and manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C2 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Redd Drive			
Item	Units	Price	Extended
Mobilization	100%	10500	\$ 10,500.00
Construction Faciliites and Temporary Controls	100%	5250	\$ 5,250.00
Demo and Site Prep	100%	3465	\$ 3,465.00
8" Sanitary Sewer PVC	475	150	\$ 71,250.00
Landscape Restoration	100%	2625	\$ 2,625.00
Manholes	2	6000	\$ 12,000.00
	Subtotal		\$ 105,090.00
Contingency	20%		\$ 21,018.00
Administration	3%		\$ 3,152.70
Engineering	20%		\$ 25,852.14
	Total		\$ 155,112.84

Project C3 – Reed Street

Recommended SDC Eligibility for Project C3: 18.0%

The 8" concrete pipe on Reed Street terminates in a cleanout and has been identified with deficiencies. The pipe and manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$Project\ C3\ SDC\ Eligibility = \frac{6929\ people - 5679\ people}{6929\ people} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Reed Street			
Item	Units	Price	Extended
Mobilization	100%	3500	\$ 3,500.00
Construction Faciliites and Temporary Controls	100%	1750	\$ 1,750.00
Demo and Site Prep	100%	1155	\$ 1,155.00
8" Sanitary Sewer PVC	100	150	\$ 15,000.00
Landscape Restoration	100%	875	\$ 875.00
Manholes	2	6000	\$ 12,000.00
	Subtotal		\$ 34,280.00
Contingency	20%		\$ 6,856.00
Administration	3%		\$ 1,028.40
Engineering	20%		\$ 8,432.88
	Total		\$ 50,597.28

Project C4 – Hwy 99 Crossing

Recommended SDC Eligibility for Project C4: 18.0%

The larger AC pipes crossing Hwy 99 that connect to Thompson Avenue are in need of replacement. The pipe and most of the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C4 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Hwy 99			
Item	Units	Price	Extended
Mobilization	100%	15000	\$ 15,000.00
Construction Facilities and Temporary Controls	100%	7500	\$ 7,500.00
Demo and Site Prep	100%	4950	\$ 4,950.00
15" Sanitary Sewer PVC	175	200	\$ 35,000.00
21" Sanitary Sewer PVC	189	250	\$ 47,250.00
Landscape Restoration	100%	3750	\$ 3,750.00
Manholes	4	9000	\$ 36,000.00
Subtotal			\$ 149,450.00
Contingency	20%		\$ 29,890.00
Administration	3%		\$ 4,483.50
Engineering	20%		\$ 36,764.70
Total			\$ 220,588.20

Project C5 – Hwy 42 Concrete

Recommended SDC Eligibility for Project C5: 18.0%

The eastern influent into Snow Pump Station is old concrete pipe and needs replaced. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C5 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Hwy 42			
Item	Units	Price	Extended
Mobilization	100%	29000	\$ 29,000.00
Construction Faciliites and Temporary Controls	100%	14500	\$ 14,500.00
Demo and Site Prep	100%	9570	\$ 9,570.00
8" Sanitary Sewer PVC	1,320	150	\$ 198,000.00
Landscape Restoration	100%	7250	\$ 7,250.00
Manholes	5	6000	\$ 30,000.00
	Subtotal		\$ 288,320.00
Contingency	20%		\$ 57,664.00
Administration	3%		\$ 8,649.60
Engineering	20%		\$ 70,926.72
	Total		\$ 425,560.32

Project C6 – Cary Street

Recommended SDC Eligibility for Project C6: 18.0%

Pipe connecting through Cary Street is constructed of old concrete pipe. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C6 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Cary Street			
Item	Units	Price	Extended
Mobilization	100%	36000	\$ 36,000.00
Construction Facilities and Temporary Controls	100%	18000	\$ 18,000.00
Demo and Site Prep	100%	11880	\$ 11,880.00
8" Sanitary Sewer PVC	1,532	150	\$ 229,800.00
Landscape Restoration	100%	9000	\$ 9,000.00
Manholes	10	6000	\$ 60,000.00
Subtotal			\$ 364,680.00
Contingency	20%		\$ 72,936.00
Administration	3%		\$ 10,940.40
Engineering	20%		\$ 89,711.28
Total			\$ 538,267.68

Project C7 – Lookingglass Drive

Recommended SDC Eligibility for Project C7: 18.0%

A short section of AC pipes along Lookingglass Drive . The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C7 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Lookingglass Drive			
Item	Units	Price	Extended
Mobilization	100%	15000	\$ 15,000.00
Construction Facilities and Temporary Controls	100%	7500	\$ 7,500.00
Demo and Site Prep	100%	4950	\$ 4,950.00
8" Sanitary Sewer PVC	674	150	\$ 101,100.00
Landscape Restoration	100%	3750	\$ 3,750.00
Manholes	3	6000	\$ 18,000.00
Subtotal			\$ 150,300.00
Contingency	20%		\$ 30,060.00
Administration	3%		\$ 4,509.00
Engineering	20%		\$ 36,973.80
Total			\$ 221,842.80

Project C8 – Terracotta

Recommended SDC Eligibility for Project C8: 18.0%

A clay tile pipe by Newton Drive is very old. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C8 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Terracotta			
Item	Units	Price	Extended
Mobilization	100%	9000	\$ 9,000.00
Construction Faciliites and Temporary Controls	100%	4500	\$ 4,500.00
Demo and Site Prep	100%	2970	\$ 2,970.00
8" Sanitary Sewer PVC	400	150	\$ 60,000.00
Landscape Restoration	100%	2250	\$ 2,250.00
Manholes	2	6000	\$ 12,000.00
Subtotal			\$ 90,720.00
Contingency	20%		\$ 18,144.00
Administration	3%		\$ 2,721.60
Engineering	20%		\$ 22,317.12
Total			\$ 133,902.72

Project C9 – Glenchart Avenue

Recommended SDC Eligibility for Project C9: 18.0%

Glenchart Avenue has a couple pipe groups constructed of AC pipe that are separated by two blocks. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C9 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Glenchart Avenue			
Item	Units	Price	Extended
Mobilization	100%	8500	\$ 8,500.00
Construction Facilities and Temporary Controls	100%	4250	\$ 4,250.00
Demo and Site Prep	100%	2805	\$ 2,805.00
8" Sanitary Sewer PVC	359	150	\$ 53,850.00
Landscape Restoration	100%	2125	\$ 2,125.00
Manholes	2	6000	\$ 12,000.00
Subtotal			\$ 83,530.00
Contingency	20%		\$ 16,706.00
Administration	3%		\$ 2,505.90
Engineering	20%		\$ 20,548.38
Total			\$ 123,290.28

Project C10 – Center/Thompson

Recommended SDC Eligibility for Project C10: 18.0%

A single AC collector pipe runs from Thompson Avenue along Center Street to a cleanout. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$Project\ C10\ SDC\ Eligibility = \frac{6929\ people - 5679\ people}{6929\ people} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Center/Thompson			
Item	Units	Price	Extended
Mobilization	100%	9500	\$ 9,500.00
Construction Facilities and Temporary Controls	100%	4750	\$ 4,750.00
Demo and Site Prep	100%	3135	\$ 3,135.00
8" Sanitary Sewer PVC	416	150	\$ 62,400.00
Landscape Restoration	100%	2375	\$ 2,375.00
Manholes	2	6000	\$ 12,000.00
	Subtotal		\$ 94,160.00
Contingency	20%		\$ 18,832.00
Administration	3%		\$ 2,824.80
Engineering	20%		\$ 23,163.36
	Total		\$ 138,980.16

Project C11 – Gregory Drive

Recommended SDC Eligibility for Project C11: 18.0%

The replacement along Gregory Drive is one of the larger in town, spanning two basins. This pipe is all old concrete variety. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C11 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Gregory Drive			
Item	Units	Price	Extended
Mobilization	100%	188000	\$ 188,000.00
Construction Facilities and Temporary Controls	100%	94000	\$ 94,000.00
Demo and Site Prep	100%	62040	\$ 62,040.00
8" Sanitary Sewer PVC	8,128	150	\$ 1,219,200.00
15" Sanitary Sewer PVC	582	200	\$ 116,400.00
Landscape Restoration	100%	47000	\$ 47,000.00
Manholes	26	6000	\$ 156,000.00
	Subtotal		\$ 1,882,640.00
Contingency	20%		\$ 376,528.00
Administration	3%		\$ 56,479.20
Engineering	20%		\$ 463,129.44
	Total		\$ 2,778,776.64

Project C12 – Darrell Avenue

Recommended SDC Eligibility for Project C12: 18.0%

Similar to Gregory, Darrell Avenue has a large network of concrete pipes that have aged. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C12 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Darrell Avenue			
Item	Units	Price	Extended
Mobilization	100%	88500	\$ 88,500.00
Construction Facilities and Temporary Controls	100%	44250	\$ 44,250.00
Demo and Site Prep	100%	29205	\$ 29,205.00
8" Sanitary Sewer PVC	4,071	150	\$ 610,650.00
Landscape Restoration	100%	22125	\$ 22,125.00
Manholes	15	6000	\$ 90,000.00
	Subtotal		\$ 884,730.00
Contingency	20%		\$ 176,946.00
Administration	3%		\$ 26,541.90
Engineering	20%		\$ 217,643.58
	Total		\$ 1,305,861.48

Project C13 – Park Street

Recommended SDC Eligibility for Project C13: 18.0%

A combination of AC and concrete pipe are located in a group around Park Street. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$Project\ C13\ SDC\ Eligibility = \frac{6929\ people - 5679\ people}{6929\ people} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Park Street			
Item	Units	Price	Extended
Mobilization	100%	20000	\$ 20,000.00
Construction Facilities and Temporary Controls	100%	10000	\$ 10,000.00
Demo and Site Prep	100%	6600	\$ 6,600.00
8" Sanitary Sewer PVC	841	150	\$ 126,150.00
Landscape Restoration	100%	5000	\$ 5,000.00
Manholes	5	6000	\$ 30,000.00
Subtotal			\$ 197,750.00
Contingency	20%		\$ 39,550.00
Administration	3%		\$ 5,932.50
Engineering	20%		\$ 48,646.50
Total			\$ 291,879.00

Project C14 – Grape Avenue

Recommended SDC Eligibility for Project C14: 18.0%

The pipe in Grape Avenue has been identified as having deficiencies and is made of old concrete pipe. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$Project\ C14\ SDC\ Eligibility = \frac{6929\ people - 5679\ people}{6929\ people} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Grape Avenue			
Item	Units	Price	Extended
Mobilization	100%	44000	\$ 44,000.00
Construction Facilities and Temporary Controls	100%	22000	\$ 22,000.00
Demo and Site Prep	100%	14520	\$ 14,520.00
8" Sanitary Sewer PVC	1,980	150	\$ 297,000.00
Landscape Restoration	100%	11000	\$ 11,000.00
Manholes	9	6000	\$ 54,000.00
Subtotal			\$ 442,520.00
Contingency	20%		\$ 88,504.00
Administration	3%		\$ 13,275.60
Engineering	20%		\$ 108,859.92
Total			\$ 653,159.52

Project C15 – Evergreen Avenue

Recommended SDC Eligibility for Project C15: 18.0%

The PVC pipe in Evergreen Avenue has been identified as having deficiencies. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$Project\ C15\ SDC\ Eligibility = \frac{6929\ people - 5679\ people}{6929\ people} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Evergreen Avenue			
Item	Units	Price	Extended
Mobilization	100%	31000	\$ 31,000.00
Construction Facilities and Temporary Controls	100%	15500	\$ 15,500.00
Demo and Site Prep	100%	10230	\$ 10,230.00
8" Sanitary Sewer PVC	177	150	\$ 26,550.00
12" Sanitary Sewer PVC	468	175	\$ 81,900.00
18" Sanitary Sewer PVC	410	225	\$ 92,250.00
Landscape Restoration	100%	7750	\$ 7,750.00
Manholes	8	6000	\$ 48,000.00
	Subtotal		\$ 313,180.00
Contingency	20%		\$ 62,636.00
Administration	3%		\$ 9,395.40
Engineering	20%		\$ 77,042.28
	Total		\$ 462,253.68

Project C16 – Thompson Avenue PVC

Recommended SDC Eligibility for Project C16: 18.0%

The PVC pipe in Thompson Avenue has been identified as having deficiencies. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C16 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Thompson Avenue PVC			
Item	Units	Price	Extended
Mobilization	100%	30000	\$ 30,000.00
Construction Facilities and Temporary Controls	100%	15000	\$ 15,000.00
Demo and Site Prep	100%	9900	\$ 9,900.00
8" Sanitary Sewer PVC	1,364	150	\$ 204,600.00
Landscape Restoration	100%	7500	\$ 7,500.00
Manholes	6	6000	\$ 36,000.00
Subtotal			\$ 303,000.00
Contingency	20%		\$ 60,600.00
Administration	3%		\$ 9,090.00
Engineering	20%		\$ 74,538.00
Total			\$ 447,228.00

Project C17 – Civil Bend Avenue

Recommended SDC Eligibility for Project C17: 18.0%

Approximately half of Civil Bend Avenue is still concrete pipe and has not been replaced with PVC. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C17 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Civil Bend Avenue			
Item	Units	Price	Extended
Mobilization	100%	31000	\$ 31,000.00
Construction Facilities and Temporary Controls	100%	15500	\$ 15,500.00
Demo and Site Prep	100%	10230	\$ 10,230.00
8" Sanitary Sewer PVC	1,408	150	\$ 211,200.00
Landscape Restoration	100%	7750	\$ 7,750.00
Manholes	6	6000	\$ 36,000.00
Subtotal			\$ 311,680.00
Contingency	20%		\$ 62,336.00
Administration	3%		\$ 9,350.40
Engineering	20%		\$ 76,673.28
Total			\$ 460,039.68

Project C18 – Siphon Interceptor

Recommended SDC Eligibility for Project C18: 18.0%

The interceptor runs from the Siphon across the Umpqua all the way back to Thompson Avenue. It consists of several larger pipes and is all old AC and concrete pipe. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C18 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Siphon Interceptor			
Item	Units	Price	Extended
Mobilization	100%	295000	\$ 295,000.00
Construction Facilities and Temporary Controls	100%	147500	\$ 147,500.00
Demo and Site Prep	100%	97350	\$ 97,350.00
18" Sanitary Sewer PVC	1,277	225	\$ 287,325.00
21" Sanitary Sewer PVC	2,546	250	\$ 636,500.00
24" Sanitary Sewer PVC	4,232	275	\$ 1,163,800.00
Landscape Restoration	100%	73750	\$ 73,750.00
Manholes	26	9000	\$ 234,000.00
Subtotal			\$ 2,935,225.00
Contingency	20%		\$ 587,045.00
Administration	3%		\$ 88,056.75
Engineering	20%		\$ 722,065.35
Total			\$ 4,332,392.10

Project C19 – Ford Street

Recommended SDC Eligibility for Project C19: 18.0%

Ford Street uses a network of old concrete pipe. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C19 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Ford Street			
Item	Units	Price	Extended
Mobilization	100%	53000	\$ 53,000.00
Construction Faciliites and Temporary Controls	100%	26500	\$ 26,500.00
Demo and Site Prep	100%	17490	\$ 17,490.00
8" Sanitary Sewer PVC	2,311	150	\$ 346,650.00
Landscape Restoration	100%	13250	\$ 13,250.00
Manholes	12	6000	\$ 72,000.00
	Subtotal		\$ 528,890.00
Contingency	20%		\$ 105,778.00
Administration	3%		\$ 15,866.70
Engineering	20%		\$ 130,106.94
	Total		\$ 780,641.64

Project C20 – Morgan Avenue

Recommended SDC Eligibility for Project C20: 18.0%

The Morgan Avenue Project combines a network of concrete pipes in the north of town. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C20 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Morgan Avenue			
Item	Units	Price	Extended
Mobilization	100%	36000	\$ 36,000.00
Construction Facilities and Temporary Controls	100%	18000	\$ 18,000.00
Demo and Site Prep	100%	11880	\$ 11,880.00
8" Sanitary Sewer PVC	1,506	150	\$ 225,900.00
Landscape Restoration	100%	9000	\$ 9,000.00
Manholes	10	6000	\$ 60,000.00
Subtotal			\$ 360,780.00
Contingency	20%		\$ 72,156.00
Administration	3%		\$ 10,823.40
Engineering	20%		\$ 88,751.88
Total			\$ 532,511.28

Project C21 – Rose Street

Recommended SDC Eligibility for Project C21: 18.0%

Rose Street is a large network in basin H that is made up of old 8” concrete pipe. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C21 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Rose Street			
Item	Units	Price	Extended
Mobilization	100%	106000	\$ 106,000.00
Construction Facilities and Temporary Controls	100%	53000	\$ 53,000.00
Demo and Site Prep	100%	34980	\$ 34,980.00
8" Sanitary Sewer PVC	4,596	150	\$ 689,400.00
Landscape Restoration	100%	26500	\$ 26,500.00
Manholes	25	6000	\$ 150,000.00
Subtotal			\$ 1,059,880.00
Contingency	20%		\$ 211,976.00
Administration	3%		\$ 31,796.40
Engineering	20%		\$ 260,730.48
Total			\$ 1,564,382.88

Project C22 – Rose South

Recommended SDC Eligibility for Project C21: 18.0%

Rose South includes the pipes on Rose Street that are south of Hwy 42, some of these pipes are larger diameter. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C22 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Rose South			
Item	Units	Price	Extended
Mobilization	100%	66000	\$ 66,000.00
Construction Faciliites and Temporary Controls	100%	33000	\$ 33,000.00
Demo and Site Prep	100%	21780	\$ 21,780.00
8" Sanitary Sewer PVC	623	150	\$ 93,450.00
12" Sanitary Sewer PVC	982	175	\$ 171,850.00
15" Sanitary Sewer PVC	909	200	\$ 181,800.00
Landscape Restoration	100%	16500	\$ 16,500.00
Manholes	13	6000	\$ 78,000.00
Subtotal			\$ 662,380.00
Contingency	20%		\$ 132,476.00
Administration	3%		\$ 19,871.40
Engineering	20%		\$ 162,945.48
Total			\$ 977,672.88

Project C23 – Center Street

Recommended SDC Eligibility for Project C23: 18.0%

Some concrete and AC pipe is located around Center Street. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C23 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Center Street			
Item	Units	Price	Extended
Mobilization	100%	25000	\$ 25,000.00
Construction Facilities and Temporary Controls	100%	12500	\$ 12,500.00
Demo and Site Prep	100%	8250	\$ 8,250.00
8" Sanitary Sewer PVC	1,105	150	\$ 165,750.00
Landscape Restoration	100%	6250	\$ 6,250.00
Manholes	6	6000	\$ 36,000.00
Subtotal			\$ 253,750.00
Contingency	20%		\$ 50,750.00
Administration	3%		\$ 7,612.50
Engineering	20%		\$ 62,422.50
Total			\$ 374,535.00

Project C24 – NE Baker Street

Recommended SDC Eligibility for Project C24: 18.0%

Some concrete and AC pipe is located around Center Street. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C24 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

NE Baker Street			
Item	Units	Price	Extended
Mobilization	100%	21000	\$ 21,000.00
Construction Facilities and Temporary Controls	100%	10500	\$ 10,500.00
Demo and Site Prep	100%	6930	\$ 6,930.00
8" Sanitary Sewer PVC	971	150	\$ 145,650.00
Landscape Restoration	100%	5250	\$ 5,250.00
Manholes	4	6000	\$ 24,000.00
Subtotal			\$ 213,330.00
Contingency	20%		\$ 42,666.00
Administration	3%		\$ 6,399.90
Engineering	20%		\$ 52,479.18
Total			\$ 314,875.08

Project C25 – Grape Street North

Recommended SDC Eligibility for Project C25: 18.0%

The project for the northern end of Grape Street over to Robinson has been split off for the concrete pipe area. The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C25 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Grape Street North			
Item	Units	Price	Extended
Mobilization	100%	38000	\$ 38,000.00
Construction Faciliites and Temporary Controls	100%	19000	\$ 19,000.00
Demo and Site Prep	100%	12540	\$ 12,540.00
8" Sanitary Sewer PVC	1,670	150	\$ 250,500.00
Landscape Restoration	100%	9500	\$ 9,500.00
Manholes	9	6000	\$ 54,000.00
Subtotal			\$ 383,540.00
Contingency	20%		\$ 76,708.00
Administration	3%		\$ 11,506.20
Engineering	20%		\$ 94,350.84
Total			\$ 566,105.04

Project C26 – Hwy 42 West

Recommended SDC Eligibility for Project C26: 18.0%

Concrete and AC pipe extend west of Snow Pump Station all the way to the High School, this portion runs under Hwy 42 . The pipe and the manholes will need replaced in the planning period. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C26 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

Hwy 42 West			
Item	Units	Price	Extended
Mobilization	100%	45000	\$ 45,000.00
Construction Facilities and Temporary Controls	100%	22500	\$ 22,500.00
Demo and Site Prep	100%	14850	\$ 14,850.00
8" Sanitary Sewer PVC	2,057	150	\$ 308,550.00
Landscape Restoration	100%	11250	\$ 11,250.00
Manholes	8	6000	\$ 48,000.00
	Subtotal		\$ 450,150.00
Contingency	20%		\$ 90,030.00
Administration	3%		\$ 13,504.50
Engineering	20%		\$ 110,736.90
	Total		\$ 664,421.40

Project P1 – Wastewater Plant Expansion

Recommended SDC Eligibility for Project P1: 100.0%

The Wastewater Treatment Plant will require expansion to meet future growth. The expansion will be completed by Green Sanitary District who will need cost sharing from Winston. The cost sharing is done as a flat payout instead of sharing engineering, construction, and administration. There is not a current facilities plan, but based on the high costs of other projects, \$5,000,000 has been estimated as the portion Winston will need to contribute. Given that expansion is driven by development and not permitting requirements, this project has been deemed 100% SDC eligible.

Project P2 – Lookingglass Pump Station

Recommended SDC Eligibility for Project P2: 60.0%

The Lookingglass Pump Station needs some controls updating. It also could expand if the area is built out. Given that the area is only about 40% built out, it was determined that the SDC eligibility for the project should be based upon the growth potential, and therefore 60% eligible for SDC charges.

Project P3 – Siphon Replacement

Recommended SDC Eligibility for Project P2: 18.0%

The City of Winston is currently working on replacing the Siphon under the Umpqua River. Total costs are estimated at \$1,500,000.00 to bore new pipes under the river. Given that all residents will benefit equally from the improved infrastructure, it was determined that the SDC eligibility for the project should be based on the increase from the present population (Year 2022: 5679 people) to the planning year population (Year 2042: 6929 people).

$$\text{Project C26 SDC Eligibility} = \frac{6929 \text{ people} - 5679 \text{ people}}{6929 \text{ people}} = 0.180 \rightarrow 18.0\% \text{ Eligible}$$

TABLE 3-4: WASTEWATER SYSTEM PROJECT SDC ELIGIBILITY SUMMARY

Project No.	Project Description	Adjusted Cost Estimate	Reimbursement SDC Eligible (Y/N)	Improvement SDC Eligible (Y/N)	% SDC Eligible	SDC Eligible Cost
C1	Abraham Avenue	\$259,815	N	Y	0.180	\$46,767
C2	Redd Drive	\$297,321	N	Y	0.180	\$53,518
C3	Reed Street	\$163,431	N	Y	0.180	\$29,417
C4	Hwy 99	\$204,728	N	Y	0.180	\$36,851
C5	Hwy 42 Concrete	\$208,524	N	Y	0.180	\$37,534
C6	Cary Street	\$62,959	N	Y	0.180	\$11,333
C7	Lookingglass Drive	\$144,633	N	N	0.180	\$26,034
C8	Terra Cotta	\$167,487	N	Y	0.180	\$30,148
C9	Glenchart Avenue	\$108,357	N	Y	0.180	\$19,504
C10	Center/Thomspon	\$93,933	N	Y	0.180	\$16,908
C11	Gregory Drive	\$96,276	N	Y	0.180	\$17,330
C12	Darrell Aveneue	\$42,275	N	Y	0.180	\$7,609
C13	Park Street	\$127,872	N	Y	0.180	\$23,017
C14	Grape Avenue	\$59,829	N	Y	0.180	\$10,769
C15	Evergreen Avenue	\$282,828	N	Y	0.180	\$50,909
C16	Thompson Avenue PVC	\$282,828	N	Y	0.180	\$50,909
C17	Civil Bend Avenue	\$282,828	N	Y	0.180	\$50,909
C18	Siphon Interceptor	\$282,828	N	Y	0.180	\$50,909
C19	Ford Street	\$282,828	N	Y	0.180	\$50,909
C20	Morgan Avenue	\$282,828	N	Y	0.180	\$50,909
C21	Rose Street	\$282,828	N	Y	0.180	\$50,909
C22	Rose St South	\$282,828	N	Y	0.180	\$50,909
C23	Center Street	\$282,828	N	Y	0.180	\$50,909
C24	NE Baker Street	\$282,828	N	Y	0.180	\$50,909
C25	Grape Street North	\$282,828	N	Y	0.180	\$50,909
C26	Hwy 42 West	\$282,828	N	Y	0.180	\$50,909
Total		\$5,431,370				\$977,647

Project No.	Project Description	Adjusted Cost Estimate	Reimbursement SDC Eligible (Y/N)	Improvement SDC Eligible (Y/N)	% SDC Eligible	SDC Eligible Cost
P1	Wastewater Treatment Plant Expansion	\$5,000,000	N	Y	1.000	\$5,000,000
P2	Lookingglass Pump Station	\$800,000	N	Y	0.600	\$480,000
P3	Siphon Replacement	\$1,500,000	N	Y	0.180	\$270,000
Total		\$7,300,000				\$5,750,000

3.6 Wastewater System Reimbursement SDC

Oregon Law includes provisions for a reimbursement SDC to be developed for projects that have been completed and that have remaining capacity available to service growth. Two projects have been completed in the last few years. Snow Pump Station was completed and has approximately 50% spare capacity above the design needs after testing. The Eastside Sewer project replaced some old lines and there is some infill lots available along the route. It has been given the 18% growth value.

TABLE 3-5: WASTEWATER SYSTEM REIMBURSEMENT SDC SUMMARY

Project No.	Project Description	SDC Eligible Cost
R1	Snow Pump Station & Thompson Gravity Line	\$615,000
R2	Eastside Sewer	\$141,809
	Total Reimbursement Eligible Costs	\$756,809
	Total Wastewater System Growth EDUs	494.00
	Maximum Water System Reimbursement SDC	\$1,532

3.7 Wastewater System Improvement SDC

Calculation of the improvement SDC is based upon the methodology and the establishment of the SDC eligible project costs as outlined in Section 3.5. The following table provides a summary of the total cost of SDC eligible projects on the CIP that have not yet been constructed.

Table 3 presents the calculation used to establish the improvement SDC for the Winston wastewater system.

TABLE 3-6: WASTEWATER SYSTEM IMPROVEMENT SDC SUMMARY

Project No.	Project Description	SDC Eligible Cost
C1	Abraham Avenue	\$296,907
C2	Redd Drive	\$27,920
C3	Reed Street	\$9,108
C4	Hwy 99	\$39,706
C5	Hwy 42 Concrete	\$76,601
C6	Cary Street	\$96,888
C7	Lookingglass Drive	\$39,932
C8	Terracotta	\$24,102
C9	Glenchart Avenue	\$22,192
C10	Center/Thompson	\$25,016
C11	Gregory Drive	\$500,180
C12	Darrell Avenue	\$235,055
C13	Park Street	\$52,538
C14	Grape Avenue	\$117,569
C15	Evergreen Avenue	\$83,206
C16	Thompson Avenue PVC	\$80,501
C17	Civil Bend Avenue	\$82,807
C18	Siphon Interceptor	\$779,831
C19	Ford Street	\$140,515
C20	Morgan Avenue	\$95,852
C21	Rose Street	\$281,589
C22	Rose South	\$175,981
C23	Center Street	\$67,416
C24	NE Baker Street	\$56,678
C25	Grape Street North	\$101,899
C26	Hwy 42 West	\$119,596
P1	Wastewater Treatment Plant Expansion	\$5,000,000
P2	Lookingglass Pump Station	\$480,000
P3	Siphon Replacement	\$270,000
Total Improvement Eligible Costs		\$9,379,585
Total Water System Growth EDUs		494.00
Maximum Water System Improvement SDC		\$18,987

Therefore, based on this methodology, the improvement components of the Winston wastewater system SDC should not exceed approximately \$18,987

The combined SDC including improvement and reimbursement eligible projects totals \$20,519 not including adjustments for SDC credits or compliance costs.

3.8 Wastewater System SDC Credits

An analysis of potential SDC credits is included as part of this SDC methodology. Credits may be appropriate to offset financing costs that will be paid by all system customers including new customers. Credits are also appropriate for developers who construct or otherwise provide improvements to the system that are part of the current CIP List. A brief description of a few potential SDC credit scenarios is provided below.

3.8.1 Improvement Offset Credit

In the case of a developer completing some or all of a CIP List project, the credit provided should be equal to the value of the improvement made, though the credit cannot exceed the SDC amount that the developer would have been required to pay.

For example: Assume that a developer undertakes a subdivision that would require him to pay \$200,000 in SDC fees for the wastewater system. This same developer elects to construct a new sewer line to service his development. As the sewer line is part of the City's CIP List, the developer's efforts make him eligible to receive an SDC credit for the improvements that he completed. If we assume the actual project cost to install the sewer line is around \$300,000, the developer is only eligible to receive wastewater SDC credits up to the \$200,000 that he would have paid into SDC's.

It should be noted that determination of improvements offset credits can require some judgment as development situations can vary. The City should maintain an open policy when working with developers to identify a fair and reasonable offset credit when it applies. It should also be reiterated that offset credits are not available for improvements undertaken by the developer that do not appear on the City's CIP List and are not part of the SDC methodology.

3.8.2 Financing Credit

Financing credits should be applied to SDC's so that new users who are assessed an SDC do not end up paying twice due to new debt loads incurred by the City to undertake improvements or portions of improvements intended to increase system capacity. As growth-related debt service may be repaid with SDC revenue, it is critical that the users who have paid SDC's receive an appropriate credit for the present value of rate increases that will likely be imposed for the purposes of paying back debt.

It would be appropriate to provide a credit to new customers to offset the “double-dip” effects of paying an increased rate to payback a loan supporting the SDC-eligible portion of a project in addition to paying the SDC itself. For example:

Assume the City undertakes a \$1,000,000 project to construct a new facility. It is determined that the project is 50% SDC eligible and the other half of the project will be paid through a loan. The terms of the loan are as follows:

Term: 20 years (240 months)

Rate: 5%

Principal: \$1,000,000 with \$500,000 being SDC eligible

Number of EDU's setting rate of payback: Existing customer base or 1225 EDU's

Assuming the City obtains the \$1,000,000 loan, a monthly rate increase of around \$10.31 per EDU would be required. Approximately \$5.15 of that increase would be to cover the SDC eligible portion of the project. New customers would be charged an SDC to pay for their share of the SDC eligible portion of the project.

To avoid charging a rate increase in addition to an SDC, a present worth analysis of the \$5.15 portion of the rate increase should be completed and a credit established. The amount of the credit will vary depending on the period of time in the planning period that the new customer joins the system and begins paying the higher rates. A range of potential credits for this example scenario is discussed below:

- 1. A new customer joins the system early in the planning period and has nearly 20 years of increased rate payments in front of them. In this case, the present worth of a \$5.15 per month rate increase over 20 years (at 5% interest) is around \$780.*
- 2. A new customer joins the system in the middle of the planning period with only 10 years of increased payments in front of them. Under this scenario, the present worth of a \$5.15 rate increase over 10 years (at 5% interest) is around \$486.*
- 3. A new customer joins the system toward the end of the planning period with only 5 years remaining in the 20-year planning cycle. Under this scenario, the present worth of a \$5.15 rate increase over the remaining 5 years (at 5% interest) is around \$273.*

The amount of the credit that would be appropriate to offset the “double-dip” effect of a rate increase and an SDC varies with the following:

- 1. The amount of the loan and the resulting rate increase required to pay it back*
- 2. The percentage of SDC eligibility for a specific project*

3. *The number of years remaining within the planning period, or the remaining term left on the loan payback*

Should the City elect to offer an SDC credit to offset a “double-dip” effect, a credit schedule should be established once a project is undertaken, a loan obtained, and a rate increase set to pay back the loan. A simple schedule can be established that varies based on years or months of time into the loan terms. When a new customer joins the system, the City can simply review the credit schedule for each affected project and total up each credit depending on the month that the new customer joins the system.

3.9 Wastewater System SDC Summary

Section 3 has been developed to provide Winston the methodology needed to establish the maximum allowable SDC’s for the wastewater collection system. The following table provides a summary of the information used to complete this analysis. The SDC credit summary calculations were completed assuming a 5% annual interest rate. The credits reflect what would be given back if the City were to finance the improvements now, prior to the SDCs being collected.

TABLE 3-7: WASTEWATER SYSTEM SDC SUMMARY PER EDU (BEFORE COMPLIANCE COSTS)

SDC Component	SDC Amount
Improvement Fee (per EDU)	\$18,987
Reimbursement Fee (per EDU)	\$1,532
Subtotal of Wastewater System SDC Fees (per EDU)	\$20,519
SDC Credit Summary	
Upper Range Credit (100% Financing)	\$7,095
Mid Range Credit (75% Financing Credit)	\$5,321
Mid Range Credit (50% Financing Credit)	\$3,547
Low Range Credit (25% Financing Credit)	\$1,774

The maximum defensible SDC for the wastewater treatment and distribution system is \$20,519 per EDU without the application of an SDC credit or SDC compliance costs. It should be reiterated that this calculation only represents the maximum SDC’s that can be assessed and defended with proper methodology. The City has the autonomy to charge less than this amount if desired; however, if adequate SDC’s are not collected and projects must be undertaken to

satisfy growth requirements, funds will have to be obtained from sources such as user rate increases.

3.10 Wastewater System SDC Assessment Schedule

The Wastewater System SDC recommended in Section 3.9 is based on a cost per EDU or cost per single residential dwelling. For most non-residential developments, a plan review must be performed to determine the equivalent number of EDU's the development will require.

The following tables should be used to assess Wastewater System SDC's for both residential and non-residential customers who wish to connect to the Winston Collection system.

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TABLE 3-8: ASSESSMENT SCHEDULE FOR WATER AND WASTEWATER SYSTEM SDC'S

Enterprise	Number of EDU's	Units
Apartments	0.75	per dwelling unit (EDU)
Apparel Store	0.2	per 1,000 ft ²
Athletic Club	0.3	per 1,000 ft ²
Auto Care	0.1	per service bay
Auto Parts Sales	0.2	per 1,000 ft ²
Auto Sales	0.2	per 1,000 ft ²
Bank, Drive-in	0.3	per 1,000 ft ²
Bank, Walk-in	0.3	per 1,000 ft ²
Building Material and Lumber Store	0.2	per 1,000 ft ²
Cab Company	0.2	per 1,000 ft ²
Car Wash, Automated	na	See meter sizing assessment in Table 3.9
Car Wash, Self Service	0.7	per stall
Cemetery	0.2	per 1,000 ft ²
Church	0.2	per 1,000 ft ²
Community/Junior College	1	Per 250 gross square ft ²
Convenience Market (Open 24 Hours)	0.2	per 1,000 ft ²
Convenience Market (Open 15-16 Hours)	0.2	per 1,000 ft ²
Convenience Market with Gasoline Pumps	0.2	per 1,000 ft ²
	0.1	per pump
Day Care	0.2	per student
Drinking Establishment	0.7	per 1,000 ft ²
Furniture Store	0.2	per 1,000 ft ²
Hardware/Paint	0.2	per 1,000 ft ²
Health/Fitness Club	0.3	per 1,000 ft ²
Hospital	1	See meter sizing assessment in Table 3.9
Industrial	1	See meter sizing assessment in Table 3.9
Library	0.2	per 1,000 ft ²
Lodge/Fraternal	0.3	per 1,000 ft ²
Manufacturing	0.2	per 1,000 ft ²
Medical/Dental Office	0.4	per 1,000 ft ²
Mini-warehouse Storage and warehouses	0.1	per 1,000 ft ²
Mobil Home Park	0.75	Per dwelling unit
Motel (not including laundry facilities or pools)	0.3	per room
Nursery Garden Center	0.2	per 1,000 ft ²
Nursing Home	0.3	per bed
Office Building	0.2	per 1,000 ft ²
Retail establishment, shopping center, grocery, etc.	0.2	per 1,000 ft ²
Post Office	0.2	per 1,000 ft ²
Quick Lubrication Vehicle Stop	0.1	per bay
Recreational Facility, Multipurpose	0.3	per 1,000 ft ²
Restaurant, any type	4	per 1,000 ft ²
Schools	1.4	Per 250 gross square ft ²
Service Station	0.1	per bay
Service Station w/Convenience Market	0.1	per pump
	0.2	per 1,000 ft ²
Townhouse/Condo/Duplex	1	per unit
Single Family Detached Housing	1	per house
Pools and aquatic facilities	na	See meter sizing assessment in Table 3.9
Brewery	na	See meter sizing assessment in Table 3.9
Movie Theatre	0.3	per 100 seats
Commercial/Coin-Op Laundry	1	Per washing machine

TABLE 3-9: EQUIVALENCY TABLE TO CONVERT WATER METER SIZE TO EDU'S

Meter Size	Hydraulic Capacity Factor	No. of EDU's
3/4"	1	1
1"	1.67	1.7
1-1/2"	3.33	3.3
2"	5.33	5.3
3"	10.67	10.7
4"	16.67	16.7
6"	33.33	33.3
8"	53.33	53.3
10"	76.67	76.7

When a specific land use is not included in Table 3- or if the table does not fit the application well, Table 3- can be used to convert the meter size of a new customer into an equivalent EDU amount. Staff should review the new customer's land use plans carefully to ensure that the proper meter size is being utilized by the new property.

3.11 Appeal Process for EDU Assessment Calculation

While Table 3- and Table 3- include a wide assortment of residential and non-residential customer types and meter size estimates with corresponding estimates of the number of EDU's that should be associated with a new customer, it's difficult to address all potential customers through simple tables. Furthermore, the assessment system may not fairly represent a new customer's actual impact on the water system. This is often the case in commercial or industrial developments where water use varies greatly from one business to another. In these cases, the City may choose to allow for an appeal process so that new customers are assessed at a fair and reasonable rate.

The following discussion provides a sample appeal process which may be used in Winston when it is deemed appropriate by the City:

A single EDU in Winston is assumed to have a water demand of around **xxx** gallons per month on average. If a new customer disagrees with the assessment that is calculated using Table 3-, they may be allowed to appeal the assessment and request a trial period

to track water use and compare their own water consumption (and therefore their equivalent water demand) to the average City water usage per EDU. If time allows, a full year should be used to develop an average for the new customer. The average monthly water consumption of the new customer should be compared against the City's typical average. If this results in a lower EDU rating, an adjustment to the assessment could be made.

The City may wish to hold an SDC deposit during the appeal period. The amount of the deposit should be established by the City. A reasonable deposit amount equal to one-half (1/2) the amount estimated using Table 3-, may be appropriate. Depending on the results of the water use study, the new user may either receive a refund of some of the SDC payment or be required to pay additional SDC costs.

A specific example of the above appeal process follows:

A new restaurant wishes to open in the City. Through a plan review, it is determined that the restaurant has 2,000 square feet of floor space. Based on Table 3- the assessment to the restaurant would be for 8 EDU's.

The restaurant owner protests and appeals this calculation. They are assessed for 4 EDU's as a deposit and can track the water use during their first year in operation. At the end of this period, they produce water bills showing that they used an average of 30,000 gallons per month. This equates to around 7.32 EDU's of water use. The restaurant is charged for an additional 3.32 EDU's worth of water system SDC's. Through the appeal process, the restaurant reduced the SDC assessment for water by 0.68 EDU's.

The inclusion of an appeal process will necessitate additional administration of individual customer SDC issues and may increase the costs associated with SDC compliance and administration. Appeals should only be considered for non-residential customers.

For the residential sector, it is recommended that the City keep the assessment method as simple as possible. Each new home should be assessed on a single EDU basis with no adjustments to be made for square footage, fixture counts, or other more complex methods.

4 COMPLIANCE COSTS

4.1 Introduction

Oregon law includes provisions that allow SDC revenues to be used to offset costs incurred by local governments in complying with the provisions of SDC law, including expenses associated with developing SDC methodologies, master planning, administration and updating of CIP lists, and other compliance related costs. Amendments to the law require annual accounting of SDC expenditures including revenue collected and attributed to the costs of compliance. The expenses of this annual accounting process are also considered to be related to the costs of compliance and can be paid for with SDC revenues.

4.2 Compliance Costs

Unlike reimbursement and improvement SDC's, compliance costs do not represent another category of system development charge. For Winston, it is recommended that compliance costs be established as a percentage of the total SDC's that are likely to be assessed each year. The additional surcharge that is to be added to all SDC's will provide the funds necessary to administer each of the SDC programs and comply with current SDC laws and requirements.

The following sections provide a brief description of the components that comprise the compliance cost methodology.

4.2.1 Auditing/Accounting Costs

The City is required to complete annual accounting and auditing of all of the SDC programs that are implemented. The City must account for all revenues collected through SDC assessments, all expenses and project costs that are fully or partially paid for with SDC funds, and all other debits or credits from the SDC funds.

For the purposes of this document, it will be assumed that auditing and accounting expenses will not exceed \$2,000 per year.

4.2.2 SDC Methodology and Administration

The City will need to perform regular updates to their SDC methodology to account for increases in project costs (inflation), additions to the capital improvement project list,

adjustments for project financing specifics as projects develop (i.e. interest rates, grants, etc.), population or growth rate changes, and other issues that may change the SDC charge for one or more of the individual SDC programs. These updates may be required, to a greater or lesser extent, on an annual basis.

It is also assumed that a full SDC methodology update will be required at least once each decade as planning efforts are updated. This major SDC methodology update may be required once every ten years and would ensure that the City's SDC methodology meets all current legal requirements and is coordinated with updated planning efforts and CIP's.

While the cost of administering and updating the City's SDC methodology may vary, it is recommended that the City budget \$2,100 per year for this purpose. The cost to update SDC methodology is 100 percent SDC eligible. This will include costs for consulting assistance and administrative costs of city staff as they address SDC issues, determine assessments, track funds, and perform other SDC administrative tasks.

4.2.3 Infrastructure Planning Efforts

Most master planning and facilities planning efforts cover a planning period of 20 years. Changes in community needs, development pressures, regulatory changes, or other issues often prompt these planning documents to be updated or repeated on a more frequent basis than the planning period suggests.

For the purpose of establishing compliance costs, it is recommended that water and wastewater system planning be repeated on a schedule of at least once every 10 years. It may be that a major planning effort is required in year 1 and a less involved planning effort or update is appropriate for year 10. In any event, the City should be collecting revenues through the planning process that will allow them to update their planning documents as required.

It can be argued that 100 percent of the costs associated with planning should be considered SDC eligible; however, some of the effort involved with infrastructure planning includes assessing existing facilities, their capacities and condition, and the capabilities of the existing systems to provide service to existing and future customers. The planning effort also includes determining the infrastructure needs associated with growth and development. Therefore, the compliance cost associated with infrastructure planning should be borne in part by the SDC programs and in part by the existing system users.

For the purposes of this analysis, it is recommended that 18.0% (the portion of the population attributable to growth over the next 20 years, 1250 persons/6929 persons =18%) of the recurring planning costs be considered attributable to growth. These costs are SDC eligible. The individual costs of these planning efforts are estimated in Table 4-1.

4.2.4 Total Estimated SDC Revenue

As it is recommended that compliance costs should be charged as a percentage surcharge of SDC revenues, the amount of SDC revenue that is anticipated to be collected must be estimated.

For this calculation, it was assumed that the City will charge the maximum defensible SDC for each system. This calculation will require adjustment should the City opt to charge less than the maximum defensible SDC for each system. The annual compliance costs and annual expected revenue were then used to calculate the recommended percentage surcharge necessary to pay for associated SDC compliance costs.

It was determined that the Wastewater System SDC program will add (1250 people) 494 EDU's over 20 years; therefore, it should be assumed that the system will add an average of 24.7 EDU's each year to the system. The compliance costs associated with the Wastewater System SDC program should be paid as a percentage of the SDC revenues collected from the 24.7 new EDU's added to the system in any given year.

This analysis was repeated for each of the SDC programs. A summary of this analysis is provided below in Table 4-2.

4.2.5 Calculation of Compliance Expenses

Table 4-1 summarizes the estimated compliance costs associated with the proper administration of an SDC program for the Winston. These expenses include annual costs for accounting and administration as well as long term costs for planning efforts.

TABLE 4-1: SDC COMPLIANCE EXPENSES

Compliance Activity	Estimated Cost	SDC Eligibility	Frequency (Years)	Annual Cost
General Accounting/Administrative Costs				
Auditing/Accounting	\$2,000	100%	1	\$2,000
SDC Methodology Administration & Annual Adjustments	\$5,000	100%	1	\$5,000
SDC Methodology Update	\$21,000	100%	10	\$2,100
Water System Compliance Costs				
Water Master Planning	\$60,000	13.0%	10	\$780
Water Conservation and Management Planning	\$25,000	13.0%	20	\$163
Subtotal Annual Compliance Costs	\$113,000			\$10,043

Based on this analysis, it is estimated that \$9,820 per year will be needed to properly administer the City’s SDC programs. This includes costs for planning and general administration.

4.2.6 Summary of SDC Revenue and Calculation of Compliance Charge

Each section of this methodology describes the growth potential, over a 20-year planning period, for each infrastructure sector. To calculate the average annual SDC revenue, it was assumed that a constant growth rate would occur for each sector for the duration of the planning period. It is important to note that this assumption has been made to simplify the calculation and administration of the SDC Compliance Charge and that growth is not necessarily projected to occur at a constant growth rate as shown in Table 3-1.

The SDC per EDU was multiplied by the annual anticipated growth in EDUs to estimate the annual SDC revenue for each infrastructure sector. Table 4-2 below summarizes the estimated revenue expected within each sector.

TABLE 4-2: ANTICIPATED SDC REVENUE BY SYSTEM

Estimates of SDC Revenues	Added EDU's EDU's/yr	SDC Charge per EDU	Annual Revenue
Estimated Annual Water SDC Revenues	24.70	\$7,500	\$185,250
Total Estimated SDC Revenues			\$185,250
Compliance Cost Charge (Annual Cost/Annual Revenue)			5.30%

An appropriate SDC compliance charge was determined by dividing the annual anticipated compliance costs estimated in Table 4-1 by the total estimated annual revenue in Table 4-2.

Based on this analysis, a compliance charge of approximately 5.3% of the SDC revenue be collected. On average, this charge should produce enough revenue annually to assist the City with the compliance and administration of all the SDC programs.

When SDC's are collected, the City must deposit an appropriate amount into the SDC account, taking care to separate the individual SDC charges as well as an appropriate portion of the compliance costs into each separate account.

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5 SDC COMPARISON

This section compares the SDCs proposed in this methodology to those of other municipalities in the region. It is important to note that comparing SDCs from other cities to those proposed here should not be used as a benchmark of “reasonableness” given the variation in infrastructure needs from city to city and differences in costs for goods and services.

SDC’s from the following cities were included in this comparison due to their proximity to the Winston.

Each city has flexibility in the method used to calculate SDCs assessed on new development. The comparison presented here was determined for a detached single-family residence. In cases where the method used by the comparative municipality differed from the method proposed for the City, the following criteria were used as defining characteristics of a detached single-family home:

- Number of Bedrooms: 3
- Number of Bathrooms: 2.5
- House Square Footage: 1,600 SF
- Water and Sewer Fixtures (Qty): Lavatory (3), Toilet (3), Shower or Tub (2), Sink (1), Dishwasher (1), Clothes washer (1), Hose Bibb (2)
- Water Meter Size: $\frac{3}{4}$ ”

TABLE 5-1: COMPARISON OF SYSTEM DEVELOPMENT CHARGES

Municipality	Water	Notes
Winston (current)	\$3,450	\$1000 Install Fee
Winston (Proposed)	\$6,000	
Sutherlin	\$1,675	\$490 Install Fee
RUSA	\$3,240	SDC plus meter install fee
Tri City	\$4,950	\$500 Install Fee, \$247.50 admin
Myrtle Creek	\$2,412	
Oakland	\$2,695	\$1100 more for connection fee and inspection
Canyonville	\$5,394	
Riddle	\$3,000	
Drain	\$1,619	
Cottage Grove	\$1,058	

¹City of Sutherlin obtained from [https://www.ci.sutherlin.or.us/system_development_charges_\(sdc\)/index.php](https://www.ci.sutherlin.or.us/system_development_charges_(sdc)/index.php)

²RUSA obtained from <https://www.rusa-or.org/roseburg-urban-sanitary-authority-updated-fee-schedule>

³Tri City obtained from <https://www.tcwsa.com/Rate-Schedule>

⁴Myrtle Creek Obtained by contacting City Hall

⁵Oakland obtained from <http://www.oaklandoregon.org/water.html>

⁶City of Canyonville obtained from contacting City Hall

⁷City of Riddle obtained from Oregon System Development Charges Public Review Draft 10/18/2022

⁸City of Drain obtained from Oregon System Development Charges Public Review Draft 10/18/2022

⁹City of Cottage Grove obtained from <https://www.cottagegroveor.gov/publicworks/page/system-development-charges-0>

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