



Gregory L. Geist  
Director

June 27, 2019

Board of County Commissioners  
Clackamas County

Members of the Board:

**RESOLUTION ADOPTING AND APPROPRIATING FISCAL YEAR 2019-2020 BUDGET AND FUNDS FOR WATER ENVIRONMENT SERVICES**

|                                        |                                                                                                                                                                                                                                        |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose/Outcomes</b>                | Adopt and appropriate Fiscal Year 2019-20 budget and funds for Water Environment Services ("WES").                                                                                                                                     |
| <b>Dollar Amount and Fiscal Impact</b> | The spending level considered necessary by the Budget Committee for WES to meet operations and maintenance, capital, and debt service requirements and to provide reserves amounts to \$121,196,647.00 for Water Environment Services. |
| <b>Funding Source</b>                  | WES funds. No General funds.                                                                                                                                                                                                           |
| <b>Duration</b>                        | July 1, 2019 through June 30, 2020                                                                                                                                                                                                     |
| <b>Previous Board Action/Review</b>    | None                                                                                                                                                                                                                                   |
| <b>Strategic Plan Alignment</b>        | 1. WES Customers will continue to benefit from a well-managed utility.<br>2. Build public trust through good government.                                                                                                               |
| <b>Contact Person</b>                  | Doug Waugh, Finance Manager <a href="mailto:dougwau@clackamas.us">dougwau@clackamas.us</a>                                                                                                                                             |
| <b>Contract No.</b>                    | N/A                                                                                                                                                                                                                                    |

**BACKGROUND:**

The attached Resolution and exhibit adopts and appropriates funds for the enterprise fund budget for Fiscal Year 2019-20 for Water Environment Services ("WES"), and further adopts and appropriates the debt service fund budget for WES.

The Budget Committee for WES met on June 3, 2019 to consider its budget. The budget for WES was unanimously approved as recommended by staff. Spending levels considered necessary by the Budget Committee for WES to meet its operations and maintenance, capital and debt service requirements and to provide reserves amount to \$121,196,647.00.

At the June 3, 2019 Budget Committee meeting, staff also presented the Water Environment Services' Advisory Committee's recommended increases in the Sanitary Sewer SDC and Surface Water SDC rates. The budget committee approved the recommended SDC rate increases. The budget as approved by the Budget Committee has been revised to include the additional revenues collected from the SDC increases and the resulting increase in reserves which were incorporated after the budget was approved. This revision did not result in any change to the expenditures as approved by the Budget Committee.

This resolution to adopt and appropriate Fiscal Year 2019-20 budget and funds has been reviewed and approved by County Counsel.

**RECOMMENDATION:**

Staff recommends the Board of County Commissioners of Clackamas County, as the governing body of Water Environment Services, approve the Resolution adopting and appropriating the budget and funds for Fiscal Year 2019-20 for Water Environment Services.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Greg Geist", with a long horizontal flourish extending to the right.

Greg Geist, Director  
Water Environment Services

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

A Resolution Adopting a 2019-2020  
Fiscal Year Budget and Making  
Appropriations for the Period of July  
1, 2019 through June 30, 2020



Resolution No. \_\_\_\_\_

WHEREAS, the proposed expenditures and resources constituting the budget for Water Environment Services for the period of July 1, 2019 through June 30, 2020, inclusive, has been prepared, published and approved by the Budget Committee, and that the matters discussed at the public hearing were taken into consideration, as required by Oregon statutes; and

WHEREAS, in accordance with ORS 294.920, the notice of this public hearing and a financial summary were published in The Oregonian on June 14<sup>th</sup>, 2019; and

WHEREAS, ORS 294.456 and ORS 294.910 require municipal corporations to make appropriations when adopting the budget, as shown in Exhibit A.

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

The budget is hereby adopted for the Fiscal Year 2019-2020 in the amount of **\$121,196,647.00** and establishes appropriation as shown in the attached Exhibit A, which by this reference is made a part of this resolution.

ADOPTED this 27<sup>th</sup> day of June, 2019.

CLACKAMAS COUNTY BOARD OF COUNTY  
COMMISSIONERS as the Governing Body  
of Water Environment Services:

\_\_\_\_\_  
Chair

\_\_\_\_\_  
Recording Secretary

**WATER ENVIRONMENT SERVICES  
FISCAL YEAR 2019-2020 BUDGET  
EXHIBIT A**

**SANITARY SEWER OPERATING FUND**

|                        |               |
|------------------------|---------------|
| Materials and Services | \$ 24,723,633 |
| Special Expenditures   |               |
| Transfers              | 20,395,406    |
| Contingency            | 4,121,000     |

**TOTAL OPERATING FUND EXPENDITURES** \$ 49,240,039

**SANITARY SEWER SYSTEM DEVELOPMENT CHARGE FUND**

|                      |              |
|----------------------|--------------|
| Capital Outlay       | \$ 4,248,500 |
| Special Expenditures |              |
| Contingency          | 1,062,125    |

**TOTAL SYSTEM DEVELOPMENT CHARGE  
FUND EXPENDITURES** \$ 5,310,625

**SANITARY SEWER CONSTRUCTION FUND**

|                      |               |
|----------------------|---------------|
| Capital Outlay       | \$ 38,449,500 |
| Special Expenditures |               |
| Contingency          | 9,612,375     |

**TOTAL CONSTRUCTION FUND EXPENDITURES** \$ 48,061,875

**SURFACE WATER OPERATING FUND**

|                        |              |
|------------------------|--------------|
| Materials and Services | \$ 5,435,236 |
| Special Expenditures   |              |
| Transfers              | 3,000,000    |
| Contingency            | 906,000      |

**TOTAL OPERATING FUND EXPENDITURES** \$ 9,341,236

**SURFACE WATER SYSTEM DEVELOPMENT CHARGE FUND**

|                      |           |
|----------------------|-----------|
| Capital Outlay       | \$ 50,000 |
| Special Expenditures |           |
| Contingency          | 12,500    |

**TOTAL SYSTEM DEVELOPMENT CHARGE  
FUND EXPENDITURES** \$ 62,500

**SURFACE WATER CONSTRUCTION FUND**

|                      |            |
|----------------------|------------|
| Capital Outlay       | \$ 775,000 |
| Special Expenditures |            |
| Contingency          | 193,750    |

**TOTAL CONSTRUCTION FUND EXPENDITURES** \$ 968,750

**STATE LOAN FUND**

|                        |            |
|------------------------|------------|
| Principal and Interest | \$ 463,112 |
| Special Expenditures   |            |
| Transfers              | 900,000    |
| Reserve                | 53,104     |

**TOTAL DEBT SERVICE FUND EXPENDITURES** \$ 1,416,216

**REVENUE BOND FUND**

|                        |              |
|------------------------|--------------|
| Principal and Interest | \$ 6,795,406 |
| Special Expenditures   |              |
| Reserve                | -            |

**TOTAL DEBT SERVICE FUND EXPENDITURES** \$ 6,795,406



Gregory L. Geist  
Director

June 27, 2019

Board of County Commissioners  
Clackamas County

Members of the Board:

**BOARD ORDER AMENDING AND ADOPTING RATES AND CHARGES FOR  
WATER ENVIRONMENT SERVICES**

|                                        |                                                                                                                                                                                  |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose/Outcomes</b>                | Amend and adopt rates and charges for Water Environment Services.                                                                                                                |
| <b>Dollar Amount and Fiscal Impact</b> | Harmonization of wholesale and retail rates across Rate Zones One and Two, and inflationary adjustment to surface water rates.                                                   |
| <b>Funding Source</b>                  | Ratepayer payments for services.                                                                                                                                                 |
| <b>Duration</b>                        | July 1, 2019 through June 30, 2020                                                                                                                                               |
| <b>Previous Board Action/Review</b>    | None                                                                                                                                                                             |
| <b>Strategic Plan Alignment</b>        | <ol style="list-style-type: none"> <li>1. WES Customers will continue to benefit from a well-managed utility.</li> <li>2. Build public trust through good government.</li> </ol> |
| <b>Contact Person</b>                  | Doug Waugh, Finance Manager <a href="mailto:dougwau@clackamas.us">dougwau@clackamas.us</a>                                                                                       |
| <b>Contract No.</b>                    | N/A                                                                                                                                                                              |

**BACKGROUND:**

The attached Order changes the Equivalent Dwelling Unit (“EDU”) monthly charge for wholesale sanitary sewer service within Rate Zone One (contiguous with the boundaries of the Tri-City Service District) of Water Environment Services (“WES”) from \$23.00 to \$23.75 per EDU. The City of Oregon City will be charged an additional amount of \$1.50 per EDU to offset the City’s right of way usage fee. The City of Gladstone will be charged an additional amount of \$1.20 per EDU to offset the City’s right of way usage fee. The monthly service charge for retail sanitary sewer service within Rate Zone One will be adjusted from \$33.25 to \$36.40 per EDU.

The retail EDU monthly charge for sanitary sewer service within Rate Zone Two (contiguous with the boundaries of Clackamas County Service District No. 1) will be adjusted from \$48.15 to \$50.55/EDU, and the retail Equivalent Service Unit (ESU) for surface water management services within Rate Zone Two will be adjusted from \$6.95 to \$7.30/ESU. Ratepayers in the City of Happy Valley will be charged an additional amount of 5% or approximately \$2.53 per EDU for sanitary sewer service and approximately \$0.37 per ESU for surface water management service to offset the City’s right-of-way usage fee. The wholesale EDU monthly charge for sanitary sewer service in Rate Zone Two changes from \$36.10 to \$37.90/EDU.

The monthly service charge for retail surface water service will be adjusted from \$4.25 to \$4.45 per Equivalent Service Unit within Rate Zone Three (contiguous with the boundaries of the Surface Water Management Agency of Clackamas County).

These changes are effective for service rendered on and after July 1, 2019. The Order further requires WES to amend its published service charge schedule to reflect this change.

The change in charges for monthly sanitary sewer service and monthly surface water service for WES is pursuant to the Fiscal Year 2019-2020 budget approved by WES' Budget Committee on June 3, 2019, and adopted by the Board on June 27, 2019.

**RECOMMENDATION:**

Staff recommends the Board of County Commissioners of Clackamas County, as the governing body of Water Environment Services, approve the Order amending and adopting rates and charges for Water Environment Services.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Greg Geist", with a long horizontal flourish extending to the right.

Greg Geist, Director  
Water Environment Services

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

In the Matter of an Order Amending  
and Adopting Rates and Charges  
for Water Environment Services,  
Clackamas County, Oregon

ORDER NO.

Page 1 of 3

This matter came for hearing before the Board of County Commissioners of Clackamas County, Oregon ("Board"), as the governing body of Water Environment Services ("WES"), in public hearing on June 27<sup>th</sup>, 2019.

WHEREAS, WES finds that WES' Rules and Regulations allow for adoption and amendment of rates and charges by order;

WHEREAS, in order to meet the continuing obligations and ensure effective performance of WES, it is necessary for WES to adopt a wholesale sanitary sewer equivalent dwelling unit ("EDU") charge within Rate Zone One of \$23.75 per EDU per month. The City may set such additional amounts for monthly sanitary sewer user charges which shall be added to WES' wholesale sanitary sewer charge, and the entire amount shall be billed by the City;

WHEREAS, in order to meet the continuing obligations and ensure effective performance of WES, it is necessary for WES to adopt a retail sanitary sewer charge within Rate Zone One of \$36.40 per EDU per month;

WHEREAS, in order to meet the continuing obligations and ensure effective performance of WES, it is necessary for WES to adopt a retail sanitary sewer charge within Rate Zone Two of \$50.55 per EDU per month;

WHEREAS, in order to meet the continuing obligations and ensure effective performance of WES, it is necessary for WES to adopt a retail surface water equivalent service unit ("ESU") charge within Rate Zone Two of \$7.30 per ESU per month;

WHEREAS, in order to meet the continuing obligations and ensure effective performance of WES, it is necessary for WES to adopt a retail surface water charge within Rate Zone 3 of \$4.45 per ESU per month;

WHEREAS, in order to meet continuing obligations and ensure equity amongst ratepayers and avoid a budget deficit, it is necessary for WES to adopt a methodology that allows for charges to any municipal customer of WES that levies, charges, taxes or otherwise imposes additional costs on WES relating to the use of public right of way within that municipality in an amount equal to the cost of such levy, charge, tax or other cost plus the maximum statutorily allowed interest rate to be charged for late fees;

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

In the Matter of an Order Amending  
and Adopting Rates and Charges  
for Water Environment Services,  
Clackamas County, Oregon

ORDER NO.

Page 2 of 3

WHEREAS, in order to implement such methodology for Fiscal Year 2019-20, WES shall charge the City of Oregon City \$1.50 per month per EDU served by Oregon City, in addition to the \$23.75 wholesale EDU rate, all effective July 1, 2019, pursuant to WES' approved budget. WES shall charge the City of Gladstone \$1.20 per month per EDU served by Gladstone, in addition to the \$23.75 wholesale EDU rate, all effective July 1, 2019, pursuant to WES' approved budget. WES shall charge the customers of WES residing within the City of Happy Valley an additional 5% or approximately \$2.53 per EDU per month for sanitary sewer service and an additional 5% or approximately \$0.37 per EDU per month for surface water services pursuant to the adopted rate methodology, all effective July 1, 2019, pursuant to WES' approved budget.

The Board, having held a hearing, considered testimony, factual supporting materials and the above findings and rate methodology, and being fully advised, it is hereby ORDERED:

1. Effective July 1, 2019, WES' published service charge schedule is amended in part to reflect the changes in charges below:
  - a. WES' wholesale sanitary sewer service charge shall be \$23.75 per month for each dwelling unit or equivalent dwelling unit as assigned each class of service, which shall be paid by the City for each user from the date of connection of such user to the sewerage system within Rate Zone One (contiguous with the boundaries of the Tri-City Service District). Payment shall be made to the City in which the property is located for subsequent remittance to WES, except for those areas billed directly to the users by WES. WES shall bill for and directly receive the retail charge of \$36.40 for retail sanitary sewer customers within Rate Zone One. WES shall bill the City of Oregon City an additional \$1.50 per EDU, pursuant to the adopted rate methodology. WES shall bill the City of Gladstone an additional \$1.20 per EDU, pursuant to the adopted rate methodology. WES shall set the sewer service charges for each user based upon WES' service charge schedule.
  - b. WES' retail sanitary sewer service charge shall be \$50.55 per month for each dwelling unit or equivalent dwelling unit within Rate Zone Two (contiguous with the boundaries of Clackamas County Service District No. 1). WES shall charge retail customers of Rate Zone Two residing in the City of Happy Valley an additional 5% or approximately \$2.53 per EDU for sanitary sewer service pursuant to the adopted rate methodology. WES' wholesale sanitary sewer service charge within Rate Zone Two shall be \$37.90 per month for each dwelling unit or equivalent dwelling unit as assigned each class of service, which shall be paid by the Cities of Milwaukie and Johnson City for each user from the date of connection of such user to the sewerage system within Rate Zone Two.
  - c. WES' retail surface water service charge shall be \$7.30 per month for each service unit or equivalent service unit within Rate Zone Two (contiguous with the boundaries of Clackamas County Service District No. 1). WES shall charge retail customers of Rate Zone Two residing in the City of Happy Valley an additional 5% or approximately \$0.37 per EDU for surface water service pursuant to the adopted rate methodology.



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

In the Matter of an Order Amending  
and Adopting Rates and Charges for  
Water Environment Services,  
Clackamas County, Oregon

ORDER NO.

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- d. WES' retail surface water service charge shall be \$4.45 per month for each service unit or equivalent service unit within Rate Zone Three (contiguous with the boundaries of the Surface Water Management Agency of Clackamas County).
2. WES staff is directed to publish the amended service charge schedule in accordance with this Order.
3. In all other respects, the Rules and Regulations of WES remain in full force and effect.
4. An executed copy hereof shall be kept on file at Water Environment Services.

PASSED this 27<sup>th</sup> day of June, 2019, after public hearing by the Board of County Commissioners at its regular meeting.

CLACKAMAS COUNTY BOARD OF COUNTY  
COMMISSIONERS as the Governing Body  
of Water Environment Services:

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Chair

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Recording Secretary



Gregory L. Geist  
Director

June 27, 2019

Board of County Commissioners  
Clackamas County

Members of the Board:

**BOARD ORDER ESTABLISHING SYSTEM DEVELOPMENT CHARGES FOR  
WATER ENVIRONMENT SERVICES FOR FY 2019-2020**

|                                        |                                                                                                                                                                                                                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose/Outcomes</b>                | Ensuring continued collection of system development charges and increasing the revenues received from new development within Water Environment Services (“WES”).                                                                                              |
| <b>Dollar Amount and Fiscal Impact</b> | Projected to collect ~\$2,279,000 in additional wholesale Sanitary Sewer System Development Charges (“SDC”) revenues annually. Projected to collect ~\$3,300 in additional Rate Zone Two Surface Water SDC revenues annually.                                 |
| <b>Funding Source</b>                  | No General Funds involved.                                                                                                                                                                                                                                    |
| <b>Duration</b>                        | Permanent.                                                                                                                                                                                                                                                    |
| <b>Previous Board Action/Review</b>    | In June 2017, the SDC methodology for CCSD#1 and TCSD were adopted as the system development charge methodology for WES. In June 2018, the Board approved an SDC rate increase to \$3,490 for Rate Zone One and a rate increase to \$7,615 for Rate Zone Two. |
| <b>Strategic Plan Alignment</b>        | 1. WES Customers will continue to benefit from a well-managed utility.<br>2. Build public trust through good government.                                                                                                                                      |
| <b>Contact Person</b>                  | Doug Waugh, Finance Manager <a href="mailto:dougwau@clackamas.us">dougwau@clackamas.us</a>                                                                                                                                                                    |
| <b>Contract No.</b>                    | N/A                                                                                                                                                                                                                                                           |

**BACKGROUND:**

Water Environment Services, an intergovernmental partnership formed under ORS Chapter 190 (“WES”), began providing services within Rate Zone One (contiguous with the boundaries of the Tri-City Service District) and Rate Zone Three (contiguous with the boundaries of the Surface Water Management Agency of Clackamas County) on July 1, 2017, and began providing services within Rate Zone Two (contiguous with the boundaries of Clackamas County Service District No. 1) on July 1, 2018.

WES’ Rules and Regulations allow for an update to the Sanitary Sewer and Surface Water System Development Charges (“SDCs”).

On February 21, 2019, the Board of County Commissioners adopted the WES Capital Improvement Plan for FY 2018-2023 (the "CIP"). The CIP anticipates approximately two hundred twenty-four million dollars (\$224,000,000) in infrastructure improvements, primarily relating to wastewater services. A material portion of that CIP is infrastructure needed to serve anticipated growth in connections. The cost of those growth-related elements of the CIP were spread across the estimated number of new equivalent dwelling units ("EDUs") anticipated during the relevant time period. This resulted in a statutorily-allowed maximum SDC rate for WES new customers of \$13,019 per EDU. The calculations used to arrive at this SDC rate are detailed in the June 2019 report titled "Wastewater System Development Charge Update" produced by Donovan Enterprises, Inc., attached hereto as Exhibit A.

On May 23, 2019, staff presented to Water Environment Services' Advisory Committee that report, and four options for Sanitary Sewer SDC rates for Fiscal Year 2019-20. The committee voted to recommend the "status quo cost recovery" option, consisting of a harmonized Sanitary Sewer Wholesale Service SDC rate across all sewer service areas, applicable to all new customers in Rate Zones One and Two, of \$7,850 per EDU. This rate, as less than what is statutorily authorized, will result in an estimated increase of approximately \$2.28 million in revenue. The SDC rate established is entirely related to wholesale sanitary sewer service, with the retail service component of the SDC being set to zero at this time.

On June 3, 2019, staff presented to Water Environment Services' Budget Committee the fiscal year 2019-20 budget, which included the Advisory Committee's recommended increases in the Sanitary Sewer SDC in Rate Zones One and Two to \$7,850, and an increase in the Surface Water SDC in Rate Zone Two of 3.0% from \$205 to \$211. The Budget Committee unanimously voted to recommend approval of the budget, which included the increases.

**RECOMMENDATION:**

Staff respectfully recommends that the Board of County Commissioners, as the governing body of Water Environment Services, adopts the resolution increasing the sanitary sewer wholesale services system development charge in Rate Zone One and Two to \$7,850, and increasing the surface water system development charge to \$211 for WES Rate Zone Two.

Respectfully submitted,



Greg Geist, Director  
Water Environment Services

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

The Matter of an Order Establishing  
System Development Charges for  
Water Environment Services for  
Fiscal Year 2019-2020

ORDER NO.

Page 1 of 2

This matter coming before the Board of County Commissioners of Clackamas County, Oregon, as the governing body of Water Environment Services (the "Board"), an intergovernmental entity created pursuant to Oregon Revised Statutes Chapter 190 ("WES"), in the Board's regular business meeting on June 27, 2019.

WHEREAS, WES began providing services within Rate Zone One (contiguous with the boundaries of the Tri-City Service District ("TCSD")) and Rate Zone Three (contiguous with the boundaries of the Surface Water Management Agency of Clackamas County) as of July 1, 2017, and began providing services within Rate Zone Two (contiguous with the boundaries of Clackamas County Service District No. 1 ("CCSD#1")) as of July 1, 2018; and

WHEREAS, on June 29, 2017, the SDC methodology for CCSD#1 and TCSD were adopted as the System Development Charge ("SDC") methodology for WES; and

WHEREAS, on February 21, 2019, the Board of County Commissioners adopted the WES Capital Improvement Plan for FY 2018-2023 (the "CIP"), which anticipates approximately two hundred twenty-four million (\$224,000,000) in infrastructure improvements, primarily relating to wastewater services; and

WHEREAS, under the FY 2018-2023 CIP, a statutory maximum rate of \$13,019 per EDU was calculated as detailed in a report titled "Wastewater System Development Charge Update" created by Donovan Enterprises, Inc. in June 2019, attached as Exhibit A and incorporated herein ("2019 Donovan Report"); and

WHEREAS, WES' Rules and Regulations allow for the update of a Sanitary Sewer SDC by order based upon new CIP information and projects; and

WHEREAS, on May 23, 2019, the Water Environment Services Advisory Committee recommended the Board harmonize the Sanitary Sewer wholesale SDC rate within Rate Zones One and Two and increase the Sanitary Sewer SDC rate to \$7,850 for fiscal year 2019-2020, rather than to the CIP-justified statutory maximum of \$13,019 per EDU; and

WHEREAS, on June 3, 2019, the Water Environment Services Budget Committee approved the fiscal year 2019-20 budget for WES, which included a Sanitary Sewer wholesale SDC rate of \$7,850 for both Rate Zones One and Two and a Surface Water SDC rate of \$211; and

WHEREAS, in order to meet the continuing obligations and ensure effective performance of WES, it is necessary to adopt an increased Sanitary Sewer wholesale SDC within Rate Zone One of \$7,850, and adopt an increased Sanitary Sewer wholesale SDC within Rate Zone Two of \$7,850, and also adopt an increased Surface Water SDC within Rate Zone Two of \$211;

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

The Matter of an Order Establishing  
System Development Charges for  
Water Environment Services for  
Fiscal Year 2019-2020

ORDER NO.

Page 2 of 2

The Board, having held a hearing and considered the factual supporting materials, and being fully advised, it is hereby ORDERED:

1. Effective August 1, 2019, the WES wholesale sanitary sewer service system development charge within Rate Zone One (contiguous with the boundaries of the Tri-City Service District) shall be Seven Thousand Eight Hundred Fifty Dollars (\$7,850.00) per equivalent dwelling unit as defined and applied by the WES Rules and Regulations, the previously-adopted methodology, and the 2019 Donovan Report; and
2. Effective August 1, 2019, the WES wholesale sanitary sewer service system development charge within Rate Zone Two (contiguous with the boundaries of Clackamas County Service District No. 1) shall be Seven Thousand Eight Hundred Fifty Dollars (\$7,850.00) per equivalent dwelling unit as defined and applied by the WES Rules and Regulations, the previously-adopted methodology and the 2019 Donovan Report; and
3. Effective August 1, 2019, the WES surface water system development charge within Rate Zone Two shall be Two Hundred Eleven Dollars (\$211.00) per equivalent service unit as defined and applied by the WES SDC ordinance and the previously-adopted methodology; and
4. WES staff is directed to publish these updated SDC charges where appropriate, in accordance with this order; and
5. An executed copy hereof shall be kept on file at WES.

ADOPTED this 27<sup>th</sup> day of June, 2019.

CLACKAMAS COUNTY BOARD OF COUNTY  
COMMISSIONERS as the Governing Body  
of Water Environment Services:

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Chair

---

Recording Secretary

Presented by:



June

# 2019

Wastewater System  
Development Charge  
Update

Final Report

Prepared for:



Donovan Enterprises, Inc.  
9600 SW Oak Street, Suite 335  
Tigard, Oregon 97223-6596  
☎ 503.517.0671  
[www.donovan-enterprises.com](http://www.donovan-enterprises.com)

# Water Environment Services 2019 Wastewater SDC Methodology Update

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## Introduction/History of the Project

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

The current schedule of SDCs were last reviewed in the Fall of 2013. Since that time, WES has completed new master plans for wastewater collection and treatment services. In January of 2019, WES hired Donovan Enterprises, Inc. to review and update the wastewater SDC calculations. No changes have been made to the methodology that is used to calculate the SDCs. With this review and update, WES has stated a number of objectives:

- Review the basis for charges to ensure a consistent methodology;
- Address specific policy, administrative, and technical issues which had arisen from application of the existing SDCs;
- Determine the most appropriate and defensible fees, ensuring that development is paying its way;
- Consider possible revisions to the structure or basis of the charges which might improve equity or proportionality to demand;
- Provide clear, orderly documentation of the assumptions, methodology, and results, so that WES staff could, by reference, respond to questions or concerns from the public.

This report provides the documentation of that effort, and was done in close coordination with WES staff and available facilities planning documents. The SDC update complies with WES Rules and Regulations regarding SDCs (for rate zone 1, Chapter 2, Section 9.1 through 9.1.13; and for rate zone 2, Chapter 4, Section 4.1 through 4.1.15).

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



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

|                              | Calculated<br>SDCs | SDCs as of<br>June 1, 2019 |
|------------------------------|--------------------|----------------------------|
| SDCs by rate zone:           |                    |                            |
| Rate zone 1:                 |                    |                            |
| Reimbursement fee            | -                  | -                          |
| Improvement fee              | 11,927             | 3,490                      |
| Administration fee*          | 596                | -                          |
| <b>Total rate zone 1 SDC</b> | <b>\$ 12,523</b>   | <b>\$ 3,490</b>            |
| Rate zone 2:                 |                    |                            |
| Reimbursement fee            | 357                | -                          |
| Improvement fee              | 12,042             | 7,615                      |
| Administration fee*          | 620                | -                          |
| <b>Total rate zone 2 SDC</b> | <b>\$ 13,019</b>   | <b>\$ 7,615</b>            |

\* note: administration fees are different between rate zones based on assumed flat 5% fee on total calculated reimbursement and improvement fees per zone

## Analytical Process for the SDC Updates

This study is an update of the System Development Charge (SDC) methodology analysis that was completed by WES in December, 2013. This update addresses the levels and structure of SDCs needed to support current and future infrastructure investments managed by WES. This study also takes into account the recommendations of the recently completed wastewater treatment facilities plan update. That plan calls for future investments of \$224 million over the five years by WES.

WES was created in August, 1984, to administer several county service districts formed under ORS Chapter 451. The enabling legislation establishes county service districts as independent municipal corporations authorized to provide specific services within specified boundaries in Clackamas County. The Board of County Commissioners (BOCC) is designated as the governing body with the County Administrator serving as the Administrator of the Districts.

In November of 2016, the BOCC in their capacity as directors of the Tri-City Service District (TCSD), and Clackamas County Service District No. 1 (CCSD1) created an intergovernmental partnership for the delivery of wastewater collection and treatment services. This municipal partnership is called WES. In May of 2017, that partnership agreement was amended to include the Surface Water Management Agency of Clackamas County (SWMACC). WES' formation enables more efficient and cost-effective delivery of wastewater and surface water services on a regionalized basis. At the time of formation, the BOCC created rate zones. As of today, there are three (3) rate zones within WES. Rate zone 1 is coterminous with the boundaries of TCSD. Rate zone 2 is coterminous with the boundaries of CCSD1, and

rate zone 3 is coterminous with SWMACC. The scope of this SDC update is limited to the wastewater SDCs charged by WES in rate zones 1 and 2.

Section 3 of the amended partnership agreement establishes the ratemaking authority of the WES Board. The SDC ratemaking authority and functions are enumerated in Section 3.05. This section is shown in its entirety below:

**3.05 Connection Charge and System Development Charge.** Until at least the end of the Transition Period, each Partner shall collect a Connection Charge and System Development Charge equal to the amount established by the WES Board for every additional structure connected to the WES System beginning with the effective date established by the WES Board. After the Transition Period, the WES Board may directly charge a Connection Charge or direct a Partner to continue charging the same until otherwise directed by the WES Board. Upon change in the character in use of any structure connected to the WES System resulting in increased wastewater or surface water discharge, an additional WES Connection Charge and System Development Charge shall be collected so as to account for actual use, giving appropriate credit for connection charges already paid. After the Transition Period concludes, all Connection Charges and/or System Development Charges shall be paid to WES with the Partner’s next monthly payment following the month in which the charges are collected. At least annually and more frequently as necessary, the WES Board shall consider the Connection Charge and confirm or adjust the amount of the Connection Charge as needed to cover costs of additional conveyance, treatment and management capacity.

The essential ingredient in the development of an SDC methodology is valid sources of data. For this project, the consultant team has relied on a number of data sources. The primary sources have been the newly formulated and adopted capital improvement plans for wastewater. We have supplemented these data sources with WES utility billing records, certified census data, and other documents that we deemed helpful, accurate, and relevant to this study. Table 2 contains a bibliography of the key documents/sources that we relied upon to facilitate our analysis and hence the resulting SDCs.

Table 2 - Data Sources for the Calculation of SDCs

| Service                  | Master Plan Document and/or Corroborating Source Documentation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Wastewater</b></p> | <ul style="list-style-type: none"> <li>• WES Capital Improvement Plan, 2018-2023; September 10, 2018</li> <li>• CCSD1 and TCSD Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2018</li> <li>• 2018 Discharge Monitoring Reports Tri-City wastewater treatment plant and Kellogg Creek wastewater treatment plant</li> <li>• WES wastewater system fixed asset schedule; June 30, 2018; WES records</li> <li>• WES Utility Billing System – wastewater system active accounts and Equivalent Dwelling Units in service report; December, 2018</li> <li>• ECONorthwest Population Forecasts for Expanded Boundaries in the CCSD1 and TCSD Service Areas; August 9, 2016</li> <li>• WES Comprehensive Wastewater Rate Model; Fiscal 2018-19 forecast dated June 4, 2018</li> </ul> |

The data sources shown in Table 2 were used to formulate the two (2) components of the SDCs. These components are the reimbursement and improvement fees. WES has been constructing the SDCs with these two components for over twenty years, and our analysis does not propose to change that methodology. A brief definition of the two components are:

- *The reimbursement fee* considers the cost of existing facilities, prior contributions by existing users of those facilities, the value of the unused/available capacity, and generally accepted ratemaking principles. The objective is future system users contribute no more than an equitable share to the cost of existing facilities. The reimbursement fee can be spent on capital costs or debt service related to the systems for which the SDC is applied.
- *The improvement fee* portion of the SDC is based on the cost of planned future facilities that expand the system's capacity to accommodate growth or increase its level of performance. In developing an analysis of the improvement portion of the fee, each project in the respective service's capital improvement plan is evaluated to exclude costs related to correcting existing system deficiencies or upgrading for historical lack of capacity. An example is a facility which improves system capacity to better serve current customers. The costs for this type of project must be eliminated from the improvement fee calculation. Only capacity increasing/level of performance costs provide the basis for the SDC calculation. The improvement SDC is calculated as a function of the estimated number of additional equivalent residential units to be served by WES's facilities over the planning period. Such a fee represents the greatest potential for future SDC changes. The improvement fee must also provide a credit for construction of a qualified public improvement.

## **SDC Legal Authorization and Background**

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

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

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

charge expenditures.” To avoid spending monies for compliance that might otherwise have been spent on growth-related projects, this report includes an estimate of compliance costs in its SDCs.

## **Reimbursement Fee Methodology**

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

In order to determine an equitable reimbursement fee to be used in conjunction with an improvement fee, two points should be highlighted. First, the cost of the system to WES customers may be far less than the total plant-in-service value. This is due to the fact that elements of the existing system may have been contributed, whether from developers, governmental grants, and other sources. Therefore, the net investment by the customer/owners is less. Second, the value of the existing system to a new customer is less than the value to an existing customer, since the new customer must also pay, through an improvement fee, for expansion of some portions of the system.

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

## **Improvement Fee Methodology**

There are three basic approaches used to develop improvement fee SDCs: “standards-driven”, “improvements-driven”, and “combination/hybrid” approaches. The “standards-driven” approach is based on the application of Level of Service (LOS) standards for facilities. Facility needs are determined by applying the LOS standards to projected future demand, as applicable. SDC-eligible amounts are calculated based on the costs of facilities needed to serve growth. This approach works best where level of service standards has been adopted but no specific list of projects is available. The “improvements-driven” approach is based on a specific list of planned capacity increasing capital improvements. The portion of each project that is attributable to growth is determined, and the SDC-eligible costs are calculated by dividing the total costs of growth-required projects by the projected increase in projected future demand, as applicable. This approach works best where a detailed master plan or project list is available and the benefits of projects can be readily apportioned between growth and current users. Finally, the combination/hybrid-approach includes elements of both the “improvements driven” and “standards-driven” approaches. Level of Service standards may be used to create a list of planned capacity-increasing projects, and the growth required portions of projects are then used as the basis for

determining SDC eligible costs. This approach works best where levels of service have been identified and the benefits of individual projects are not easily apportioned between growth and current users.

In the past, WES has utilized the “improvements-driven” approach for the calculation of SDCs. This study continues to use this method, and has relied on the capital improvement plans that are incorporated in the master plans, and plan updates for the wastewater systems.

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

The key step in determining the improvement fee is identifying capital improvement projects that expand the system and the share of those projects attributable to growth. Some projects may be entirely attributable to growth, such as a wastewater collection line that exclusively serves a newly developing area. Other projects, however, are of mixed purpose, in that they may expand capacity, but they also improve service or correct a deficiency for existing customers. An example might be a pump station project that both expands future capacity and corrects a chronic capacity issue for existing users. In this case, a rational allocation basis must be defined.

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

Figure 1 - SDC Eligibility Criteria

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

In developing the improvement fee, the project team in consultation with WES staff evaluated each of its CIP projects to exclude costs related to correcting existing system deficiencies or upgrading for historical lack of capacity. Only capacity increasing/level of performance costs were used as the basis for the SDC calculation, as reflected in the capital improvement schedules developed by WES. The improvement fee is calculated as a function of the estimated number of projected additional Equivalent Dwelling Units for wastewater over the planning horizon. Once the future costs to serve growth have been segregated (i.e., the numerator), they can be divided by the total number of new EDUs that will use the capacity derived from those investments (i.e., the denominator).

## Methodology for the Granting of Credits, Discounts, and Exemptions

### SDC Credits Policy

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

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

WES has adopted a policy for granting SDC credits, and has codified this policy in the WES Rules and Regulations; last update July, 2018. The adopted SDC credit policy consists of five (5) items as follows:

*WES Rules and Regulations for Wastewater SDC Credits: Rate Zone 1 – Chapter 2; Section 9.1.9; Rate Zone 2 – Chapter 4; Section 4.1.10*

- (a) A permittee is eligible for credit against the improvement fee element of the system development charge for constructing a qualified public improvement. A qualified public improvement means one that meets all of the following criteria:
  - (1) Required as a condition of development approval by the Board or its designee through the development review process; and
  - (2) Identified in the District's Capital Improvement Plan; and
  - (3) (i) Not located within or contiguous to the property or parcel that is subject to development approval; or
    - (ii) 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.
  - (4) This credit shall be only for the improvement fee charged for the type of improvement being constructed. Credit under this section may be granted only for the cost of that portion of the improvement that exceeds the facility size or capacity needed to serve the development project and their oversizing provides capital usable by the district.
- (b) Applying the adopted methodology, the District may grant a credit against the improvement charge for capital facilities provided as part of the development that reduces the development's demand upon existing District capital improvements or the need for further District capital improvements or that would otherwise have to be constructed at District expense under the then-existing Board policies.
- (c) When the construction of a qualified public improvement gives rise to a credit amount greater than the improvement fee that would otherwise be levied against the project receiving development approval, the excess credit may be applied against improvement fees that accrue in subsequent phases of the original development project.
- (d) All credit requests must be in writing and filed with the District before the issuance of a building permit. Improvement acceptance shall be in accordance with the usual and customary practices, procedures and standards of the District. The amount of any credit shall be determined by the District and based upon the subject improvement construction contract documents, or other appropriate information, provided by the applicant for the credit. Upon a finding by the District that the contract amounts exceed the prevailing market rate for a similar

project, the credit shall be based upon market rates. The credit shall state the actual dollar amount that may be applied against any system development charge imposed against the subject property. The applicant has the burden of demonstrating qualification for a credit.

- (e) Credits shall be apportioned against the property which was subject to the requirements to construct an improvement eligible for credit. Unless otherwise requested, apportionment against lots or parcels constituting the property shall be proportionate to the anticipated public facility service requirements generated by the respective lots or parcels. Upon written application to the District, however, credits shall be reapportioned from any lot or parcel to any other lot or parcel within the confines of the property originally eligible for the credit. Reapportionment shall be noted on the original credit form retained by the District.
- (f) Any credits are assignable; however, they shall apply only to that property subject to the original condition for land use approval upon which the credit is based or any partitioned or subdivided parcel or lots of such property to which the credit has been apportioned. Credits shall only apply against system development charges, are limited to the amount of the fee attributable to the development of the specific lot or parcel for which the credit is sought, and shall not be a basis for any refund.
- (g) Any credit request must be submitted before the issuance of a building permit. The applicant is responsible for presentation of any credit and no credit shall be considered after issuance of a building permit.
- (h) Credits shall be used by the applicant within ten years of their issuance by the District.

### **SDC Discount Policy**

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

### **Partial and Full SDC Exemption**

WES may exempt certain types of development, from the requirement to pay SDCs. Exemptions reduce SDC revenues and, therefore, increase the amounts that must come from other sources, such as user fees and property taxes. As in the case of SDC credits, WES has articulated a policy relative to partial and full SDC exemption. This SDC exemption policy is codified in the WES Rules and Regulations (for Rate Zone 1, Chapter 2; Section 9.1.8; for Rate Zone 2, Chapter 4, Section 4.1.9), and is as follows:

- (a) Structures and uses using the sewerage facilities on or before the effective date of the resolution.
- (b) Additions to single-family dwellings that do not constitute the addition of a dwelling unit, as defined by the Uniform Building Code or the City's Zoning Development Ordinance.
- (c) An alteration, addition, replacement or change in use that does not increase the parcel's or structure's use of the sanitary sewer facilities.



## Wastewater SDCs

### Wastewater Capital Improvement Plan

The principal sources of data for the wastewater system CIP are the 2018 capital improvement plans for wastewater treatment, pumping stations, and collection systems. WES Staff have periodically updated these plans for current development conditions. With the assistance of WES Staff, the project team has summarized the 2018 wastewater system CIPs for this SDC methodology update. The 2018 five-year wastewater system CIP is shown in Table 3. The project costs shown in Table 3 are organized in total and by priority tier. These priority tiers are established by WES and the projects assigned to each tier are regularly reviewed for status and efficacy. The criteria WES Staff use to prioritize projects are as follows:

- Health and Safety
- Ease of Implementation
- Innovation
- Regulatory Compliance
- Reliability
- Risk Reduction

Projects which received the highest scores when ranked against these criteria are placed in the first tier and are recommended for funding and will be carried forward in subsequent years of the CIP until completion. To be considered for the CIP, projects must result in the acquisition of an asset with a total cost of \$5,000 or more and an estimated useful life exceeding one year. Capital project costs include the costs of design, construction (or purchase), WES engineering, administrative and legal costs, and financing. Costs must be directly related to, and primarily benefit, a single capital project to be considered project costs.

As discussed above, each project in the 2018 five-year CIP has been reviewed by the project team in consultation with WES staff to eliminate projected costs for correcting existing system deficiencies or upgrading for historical lack of capacity. Table 4 shows the costs by year and by project category for capacity increasing/level of performance costs (i.e., SDC-eligible costs).

Table 3 - 2018 Wastewater System CIP

| CAPITAL CATEGORY   | 18/19             | 19/20             | 20/21             | 21/22             | 22/23             | 5 YEAR CIP         |
|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| TC WRRF            | 19,690,000        | 18,970,000        | 21,320,000        | 21,550,000        | 30,630,000        | 112,160,000        |
| LAB                | 125,000           | 27,000            | 184,000           |                   | 60,000            | 396,000            |
| KC WRRF            | 9,200,000         | 11,700,000        | 8,492,000         | 3,000,000         |                   | 32,392,000         |
| HOODLAND WRRF      | 2,200,000         | 250,000           |                   | 500,000           | 2,750,000         | 5,700,000          |
| BORING WRRF        | 50,000            | 50,000            |                   |                   |                   | 100,000            |
| COLLECTION SYSTEM  | 4,945,000         | 6,160,000         | 13,470,000        | 16,150,000        | 14,750,000        | 55,475,000         |
| BLUE HERON         | 100,000           | -                 | -                 | -                 | 6,000,000         | 6,100,000          |
| FLEET              | 995,000           | 990,000           | 1,041,000         | 1,152,000         | 1,285,000         | 5,463,000          |
| AM BUCKET - TC     | 400,000           | 400,000           | 400,000           | 400,000           | 400,000           | 2,000,000          |
| AM BUCKET - KC     | 400,000           | 400,000           | 400,000           | 400,000           | 400,000           | 2,000,000          |
| PUMP STATION       |                   |                   |                   |                   |                   |                    |
| UPGRADES           | 450,000           | 450,000           | 450,000           | 450,000           | 450,000           | 2,250,000          |
| <b>Grand Total</b> | <b>38,555,000</b> | <b>39,397,000</b> | <b>45,757,000</b> | <b>43,602,000</b> | <b>56,725,000</b> | <b>224,036,000</b> |

## SUMMARY BY TIER

|                    | 18/19             | 19/20             | 20/21             | 21/22             | 22/23             | 5 YEAR CIP         |
|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| <b>TIER 1</b>      |                   |                   |                   |                   |                   |                    |
| TC WRRF            | 14,120,000        | 14,520,000        | 8,720,000         | -                 |                   | 37,360,000         |
| KC WRRF            | 9,150,000         | 10,000,000        | 4,000,000         |                   |                   | 23,150,000         |
| LAB                | 125,000           | 27,000            | 184,000           |                   | 60,000            | 396,000            |
| HOODLAND WRRF      | 2,100,000         | -                 |                   |                   |                   | 2,100,000          |
| COLLECTION SYSTEM  | 4,780,000         | 4,150,000         | 6,450,000         | 7,150,000         | 7,150,000         | 29,680,000         |
| FLEET              | 995,000           | 990,000           | 1,041,000         | 1,152,000         | 1,285,000         | 5,463,000          |
| <b>TIER 1 Sum</b>  | <b>31,270,000</b> | <b>29,687,000</b> | <b>20,395,000</b> | <b>8,302,000</b>  | <b>8,495,000</b>  | <b>98,149,000</b>  |
| <b>TIER 2</b>      |                   |                   |                   |                   |                   |                    |
| TC WRRF            | 4,770,000         | 4,450,000         | 12,450,000        | 16,400,000        | 25,000,000        | 63,070,000         |
| KC WRRF            |                   | 1,700,000         | 4,492,000         | 3,000,000         |                   | 9,192,000          |
| HOODLAND WRRF      |                   | -                 |                   | 500,000           | 2,750,000         | 3,250,000          |
| BORING WRRF        | 50,000            | 50,000            |                   |                   |                   | 100,000            |
| COLLECTION SYSTEM  | 165,000           | 1,810,000         | 7,020,000         | 9,000,000         | 7,600,000         | 25,595,000         |
| <b>TIER 2 Sum</b>  | <b>4,985,000</b>  | <b>8,010,000</b>  | <b>23,962,000</b> | <b>28,900,000</b> | <b>35,350,000</b> | <b>101,207,000</b> |
| <b>TIER 3</b>      |                   |                   |                   |                   |                   |                    |
| TC WRRF            | 800,000           | -                 | 150,000           | 5,150,000         | 5,630,000         | 11,730,000         |
| KC WRRF            | 50,000            |                   |                   |                   |                   | 50,000             |
| HOODLAND WRRF      | 100,000           | 250,000           |                   |                   |                   | 350,000            |
| COLLECTION SYSTEM  |                   | 200,000           |                   |                   |                   | 200,000            |
| BLUE HERON         | 100,000           | -                 | -                 | -                 | 6,000,000         | 6,100,000          |
| AM BUCKET - TC     | 400,000           | 400,000           | 400,000           | 400,000           | 400,000           | 2,000,000          |
| AM BUCKET - KC     | 400,000           | 400,000           | 400,000           | 400,000           | 400,000           | 2,000,000          |
| PUMP STATION UPGRA | 450,000           | 450,000           | 450,000           | 450,000           | 450,000           | 2,250,000          |
| <b>TIER 3 Sum</b>  | <b>2,300,000</b>  | <b>1,700,000</b>  | <b>1,400,000</b>  | <b>6,400,000</b>  | <b>12,880,000</b> | <b>24,680,000</b>  |
| <b>Grand Total</b> | <b>38,555,000</b> | <b>39,397,000</b> | <b>45,757,000</b> | <b>43,602,000</b> | <b>56,725,000</b> | <b>224,036,000</b> |

Table 4 - 2018 Wastewater System CIP SDC-Eligible Costs

| <b>TOTAL SDC-ELIGIBLE EXPENSES BY FISCAL YEAR</b> |                   |                   |                   |                   |                   |                         |
|---------------------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------------|
| <b>CAPITAL CATEGORY</b>                           | <b>18/19</b>      | <b>19/20</b>      | <b>20/21</b>      | <b>21/22</b>      | <b>22/23</b>      | <b>5 YEAR SDC TOTAL</b> |
| TC WRRF                                           | 10,700,000        | 12,425,000        | 12,575,000        | 10,500,000        | 12,500,000        | 58,700,000              |
| LAB                                               | -                 | -                 | -                 | -                 | -                 | -                       |
| KC WRRF                                           | -                 | -                 | -                 | -                 | -                 | -                       |
| HOODLAND WRRF                                     | -                 | -                 | -                 | 250,000           | 1,375,000         | 1,625,000               |
| BORING WRRF                                       | -                 | -                 | -                 | -                 | -                 | -                       |
| COLLECTION SYSTEM                                 | 2,278,500         | 3,589,000         | 8,031,000         | 10,075,000        | 8,675,000         | 32,648,500              |
| BLUE HERON                                        | -                 | -                 | -                 | -                 | 6,000,000         | 6,000,000               |
| FLEET                                             | -                 | -                 | -                 | -                 | -                 | -                       |
| AM BUCKET - TC                                    | -                 | -                 | -                 | -                 | -                 | -                       |
| AM BUCKET - KC                                    | -                 | -                 | -                 | -                 | -                 | -                       |
| PUMP STATION UPGRADES                             | -                 | -                 | -                 | -                 | -                 | -                       |
| <b>TOTALS</b>                                     | <b>12,978,500</b> | <b>16,014,000</b> | <b>20,606,000</b> | <b>20,825,000</b> | <b>28,550,000</b> | <b>98,973,500</b>       |

| <b>RETAIL SDC-ELIGIBLE EXPENSES BY FISCAL YEAR</b> |                |                |                  |                  |                |                         |
|----------------------------------------------------|----------------|----------------|------------------|------------------|----------------|-------------------------|
| <b>CAPITAL CATEGORY</b>                            | <b>18/19</b>   | <b>19/20</b>   | <b>20/21</b>     | <b>21/22</b>     | <b>22/23</b>   | <b>5 YEAR SDC TOTAL</b> |
| TC WRRF                                            | -              | -              | -                | -                | -              | -                       |
| LAB                                                | -              | -              | -                | -                | -              | -                       |
| KC WRRF                                            | -              | -              | -                | -                | -              | -                       |
| HOODLAND WRRF                                      | -              | -              | -                | -                | -              | -                       |
| BORING WRRF                                        | -              | -              | -                | -                | -              | -                       |
| COLLECTION SYSTEM                                  | 225,000        | 537,500        | 1,037,500        | 1,037,500        | 287,500        | 3,125,000               |
| BLUE HERON                                         | -              | -              | -                | -                | -              | -                       |
| FLEET                                              | -              | -              | -                | -                | -              | -                       |
| AM BUCKET - TC                                     | -              | -              | -                | -                | -              | -                       |
| AM BUCKET - KC                                     | -              | -              | -                | -                | -              | -                       |
| PUMP STATION UPGRADES                              | -              | -              | -                | -                | -              | -                       |
| <b>TOTALS</b>                                      | <b>225,000</b> | <b>537,500</b> | <b>1,037,500</b> | <b>1,037,500</b> | <b>287,500</b> | <b>3,125,000</b>        |

| <b>WHOLESALE SDC-ELIGIBLE EXPENSES BY FISCAL YEAR</b> |                   |                   |                   |                   |                   |                         |
|-------------------------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------------|
| <b>CAPITAL CATEGORY</b>                               | <b>18/19</b>      | <b>19/20</b>      | <b>20/21</b>      | <b>21/22</b>      | <b>22/23</b>      | <b>5 YEAR SDC TOTAL</b> |
| TC WRRF                                               | 10,700,000        | 12,425,000        | 12,575,000        | 10,500,000        | 12,500,000        | 58,700,000              |
| LAB                                                   | -                 | -                 | -                 | -                 | -                 | -                       |
| KC WRRF                                               | -                 | -                 | -                 | -                 | -                 | -                       |
| HOODLAND WRRF                                         | -                 | -                 | -                 | 250,000           | 1,375,000         | 1,625,000               |
| BORING WRRF                                           | -                 | -                 | -                 | -                 | -                 | -                       |
| COLLECTION SYSTEM                                     | 2,053,500         | 3,051,500         | 6,993,500         | 9,037,500         | 8,387,500         | 29,523,500              |
| BLUE HERON                                            | -                 | -                 | -                 | -                 | 6,000,000         | 6,000,000               |
| FLEET                                                 | -                 | -                 | -                 | -                 | -                 | -                       |
| AM BUCKET - TC                                        | -                 | -                 | -                 | -                 | -                 | -                       |
| AM BUCKET - KC                                        | -                 | -                 | -                 | -                 | -                 | -                       |
| PUMP STATION UPGRADES                                 | -                 | -                 | -                 | -                 | -                 | -                       |
| <b>TOTALS</b>                                         | <b>12,753,500</b> | <b>15,476,500</b> | <b>19,568,500</b> | <b>19,787,500</b> | <b>28,262,500</b> | <b>95,848,500</b>       |

## Wastewater Customers Current and Future Demographics

### Existing Wastewater Demand and Population Growth

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

*A unit of measurement of sewer usage assumed to be equivalent to the usage of an average single-family dwelling unit. A unit is equivalent to sewage of a strength and volume normally associated with an average single-family dwelling unit or its equivalent. Where unit equivalency must be computed it shall be equivalent to: (a) 1,000 cubic feet of water consumption per month; (b) 0.449 pounds of BOD5 per day; and (c) 0.449 pounds of suspended solids per day.*

Existing wastewater service demand was derived from consultations with WES engineering and finance staff. Based on this data, it is estimated that as of fiscal 2017-18, WES served a total of 80,288 EDUs. After establishing existing demand conditions, the next step was to forecast future demand based on the criteria established by the District's CIP. To facilitate this demand forecasting effort, in 2016, WES retained ECONorthwest to provide population forecasting services. The resulting demand forecast data was presented to WES (for both CCSD1 and TCSD) and incorporated into WES planning documents.

The population forecasts that were contained in the ECONorthwest final report were expressed in five-year increments starting in 2015 and going out to 2040. For this SDC update, the project team used the ECONorthwest population growth forecast as the basis for estimating the future growth in EDUs. Over the five inflection points, the project team calculated the compounded annualized growth rates in population, and applied these growth rates to the know fiscal 2017-18 existing billable EDUs to arrive at future EDU totals. The resulting forecast of WES treatment EDUs is shown Table 5.

Table 5 - Forecast of Current and Future Wastewater EDUs

|                                              | Actual<br>2017 | Estimated<br>2018 | Budget<br>2019 | Forecast |        |        |        |
|----------------------------------------------|----------------|-------------------|----------------|----------|--------|--------|--------|
|                                              |                |                   |                | 2020     | 2021   | 2022   | 2023   |
| <b>Customer Profile (expressed in EDUs):</b> |                |                   |                |          |        |        |        |
| <i>Rate zone 1 (TCSD)</i>                    |                |                   |                |          |        |        |        |
| Wholesale Customers:                         |                |                   |                |          |        |        |        |
| Oregon City                                  | 15,805         | 16,174            | 16,909         | 17,493   | 18,098 | 18,723 | 19,023 |
| West Linn                                    | 10,978         | 10,340            | 10,415         | 10,533   | 10,653 | 10,774 | 10,836 |
| Gladstone - TC                               | 3,589          | 3,466             | 3,486          | 3,459    | 3,432  | 3,405  | 3,407  |
| Gladstone - CCSD1                            | 767            | 744               | 744            | 738      | 732    | 727    | 727    |
| Other                                        | -              | -                 | -              | -        | -      | -      | -      |
| Total Tri-City Service District              | 31,139         | 30,724            | 31,554         | 32,223   | 32,915 | 33,628 | 33,993 |
| <i>Rate zone 2 (CCSD1)</i>                   |                |                   |                |          |        |        |        |
| Wholesale Customers:                         |                |                   |                |          |        |        |        |
| Milwaukie                                    | 11,040         | 11,149            | 11,149         | 11,233   | 11,318 | 11,403 | 11,476 |
| Johnson City                                 | 278            | 278               | 278            | 277      | 276    | 275    | 274    |
| Total wholesale customers                    | 11,318         | 11,427            | 11,427         | 11,510   | 11,594 | 11,679 | 11,750 |
| Retail Customers:                            |                |                   |                |          |        |        |        |
| Unincorporated                               | 29,337         | 29,786            | 30,991         | 31,604   | 32,230 | 32,868 | 33,282 |
| Happy Valley                                 | 7,321          | 8,351             | 8,547          | 8,881    | 9,229  | 9,590  | 9,917  |
| Damascus                                     | 905            | -                 | -              | -        | -      | -      | -      |
| Total retail customers                       | 37,563         | 38,137            | 39,538         | 40,486   | 41,459 | 42,458 | 43,199 |
| Total CCSD1 EDUs                             | 48,881         | 49,564            | 50,965         | 51,996   | 53,053 | 54,137 | 54,949 |
| Total WES EDUs                               | 80,020         | 80,288            | 82,519         | 84,220   | 85,968 | 87,765 | 88,942 |

## Reimbursement Fee Calculations

As discussed earlier in this report, the reimbursement fee represents a buy-in to the cost, or value, of infrastructure capacity within the existing system. In theory, this should be a simple calculation. Simply go to the Utility's balance sheet, find the book value of assets in service, and divide that cost by the number of forecasted new connections to the wastewater system. That is a simple calculation, and it is wrong. In order to determine an equitable reimbursement, we have to account for some key issues of rate equity;

- First, the cost of the system to existing customers may be far less than the total plant-in-service value. This is due to the fact that elements of the existing system may have been contributed, whether from developers, governmental grants, and other sources.
- Second, the value of the existing system to a new customer is less than the value to an existing customer, since the new customer must also pay, through an improvement fee, for expansion of some portions of the system.
- Third, the accounting treatment of asset costs generally has no relationship to the capacity of an asset to serve growth. In the absence of a detailed asset by asset analysis detailed in the balance sheet (or fixed asset schedule), a method has to be used to allocate cost to existing and future users of the asset. Generally, it is industry practice to allocate the cost of existing facilities between used and available capacity proportionally based on the forecasted population growth as converted to equivalent dwelling units (i.e., equivalent ¾" meters) over the planning period.
- Fourth, the Oregon SDC statute has strict limitations on what type of assets can be included in the basis of the reimbursement fee. ORS 223.299 specifically states that a "capital improvement" does not include costs of the operation or routine maintenance of capital improvements. This means the assets on the balance sheet such as certain vehicles and equipment used for heavy repair and maintenance of infrastructure cannot be included in the basis of the reimbursement fee.

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

- Step 1: Calculate the original cost of wastewater fixed assets in service. From this starting point, eliminate any assets that do not conform to the ORS 223.299 definition of a capital improvement. This results in the **adjusted original cost of wastewater fixed assets**.
- Step 2: Subtract from the adjusted original cost of wastewater fixed assets in service the accumulated depreciation of those fixed assets. This arrives at the **modified book value of wastewater fixed assets in service**.
- Step 3: Subtract from the modified book value of wastewater assets in service any grant funding or contributed capital. This arrives at the **modified book value of wastewater fixed assets in service net of grants and contributed capital**.
- Step 4: Subtract from the modified book value of wastewater fixed assets in service net of grants and contributed capital any principal outstanding on long term debt used to finance those assets. This arrives a **gross wastewater reimbursement fee basis**.
- Step 5: Subtract from the gross wastewater reimbursement fee basis the fund balance held in the Wastewater Reimbursement SDC fund (if available). This arrives at the **net wastewater reimbursement fee basis**.

Step 6: Divide the net wastewater reimbursement fee basis by the sum of existing and future EDUs to arrive at the **unit net reimbursement fee**.

The actual data that was used to calculate the total wastewater reimbursement fee is shown below in Table 6.

Table 6 - Calculation of the Wastewater Reimbursement Fee

|                                                                                                                                    | Wholesale       |                |                 | Retail        |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------|-----------------|---------------|
|                                                                                                                                    | CCSD No. 1      | Tri-City       | Total           | CCSD No. 1    |
| Utility plant in service- original cost <sup>1</sup>                                                                               |                 |                |                 |               |
| Intangible plant                                                                                                                   | \$ 849,223      | \$ 1,040,218   | \$ 1,889,441    | \$ -          |
| Interceptor plant                                                                                                                  | -               | 20,600,311     | 20,600,311      | -             |
| Pumping plant                                                                                                                      | -               | 5,622,031      | 5,622,031       | -             |
| Sewage treatment plant                                                                                                             | 191,447,867     | 58,202,886     | 249,650,753     | -             |
| Sewage treatment line system                                                                                                       | -               | -              | -               | 132,173,634   |
| Equipment, tools, and appurtenances                                                                                                | 10,585,784      | 7,980,296      | 18,566,080      | -             |
| Construction work-in-progress                                                                                                      | 7,699,158       | 1,565,697      | 9,264,855       | -             |
| Land                                                                                                                               | 5,261,908       | 3,514,699      | 8,776,607       | -             |
| Subtotal utility plant in service original cost                                                                                    | 215,843,940     | 98,526,138     | 314,370,078     | 132,173,634   |
| Less: grants and contributed capital: <sup>2</sup>                                                                                 |                 |                |                 |               |
| EPA Clean Water Act grants                                                                                                         | 10,896,488      | 36,936,813     | 47,833,301      | -             |
| Contributed capital - Milwaukie                                                                                                    | 1,554,228       | -              | 1,554,228       | 26,824        |
| Contributed capital - Johnson City                                                                                                 | 67,548          | -              | 67,548          | -             |
| Subtotal grants and contributed capital                                                                                            | 12,518,264      | 36,936,813     | 49,455,077      | 26,824        |
| Less: accumulated depreciation <sup>1</sup>                                                                                        |                 |                |                 |               |
| Intangible plant                                                                                                                   | 802,188         | 1,040,216      | 1,842,404       | -             |
| Interceptor plant                                                                                                                  | -               | 10,595,740     | 10,595,740      | -             |
| Pumping plant                                                                                                                      | -               | 3,641,245      | 3,641,245       | -             |
| Sewage treatment plant                                                                                                             | 115,090,958     | 42,069,961     | 157,160,919     | 115,090,958   |
| Sewage treatment line system                                                                                                       | -               | -              | -               | -             |
| Equipment, tools, and appurtenances                                                                                                | 8,578,860       | 5,723,278      | 14,302,138      | -             |
| Subtotal accumulated depreciation                                                                                                  | 124,472,006     | 63,070,440     | 187,542,446     | 115,090,958   |
| Utility plant in service net of grants and accumulated depreciation <sup>1</sup>                                                   | 78,853,670      | (1,481,115)    | 77,372,555      | 17,055,852    |
| Less: principal outstanding on long term debt: <sup>1</sup>                                                                        |                 |                |                 |               |
| DEQ Clean Water State Revolving Loan R06224                                                                                        | -               | -              | -               | 1,646,239     |
| Revenue Bonds 2002A                                                                                                                | 840,000         | -              | 840,000         | -             |
| Revenue Obligations 2009A                                                                                                          | 2,370,000       | -              | 2,370,000       | -             |
| Revenue Obligations 2009B                                                                                                          | 4,245,000       | -              | 4,245,000       | -             |
| Revenue Obligations 2010                                                                                                           | 3,255,000       | -              | 3,255,000       | -             |
| Revenue Refunding Obligations 2016                                                                                                 | 82,235,000      | -              | 82,235,000      | -             |
| Subtotal principal outstanding on long term debt                                                                                   | 92,945,000      | -              | 92,945,000      | 1,646,239     |
| Utility plant in service net of grants, contributed capital, accumulated depreciation, and principal outstanding on long term debt | \$ (14,091,330) | \$ (1,481,115) | \$ (15,572,445) | \$ 15,409,613 |

<sup>1</sup> Source: Clackamas County Service District No. 1 and Tri-City Service Districts Comprehensive Annual Financial Reports for the year ended June 30, 2017

<sup>2</sup> Source: Clackamas County Service District No. 1 records

Table 6 Continued - Calculation of the Wastewater Reimbursement Fee

|                                              |                                                 |               |
|----------------------------------------------|-------------------------------------------------|---------------|
| Wholesale reimbursement fee SDC calculation: |                                                 |               |
| SDC eligible costs                           |                                                 | 0             |
| Existing and future wholesale EDUs           |                                                 | 88,942        |
|                                              | <b>Wholesale reimbursement fee SDC - \$/EDU</b> | <b>0</b>      |
| Retail reimbursement fee SDC calculation:    |                                                 |               |
| SDC eligible costs                           |                                                 | \$ 15,409,613 |
| Existing and future retail EDUs              |                                                 | 43,199        |
|                                              | <b>Retail reimbursement fee SDC - \$/EDU</b>    | <b>\$ 357</b> |
| Reimbursement fee SDCs by rate zone:         |                                                 |               |
|                                              | <b>Rate zone #1</b>                             | <b>\$ -</b>   |
|                                              | <b>Rate zone #2</b>                             | <b>\$ 357</b> |

## Improvement Fee Calculations

The calculation of the wastewater improvement fee is more streamlined than the process used to calculate the wastewater reimbursement fee. This study continues to use the improvements-driven method, and has relied on the 2018 wastewater system capital improvement plan. Under this methodology, only three steps are required to arrive at the improvement fee. These steps are:

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

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

Table 7 - Calculation of the Wastewater Improvement Fee

| Capital Program/Asset Class                | SDC Eligible Costs from CIP |              |               |
|--------------------------------------------|-----------------------------|--------------|---------------|
|                                            | Wholesale                   | Retail       | Total         |
| Tri-City WRRF                              | \$ 58,700,000               | \$ -         | \$ 58,700,000 |
| Laboratory                                 | -                           | -            | -             |
| Kellogg Creek WRRF                         | -                           | -            | -             |
| Hoodland WRRF                              | 1,625,000                   | -            | 1,625,000     |
| Boring WRRF                                | -                           | -            | -             |
| Collection system (including interceptors) | 29,523,500                  | 3,125,000    | 32,648,500    |
| Blue Heron                                 | 6,000,000                   | -            | 6,000,000     |
| Fleet                                      | -                           | -            | -             |
| Tri-City asset management                  | -                           | -            | -             |
| Kellogg Creek asset management             | -                           | -            | -             |
| Pump station upgrades                      | -                           | -            | -             |
| 2018 gross improvement fee basis           | \$ 95,848,500               | \$ 3,125,000 | \$ 98,973,500 |
| less: Improvement fee SDC fund balance     | 19,243,785                  | 2,702,177    | 21,945,962    |
| Improvement fee adjusted basis             | \$ 76,604,715               | \$ 422,823   | \$ 77,027,538 |

## Wholesale improvement fee SDC calculation:

|                                               |                  |
|-----------------------------------------------|------------------|
| SDC eligible costs                            | \$ 76,604,715    |
| Growth EDUs                                   | 6,423            |
| <b>Wholesale improvement fee SDC - \$/EDU</b> | <b>\$ 11,927</b> |

## Retail improvement fee SDC calculation:

|                                            |               |
|--------------------------------------------|---------------|
| SDC eligible costs                         | \$ 422,823    |
| Growth EDUs (rate zone 2)                  | 3,661         |
| <b>Retail improvement fee SDC - \$/EDU</b> | <b>\$ 115</b> |

## Improvement fee SDCs by rate zone:

|                     |                  |
|---------------------|------------------|
| <b>Rate zone #1</b> | <b>\$ 11,927</b> |
| <b>Rate zone #2</b> | <b>\$ 12,042</b> |

## Wastewater SDC Model Summary and Conclusions

The 2019 wastewater SDC methodology update was done in accordance with WES Rules and Regulations, and with the benefit of adopted capital improvement plans and plan updates for wastewater services. We recommend WES update the SDC charge and methodology to reflect the current capital improvement program. Our analysis indicates WES can charge a maximum of \$12,523 in rate zone 1 and \$13,019 in rate zone 2 per EDU. A comparison of the proposed and current wastewater SDCs for the average single-family residential customer is shown below in Table 8.



Table 8 - Proposed and Current Wastewater SDCs for a 3/4" Meter

|                              | <u>Calculated<br/>SDCs</u> | <u>SDCs as of<br/>June 1, 2019</u> |
|------------------------------|----------------------------|------------------------------------|
| SDCs by rate zone:           |                            |                                    |
| Rate zone 1:                 |                            |                                    |
| Reimbursement fee            | -                          | -                                  |
| Improvement fee              | 11,927                     | 3,490                              |
| Administration fee*          | 596                        | -                                  |
| <b>Total rate zone 1 SDC</b> | <b>\$ 12,523</b>           | <b>\$ 3,490</b>                    |
| Rate zone 2:                 |                            |                                    |
| Reimbursement fee            | 357                        | -                                  |
| Improvement fee              | 12,042                     | 7,615                              |
| Administration fee*          | 620                        | -                                  |
| <b>Total rate zone 2 SDC</b> | <b>\$ 13,019</b>           | <b>\$ 7,615</b>                    |

\* note: administration fees are different between rate zones based on assumed flat 5% fee on total calculated reimbursement and improvement fees per zone

## SDCs in Neighboring Communities

Figures 2 and 3 show the current SDCs charged in neighboring communities for wastewater and “all municipal services”. The SDCs charged are as of June, 2019.

Figure 2 – Neighboring Communities' SDC – Wastewater as of June, 2019

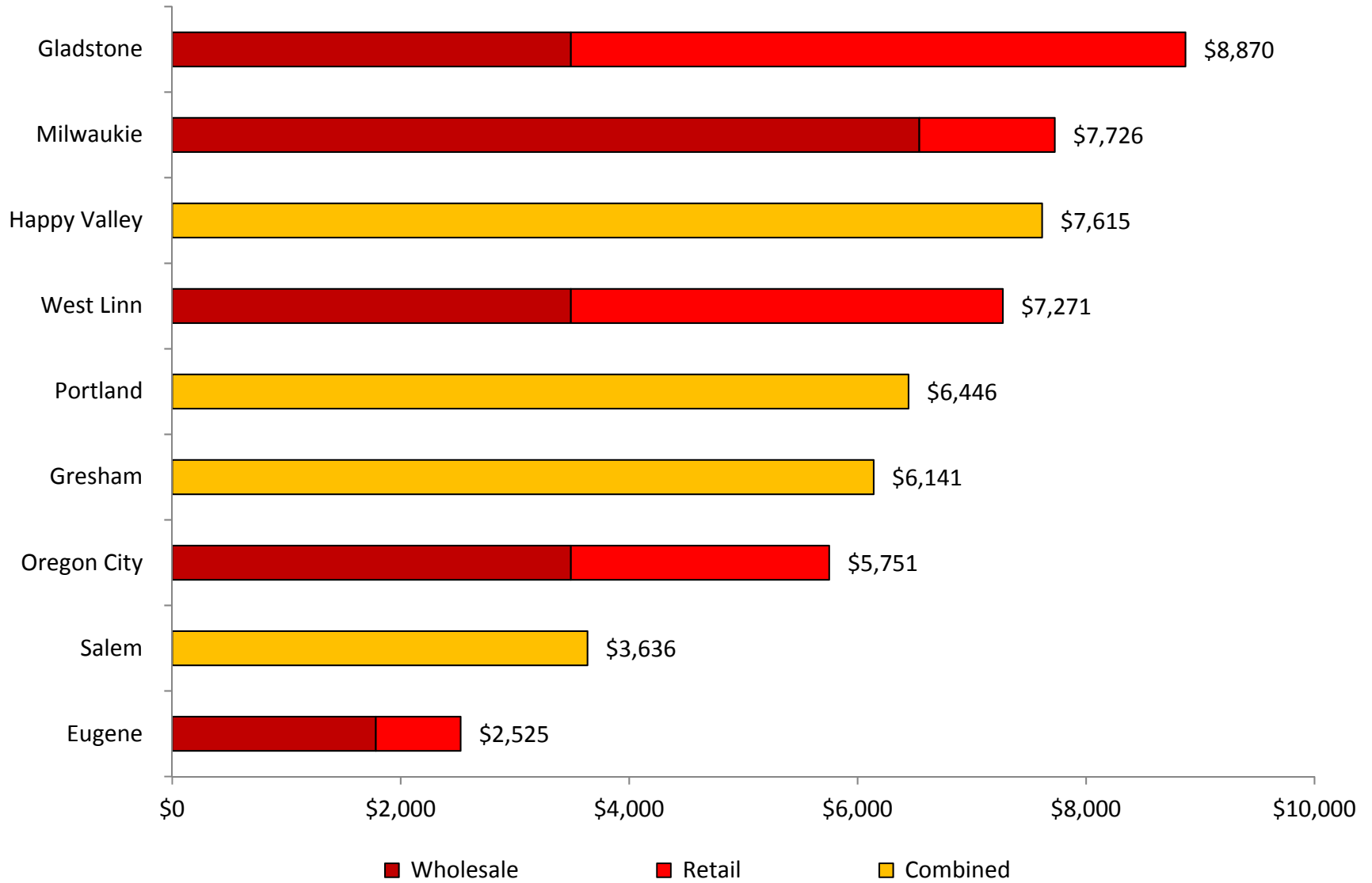


Figure 3 – Neighboring Communities' SDC – all SDCs as of June, 2019

