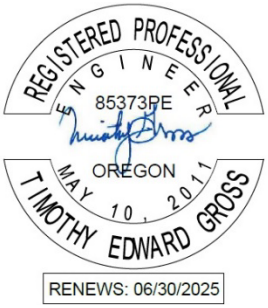
SW Lincoln County Water
People's Utility District

Lincoln County, OR

SDC Methodology

November 2023

Prepared by:



Civil West
Engineering Services, Inc.

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SECTION 1: BACKGROUND

System Development Charges (SDCs) are one-time fees charged to new development and certain types of re-development to help pay for existing and planned infrastructure needed to serve the development. State law authorizes local governments to assess SDCs and specifies how, when, and for what improvements they can be imposed. Under ORS 223.297 – 223.314, SDCs may be used for capital improvements for water supply, treatment, and distribution.

The fees may be a reimbursement by new development for a portion of unused infrastructure capacity and/or an improvement fee for planned infrastructure. The fees may not include an improvement fee portion if there is sufficient existing capacity. SDC revenues may be levied and used for capital costs, but not for ongoing facility or system maintenance or for projects that either fix existing system deficiencies or replace existing capacity.

The enacting authority must establish SDCs by ordinance or resolution. The methodology must provide credits for any qualified capital improvement financed by the developer. The calculation methodology must be adopted through a public process and the ordinance must set up a review procedure through which anyone may challenge an expenditure of SDC revenue if it is out of compliance with state restrictions.

Prior to imposing SDCs the local body must have in place:

- A capital improvement plan
- A Public Facilities Plan or comparable plan that lists improvements to be funded with the improvement fee portion of the SDC
- An estimate of the cost and timing for each listed improvement

Such plans may be modified by the jurisdiction.

SDCs are typically assessed when development or building permits are issued, but they can be collected at a later date, such as at the time of occupancy. They are collected from builders who may include the costs in their charges.

1. SDC CALCULATIONS

State law does not specify the method of calculating SDC rates, but some standard methodologies have evolved. For instance, transportation SDCs are generally based on a standard trip-generation calculator for the type of dwelling, business, or facility. The methods calculate a maximum charge, and communities often charge some percentage of the maximum. The League of Oregon Cities has developed a model SDC ordinance. It does not specify a calculation method but rather contains parameters and standard language establishing the authority.

2. RECENT LEGISLATIVE ACTION

Senate Bill 939 (2003) allowed an SDC to be a combination of improvement fee and reimbursement fee so long as the charge is not based on providing the same system capacity. The bill also strengthens the tie between the improvement plan and the list of projects eligible for SDCs, requiring local governments to provide notice and hold a hearing if requested when changes to list of projects results in an increase in the SDC. Further, the bill allows local governments to include an inflation index in their SDCs and requires the locality to "demonstrate" that certain factors were considered in establishing fees. (Janet Adkins, May 2004)

SECTION 2: SDC METHODOLOGY

The proposed SDC methodology is based on a combined reimbursement and improvement structure, and consists of the following elements:

- Determine capacity needs.
- Develop cost basis.
- Develop SDC schedule.

The Southwest Lincoln County Water People's Utility District (District) adopted their Water System Facility Plan in November of 2019 (Civil West Engineering Services, Inc., 2019). This document provides a comprehensive assessment of system capacity and makes recommendations on capital improvements to address any deficiencies. This SDC methodology uses the projects and associated capital costs identified within that document to calculate SDC eligible projects, the percentage of the project costs that are SDC eligible, and the distribution of those SDC costs based upon equivalent dwelling units (EDUs).

1. DETERMINE CAPACITY NEEDS (EDUs)

EDUs, or equivalent dwelling units, were determined based upon the number and size of connections to the water system. A typical single-family home with a ¾" meter is considered one EDU. Single family homes make up most of the connections in the District. Larger meter size capacities were compared to the ¾" meter (1 EDU) to determine the number of equivalent dwelling units. For example, a ¾" meter has a cross sectional area of 0.44 in^2 and a 1" meter has a cross sectional area of 0.785 in^2. Therefore, a 1" meter is 1.78 times larger than a ¾" meter (0.785/0.44=1.78) and rounded to the nearest whole number represents 2 EDUs. The EDU calculation summary per meter size is included as TABLE 1.

TABLE 1 EDU Calculation Based Upon Meter Size

size	pipe area (in^2)	Ratio	EDU's
3/4"	0.4415625	1.00	1
1"	0.785	1.78	2
1 1/2"	1.76625	4.00	4
2"	3.14	7.11	7
2 1/2"	4.90625	11.11	11
6"	28.26	64.00	64

Based upon the number of connections and associated meter sizes per the June 2023 utility account download from the District, the total EDUs are summarized in TABLE 2.

TABLE 2 Total District EDUs

Meter Size	3/4"	1"	1 1/2"	2"	2 1/2"	6"	Total
No. of Meters	1283	26	1	16	1	2	1329
No. EDU's	1283	52	4	112	11	128	1590

SDCs are assessed against new users of the system to pay for the impact of growth on the water system and the need to construct excess capacity to accommodate that growth. The growth analysis in the SDC methodology was based upon the approved 2019 Master Plan. Section 2.3 of the Master Plan details the growth projections for the District at 0.5% annually. TABLE 3 summarizes growth through the planning period

based upon the current number of accounts and EDUs in the District in 2023.

Based on this analysis, there is anticipated to approximately 1,731 EDUs, an increase of 141 EDUs in the system by the year 2040, the end of the planning period. This correlates to an increase in EDUs of 8.9%. The improvements and recommendations in the master plan have been sized and planned to serve this projected service population including all new residential, commercial, institutional, and industrial customers.

TABLE 3 Growth Projections

0.5% Growth			
Year	Population	Accounts	EDU's
2023	2670	1329	1590
2024	2683	1336	1598
2025	2697	1342	1606
2026	2710	1349	1614
2027	2724	1356	1622
2028	2737	1363	1630
2029	2751	1369	1638
2030	2765	1376	1646
2031	2779	1383	1655
2032	2793	1390	1663
2033	2807	1397	1671
2034	2821	1404	1680
2035	2835	1411	1688
2036	2849	1418	1697
2037	2863	1425	1705
2038	2877	1432	1714
2039	2892	1439	1722
2040	2906	1447	1731

2. DEVELOP COST BASIS

The reimbursement fee is intended to recover the costs associated with the available capacity in the existing system that will serve new development; the improvement fee is based on the costs of capacity-increasing future improvements needed to meet the requirements of growth. The value of capacity needed to serve growth in aggregate within the planning period, adjusted for assessments and other contributions, is referred to as the "cost basis".

A. REIMBURSEMENT FEE COST BASIS

I. SYSTEM VALUATION

The reimbursement fee calculation is based on the depreciated cost of the existing system facilities. Estimating the depreciated value begins with itemization of the existing water system including raw water collection, treatment, storage, and distribution. The District's Water System Master Plan includes a summary of these assets. Current replacement costs were calculated using Cost Equations for Small Water Systems published by the US Department of Commerce National Technical Information Service (US Municipal Environmental Research Lab, 1984), and unit costs as established by the 2019 Water System Facility Plan. Costs were then adjusted based upon the construction year using the Engineering News Record Construction Cost Index to calculate original construction costs.

In addition to assessments, the District has also received grants and other funding contributions in the past to help pay for the cost of the system. These funds are also deducted from the depreciated construction value for purposes of determining the SDC-eligible reimbursement cost, consistent with State law. **Need info from the District on previous grants.**

The final step in the reimbursement valuation process is adjustment of the original construction value to reflect accumulated depreciation of the assets in the system. The District's fixed asset records are used to estimate the accumulated depreciation percent, which is then deducted from the construction cost. Based upon the District's Audit for FY ending June 30, 2022, capital assets have depreciated a total of 53.6%.

II. FINANCING ADJUSTMENTS

The District has some debt associated with financing local water facilities. Outstanding debt principal is deducted from the existing system value, as it does not represent current equity in the system. However, existing users have paid interest costs on debt used to finance improvements which will help meet the needs of future growth. Therefore, historical financing costs are added to the system value, for the purpose of developing the reimbursement fee. **Need info from the District.**

III. AVAILABLE CAPACITY DETERMINATION

The existing system facilities – in conjunction with the planned improvements (which include upgrades to the existing system to address capacity deficiencies and extend the system) will provide the needed capacity to serve existing and future development within the planning period. Therefore, the existing system costs are apportioned to existing and future system users, based on the relative contribution to the future system capacity requirements, as estimated by the number of EDUs. Based on the Master Plan, future growth is responsible for 8.9% of future EDUs, and is therefore allocated 8.9% of existing facility costs.

Table 4 - REIMBURSEMENT FEE CALCULATION

2040 System EDU's: 1,731

Description	Size/Capacity	Unit	Construction Year	Unit Process	Current Cost	ENR CCI	Original Cost	District Cost (%)	Growth Share %	Growth Share $
Supply										
Raw Water Intakes										
Dicks Fork	180	gpm	1971	Package Raw Water Pumping	$905,850	1581	$106,195	100%	100%	$106,196
Big Creek	135	gpm	1945	Package Raw Water Pumping	$842,116	308	$19,233	100%	100%	$19,234
Vingie Creek	449	gpm	1989	Package Raw Water Pumping	$1,142,165	4515	$382,387	100%	100%	$382,388
Starr Creek	135	gpm	1945	Package Raw Water Pumping	$842,116	308	$19,233	100%	100%	$19,234
Treatment										
Blodgett	350	gpm	1997	Package Pressure Filtration + Filter Media - Rapid Sand + Sodium Hypochlorite Solution Feed System + Steel Backwash/Clearwell Tanks	$12,016,678	5826	$5,191,247	100%	100%	$5,191,248
Dicks Fork	200	gpm	1997	Package Pressure Filtration + Filter Media - Rapid Sand + Sodium Hypochlorite Solution Feed System + Steel Backwash/Clearwell Tanks	$9,129,922	5826	$3,944,159	100%	100%	$3,944,160
									Subtotal	$9,662,460
Storage										
Raw Water										
Big Creek Settling Basin	61,000	gal	1960	storage tank	$91,500	824	$5,591	100%	100%	$5,592
Starr Creek Settling Basin	120,000	gal	1960	storage tank	$180,000	824	$10,998	100%	100%	$10,999
Dickes Fork Settling Basin	126,000	gal	1976	storage tank	$189,000	2401	$33,649	100%	100%	$33,650
Treated Water										
Dicks Fork	200,000	gal	1976	storage tank	$300,000	2401	$53,411	100%	100%	$53,412
Seabrook	200,000	gal	1976	storage tank	$300,000	2401	$53,411	100%	100%	$53,412
Blodgett	1,000,000	gal	1997	storage tank	$1,500,000	5826	$648,005	100%	100%	$648,006
Starr Creek	500,000	gal	1997	storage tank	$750,000	5826	$324,003	100%	100%	$324,004
Crabapple	54,000	gal	1997	storage tank	$81,000	5826	$34,992	100%	100%	$34,993
									Subtotal	$1,164,068
Water Delivery										
Water mains										
4"	4,133	ft	varies (1979)*	Distribution Piping	$369,134	3003	$82,197	100%	100%	$82,198
6"	85,775	ft	varies (1979)*	Distribution Piping	$10,402,689	3003	$2,316,423	100%	100%	$2,316,424
8"	36,088	ft	varies (1979)*	Distribution Piping	$5,031,396	3003	$1,120,368	100%	100%	$1,120,369
10"	31,002	ft	varies (1979)*	Distribution Piping	$4,926,127	3003	$1,096,927	100%	100%	$1,096,928
12"	4,795	ft	varies (1979)*	Distribution Piping	$805,329	3003	$179,327	100%	100%	$179,328
Pump Stations										
Alder Street PS	100	gpm	1996	Package High Service Pumping	$581,725	5620	$242,422	100%	100%	$242,423
Seabrook PS	450	gpm	1997	Package High Service Pumping	$845,105	5826	$365,088	100%	100%	$365,089
									Subtotal	$5,402,758
Support Facilities										
District Office**			1980		$201,160	3237	$48,284	100%	100%	$48,285
									Subtotal	$48,285
									Total Asset Capital Investment:	$16,277,571
									Total Depreciation To Date:	$8,724,778 53.60%
									Reimbursement SDC Eligible Costs:	$7,552,793
									Reimbursement SDC:	**$4,363** per EDU

*According to AWWA, new pipelines have a lifetime of between 50-100 years. (AWWA Manual M28, Pipeline Renewal Methods) For the purpose of evaluation it is assumed the pipes within the District have been installed at a uniform rate over this time period with an median age of between 37.5 to 50 years, with an average age of 44 years. (year 1979)

** 2024 Real Market Value based upon Lincoln County Appraiser (14-12-11-AB-00600-00)

B. IMPROVEMENT FEE COST BASIS

Each improvement in the Master Plan is reviewed to determine the portion of costs that expand capacity specifically for growth. The Master Plan identifies three types of projects:

- Existing deficiencies
- Future deficiencies, and
- Future expansions

I. SDC ELIGIBILITY

An Improvement SDC methodology should include an assessment of the SDC eligibility of each improvement project. For a project to be SDC eligible, a nexus or cause/effect relationship should exist between growth and the need for the project or for the need to upsize a facility.

For example, if it is determined that a 500,000-gallon reservoir was needed to satisfy existing deficiencies but planning suggested constructing a 1,000,000-gallon reservoir to accommodate growth in the system over the planning period, then the project would be 50% SDC eligible as half of the planned volume is required to address needs related to growth.

An effort was made to identify the SDC eligibility of each project identified in the Masterplan CIP. Projects were broken down by category, including water supply, water treatment, storage, and booster pump stations.

1. WATER SUPPLY

There were four water supply projects identified in the CIP: 1.) Dick's Fork Diversion Improvements, 2.) Big Creek Diversion Improvements, 3.) Vinge Creek Diversion Improvements, and 4.) Starr Creek Diversion Improvements. All these projects are to improve existing facilities, and none add capacity to the system therefore none are SDC eligible.

2. WATER TREATMENT

There were three water treatment projects identified in the CIP: 1.) Blodgett Water Treatment Plant – Priority 1 Improvements, 2.) Blodgett Water Treatment Plant – Priority 2 Improvements, and 3.) Dick's Fork Water Treatment Plant – Priority 2 Improvements. Of these three projects, only project 2, Blodgett Water Treatment Plant – Priority 2 Improvements adds system capacity. The improvements are solely for the purpose of expanding capacity at the plant therefore the improvements are 100% SDC eligible. A breakdown of the project costs are shown in TABLE 5.

TABLE 5 Blodgett Water Treatment Plant - Priority 2 Improvements Design and construction Costs

Blodgett Water Treatment Plant (BWTP) - Priority 2						
Item No.	**Description**	**Unit**	**Quantity**	**Unit Cost**	**Item Cost**	**2023 Adjusted Cost**
1	Mobilization - Bonds, Insurance (5%)	LS	1	$ 35,000	$ 35,000	$40,353
2	Construction Facilities and Temporary Controls (5%)	LS	1	$ 35,000	$ 35,000	$40,353
3	Demo and Site Prep (15%)	LS	1	$ 105,000	$ 105,000	$121,059
4	Install new treatment unit, enlarge building, upgrade chemical storage	LS	1	$ 700,000	$ 700,000	$807,062
Estimated Construction Costs				$	875,000	$1,008,828
	Administrative/Legal (5%)			$	43,750	$50,441
	Contingency (25%)			$	218,750	$252,207
	Engineering, Geotechnical (25%)			$	218,750	$252,207
Estimated Project Total (rounded)				**$**	**1,357,000**	**$1,563,683**

3. STORAGE

There were three water storage projects identified in the CIP: 1.) Dick's Fork Tank No. 2, 2.) Wakonda Beach Road Tank, and 3.) Seabrook Tank. All three projects are solely for the purpose of adding system capacity therefore all three projects are 100% SDC eligible. A breakdown of the project costs are shown in TABLE 6, TABLE 7, and TABLE 8.

TABLE 8 Dick's Fork Tank No. 2 Design and Construction Costs

Dick's Fork Tank No. 2 (500,000 gallon steel tank)						
Item No.	**Description**	**Unit**	**Quantity**	**Unit Cost**	**Item Cost**	**2023 Adjusted Cost**
1	Mobilization - Bonds, Insurance (5%)	LS	1	$ 36,000.00	$ 36,000.00	$41,506
2	Construction Facilities and Temporary Controls (10%)	LS	1	$ 72,000.00	$ 72,000.00	$83,012
3	Demo and Site Prep (20%)	LS	1	$ 144,000.00	$ 144,000.00	$166,024
4	Glass-Fused, Bolted Steel Tank	LS	1	$ 450,000.00	$ 450,000.00	$518,826
5	Reinforced Concrete Pad	LS	1	$ 75,000.00	$ 75,000.00	$86,471
6	Earthwork, Grading, and Gravel Resurfacing	LS	1	$ 120,000.00	$ 120,000.00	$138,353
7	Valves, Pipes and Appurtenances	LS	1	$ 75,000.00	$ 75,000.00	$86,471
Estimated Construction Costs				$	972,000.00	$1,120,663
	Administrative/Legal (5%)			$	48,600.00	$56,033
	Contingency (25%)			$	243,000.00	$280,166
	Environmental Study			$	25,000.00	$28,824
	Engineering, Geotechnical (25%)			$	243,000.00	$280,166
Estimated Project Total (rounded)				**$**	**1,532,000.00**	**$1,765,852**

TABLE 7 Wakonda Beach Road Tank Design and Construction Costs

Wakonda Beach Road Tank (500,000 gallon steel tank)						
Item No.	**Description**	**Unit**	**Quantity**	**Unit Cost**	**Item Cost**	**2023 Adjusted Cost**
1	Mobilization - Bonds, Insurance (5%)	LS	1	$ 32,000.00	$ 32,000.00	$36,894
2	Construction Facilities and Temporary Controls (5%)	LS	1	$ 32,000.00	$ 32,000.00	$36,894
3	Demo and Site Prep (15%)	LS	1	$ 96,000.00	$ 96,000.00	$110,683
4	Glass-Fused, Bolted Steel Tank	LS	1	$ 450,000.00	$ 450,000.00	$518,826
5	Reinforced Concrete Pad	LS	1	$ 75,000.00	$ 75,000.00	$86,471
6	Earthwork, Grading, and Gravel Resurfacing	LS	1	$ 40,000.00	$ 40,000.00	$46,118
7	Valves, Pipes and Appurtenances	LS	1	$ 75,000.00	$ 75,000.00	$86,471
Estimated Construction Costs				$	800,000.00	$922,357
	Administrative/Legal (5%)			$	40,000.00	$46,118
	Contingency (25%)			$	200,000.00	$230,589
	Environmental Study			$	25,000.00	$25,000
	Engineering, Geotechnical (25%)			$	200,000.00	$230,589
Estimated Project Total (rounded)				**$**	**1,265,000.00**	**$1,454,653**

TABLE 6 Seabrook Tank Design and Construction Costs

Seabrook Tank (250,000 gallon steel tank)						
Item No.	**Description**	**Unit**	**Quantity**	**Unit Cost**	**Item Cost**	**2023 Adjusted Cost**
1	Mobilization - Bonds, Insurance (5%)	LS	1	$ 27,000.00	$ 27,000.00	$31,130
2	Construction Facilities and Temporary Controls (5%)	LS	1	$ 27,000.00	$ 27,000.00	$31,130
3	Demo and Site Prep (15%)	LS	1	$ 81,000.00	$ 81,000.00	$93,389
4	Glass-Fused, Bolted Steel Tank	LS	1	$ 350,000.00	$ 350,000.00	$403,531
5	Reinforced Concrete Pad	LS	1	$ 65,000.00	$ 65,000.00	$74,941
6	Earthwork, Grading, and Gravel Resurfacing	LS	1	$ 50,000.00	$ 50,000.00	$57,647
7	Valves, Pipes and Appurtenances	LS	1	$ 75,000.00	$ 75,000.00	$86,471
Estimated Construction Costs				$	675,000.00	$778,238
	Administrative/Legal (5%)			$	33,750.00	$38,912
	Contingency (25%)			$	168,750.00	$194,560
	Environmental Study			$	25,000.00	$25,000
	Engineering, Geotechnical (25%)			$	168,750.00	$194,560
Estimated Project Total (rounded)				**$**	**1,072,000.00**	**$1,231,270**

4. DISTRIBUTION SYSTEM

Distribution system projects were divided into Phase 1 and Phase 2 projects. Project costs were adjusted by the Engineering News Record Construction Cost Index to reflect current construction values, and the cost to install each diameter of pipe was determined. For sections of the distribution system where pipes were identified to be upsized to add capacity, the percent difference in pipe construction cost between the original pipe diameter and the proposed pipe diameter is considered to be SDC eligible. For example, the 4" pipe on California Rd. between Mason and Hwy 101 is proposed to be replaced with an 8" pipe. The 2023 cost to install a 4" pipe is $88/foot and to install an 8" pipe is $137/foot. This is an increase of 56% therefore the project is considered 56% SDC eligible ([$137-$88]/$88=0.56). A summary of SDC eligible distribution system costs are shown in TABLE 9 and TABLE 10.

TABLE 9 Phase 1 - Distribution Piping Design and Construction Costs

AC Pipe to be Replaced					Estimated Project Cost	% SDC Eligible	SDC Value
	Road	Limits	Size	Length (ft)			
1	Seabrook Tank	Seabrook Lane and Hwy 101 (replace 6") (also recommended for fire protection)	12"	2,600	$ 436,675	28%	$ 121,350
			TOTAL 12"	**2,600**			
1	Wakonda Beach Rd.	Sea Hawk St. to Tank site	8"	2,000	$ 278,840		
2	California	Mason - Hwy 101 (replace 4")	8"	950	$ 132,449	36%	$ 47,601
3	Big Creek headworks	Treatment plant to basin	8"	4,400	$ 613,449		
4	South side of District office running toward Blodget Rd.		8"	650	$ 90,623		
			TOTAL 8"	**8,000**			
1	Wakonda Beach Rd.	Sea Hawk St. to Tank site	6"	450	$ 54,575		
2	Camp One Rd	Highland - 101 (replace 4")	6"	1,300	$ 157,662	26%	$ 41,555
3	Hwy 101	Waziyata - Ranger Station (replace 4")	6"	180	$ 21,830	26%	$ 5,754
4	Tara Inn and Range Dr	North to meter to forest service and Blue Whale Trailer Park	6"	1,440	$ 174,641		
5	Fernwood Ln.	Fernwood Ln. to White Cap (new)	6"	1,500	$ 181,918	100%	$ 181,918
6	White Cap	Fernwood Ln. to Hwy 101 (replace 1")	6"	300	$ 36,384	82%	$ 29,685
7	West side Hwy 101, at Big Stump Beach entrance	Running south W. side Hwy 101 to Wakeetum St.	6"	2,600	$ 315,325		
8	North Field Ave	Wakonda Beach Rd - Wakeetum St. (new)	6"	1,430	$ 173,429	100%	$ 173,429
9	Tillucum St.	(new)	6"	795	$ 96,417	100%	$ 96,417
10	Forest Hill Ln.		6"	980	$ 118,853		
11	Line between Forest Hill Ln at Starr Creek		6"	1,000	$ 121,279		
			TOTAL 6"	**11,975**			
Fire Flow Recommended Pipe to be Replaced							
1	Seabrook Tank	SW Range Drive (replace 6")	10"	1,400	$ 222,456	0%	$ -
2	South end of District	NE Star Creek Road (replace 8")	10"	1,400	$ 222,456	0%	$ -
3	South end of District	NE Star Creek Road (replace 6")	10"	1,500	$ 238,346	0%	$ -
			TOTAL 10"	**4,300**			
21	Seabrook Tank	Hwy 101 Crossing (replace 2")	6"	400	$ 48,512	0%	$ -
			TOTAL 6"	**400**			
Total SDC Eligible Costs:							**$ 697,708**

TABLE 10 Phase 2 - Distribution Pipe Engineering and Construction Costs

	Road	Limits	Size	Length	Estimated Project Cost	% SDC Eligible	SDC Value
1	Dicks Fork Tank	Waldport High School and Industrial Park (Replace 8")	12"	10,000	$1,679,518	17%	$285,316
			TOTAL 12"	**10,000**			
1	Brubaker	Hwy 101 (replace 6")	8"	1,400	$195,188	13%	$25,398
2	Wyoming Ave	101 - Colfax (new pipe)	8"	1,450	$202,159	100%	$202,159
3	Hwy 101	Seabrook - Alicia Lane (replace 6")	8"	510	$71,104	13%	$9,252
4	Flansberg Rd	End of Existing - North	8"	2,300	$320,666		
			TOTAL 8"	**5,660**			
1	Vingie	Hwy 101 (replace 2")	6"	1,550	$187,982	27%	$51,223
2	Alley	Southmayd - Seabrook Lane (new pipe)	6"	130	$15,766		
3	Goodwin Ave	Camp One Rd - Arizona (replace 2")	6"	680	$82,470	27%	$22,472
4	Iris Lane	Neal Ave - Field Ave	6"	200	$24,256		
5	Oklahoma	Finisterre - 101 (replace 2")	6"	360	$43,660	27%	$11,897
6	Fernwood Dr.	Cross Hwy 101 (replace 1")	6"	140	$16,979	82%	$13,853
7	Hwy 101	Fernwood Dr. - South to Existing 6" (replace 1")	6"	260	$31,532	82%	$25,727
8	Trout Street	101 - North Ave (replace 2")	6"	420	$50,937	27%	$13,880
9	North Ave	Trout Street - Perch street (new)	6"	240	$29,107	100%	$29,107
10	Perch Street	North Ave - 101 (replace 4")	6"	480	$58,214	26%	$15,343
11	Airport Lane	Beach Side Lane - End of Existing (new)	6"	2,250	$272,877	100%	$272,877
12	Field Ave	Existing-South to Airport Lane (new)	6"	900	$109,151	100%	$109,151
13	Beach Side Lane	Hwy 101 - Airport Lane (add 850' of new 6")	6"	1,150	$139,471	74%	$103,087
14	Nevada	Mason - Beaver - California (replace 200' of 1", 400' of 2" and add 330' of 6")	6"	930	$112,789	65%	$73,031
15	Washington	101 - Colfax (replace 2")	6"	1,290	$156,450	27%	$42,631
16	Oregon	101 - Colfax (replace 400' of 2", add 900' of 6")	6"	1,300	$157,662	78%	$122,370
17	Colorado	101 - Stone Ave (replace 2")	6"	230	$27,894	27%	$7,601
18	Stone Ave	Knoxville - Colorado (replace 2")	6"	260	$31,532	27%	$8,592
19	Texas	Stone Ave - 101 (replace 2")	6"	230	$27,894	27%	$7,601
			TOTAL 6"	**13,000**			
1	Sunset St.	Hwy 101 - East	2"	730	$64,409		
			TOTAL 2"	**730**			
Total SDC Eligible Costs:							**$1,452,568**

5. BOOSTER PUMP STATIONS

Improvements to the water booster pumps stations were included in one large project. The proposed project includes the replacement of the Alder Street Pump station and the Seabrook Pump Station. The Seabrook Pump Station is also proposed to be expanded. Only this portion of the project is expanding capacity and is considered SDC eligible. Details of SDC eligible costs for the Seabrook Improvement are shown in TABLE 11.

TABLE 11 Pump Station Engineering and Construction Costs

Pump Stations						SDC Eligible Costs
Item No.	Description	Unit	Quantity	Unit Cost	Item Cost	
1	Mobilization - Bonds, Insurance (5%)	LS	1	$ 4,500.00	$ 4,500	$ 2,500
2	Construction Facilities and Temporary Controls (5%)	LS	1	$ 4,500.00	$ 4,500	$ 2,500
4	Alder Street Pump Station Pump Replacement	LS	1	$ 15,000.00	$ 15,000	
5	Seabrook Pump Station Pump Replacement	LS	1	$ 25,000.00	$ 25,000	
6	Seabrook Pump Station Pump Upgrade	LS	1	$ 50,000.00	$ 50,000	$ 50,000
Estimated Construction Costs				$	99,000.00	$ 50,000
	Administrative/Legal (5%)				$ 4,950	$ 2,500
	Contingency (25%)				$ 24,750	$ 12,500
	Engineering (25%)				$ 24,750	$ 12,500
Estimated Project Total (rounded)					**$ 154,000**	$ 132,500

II. IMPROVEMENT FEE CALCULATION SUMMARY

Based upon this analysis, approximately $8.3-million of the $18.5-million CIP is considered as SDC eligible, approximately 45% of the total project costs.

III. REIMBURSEMENT FEE CONVERSION

Reimbursement fees are charged to new customers for projects that have already been implemented that include additional capacity for the new customers to join the system. A project transitions from being eligible for improvement SDC funds to reimbursement SDC funds when the improvements are completed. Since none of the projects in the Master Plan have been completed, no masterplan projects have yet transitioned to reimbursement SDCs.

3. SDC FEE SCHEDULE

I. REIMBURSEMENT FEE CALCULATION

The full Reimbursement Fee calculation for the SWLCWPUD Water System is provided above in Table 4 . A summary of those calculations is included below in Table 12. The Reimbursement Fee is calculated by taking the depreciated value of capital investment in the system divided by the total number of EDUs at the end of the planning period. Reimbursement Fees are calculated to be $4,363 per EDU.

Table 12 - REIMBURSEMENT FEE SUMMARY

Total Asset Capital Investment:	$16,277,571	
Total Depreciation To Date:	$8,724,778	53.60%
Reimbursement SDC Eligible Costs:	$7,552,793	
Reimbursement SDC:	**$4,363**	**per EDU**

II. IMPROVEMENT FEE CALCULATION

Improvement fees are assessed for projects on the CIP that have not yet been undertaken but include the capacity to account for the impact of growth on the system. The fee has been calculated by taking the total SDC eligible project cost divided by the total number of EDUs at the end of the planning period. A summary of the improvement Fee calculation for the SWLCWPUD Water System is provided below in TABLE 13. The total calculated improvement fee is $4,794 per EDU.

TABLE 13 Improvement SDC Calculation

2040 EDUs:	1731		
Growth Related EDU's:	141		
Description	**Total CIP Cost**	**Total SDC Eligible Costs**	**SDC Cost per EDU**
Water Supply	$721,000	$0	$0
WTP	$2,281,190	$1,563,683	$903
Water Storage	$4,451,774	$4,451,774	$2,572
Distribution	$7,845,789	$2,150,276	$1,242
Pump Stations	$154,000	$132,500	$77
Water Meters	$2,995,000	$0	$0
Total:	$18,448,753	$8,298,232	**$4,794**

SECTION 4: SDC CREDITS

When considering SDC assessments, it is important to review whether certain SDC credits would be appropriate. SDC credits may be appropriate when a developer undertakes a project or a portion of a project that is part of the SDC methodology. For example, if a developer installs a waterline that is on the District's CIP and part of the SDC methodology, the developer could receive a credit for the work completed to an amount up to the value of what their assessment would have been for properties they are developing. There may be other opportunities for credit and these instances should be discussed on a case-by-case basis.

SECTION 5: WATER SYSTEM SDC FEE SUMMARY

Table 8.4.6 below summarizes the recommended combined SDC assessment for the District based upon the updated planning information contained within the master plan. The District should consider adopting an update to the existing water system SDCs based upon this methodology. **The new recommended combined SDC assessment is approximately $9,157 per EDU**. The District should annually review the SDC methodology, shifting projects from Improvement SDCs to Reimbursement SDC's as master plan projects are completed, and adjusting the Reimbursement SDC based upon changes in depreciation.

TABLE 14 SDC Summary

SDC Component	SDC Amount
Improvement Fee	$ 4,794
Reimbursement Fee	$ 4,363
Total of Water SDC Fees per EDU	$ 9,157

SECTION 6: SDC ORDINANCE

As described in Section 1, the enacting authority developing SDC fees must establish SDCs by ordinance or resolution. The methodology must provide credits for any qualified capital improvement financed by the developer. The calculation methodology must be adopted through a public process and the ordinance must set up a review procedure through which anyone may challenge an expenditure of SDC revenue if it is out of compliance with state restrictions.

The League of Oregon Cities' Legal Research Department first drafted a model SDC ordinance in 2001, which was subsequently revised in 2019 to bring the model ordinance into alignment with the current version of ORS Chapter 223. (League of Oregon Cities Legal Research Department, February 2019)This model ordinance was revised by Civil West to a format that may be adopted by the Southwest Lincoln County Water People's Utility District. It is advised that the District review this draft ordinance with the District's attorney before adoption. The Draft SWLCWPUD SDC ordinance is attached as Attachment A.

SECTION 7: REFERENCES

- Civil West Engineering Services, Inc. (2019). *SW Lincoln County Water People's Utility District Water System Master Plan.* Lincoln County, OR.
- Janet Adkins. (May 2004). *Background Brief on System Development Charges, Volume 2, Issue 1*. State Capital Building, Salem, OR: Legislative Commitee Services.
- League of Oregon Cities Legal Research Department. (February 2019). *Model System Development Charge Ordinance for Oregon Cities.* Salem, OR: League of Oregon Cities.
- US Municipal Environmental Research Lab. (1984). *Cost Equations for Small Drinking Water Systems (PB84-161793).* Cincinnati, OH: US Department of Commerce, National Technical Infromation Service.