

System Development Fees FY26 and FY27

Billings, MT

April 3, 2025

Executive Summary

The City of Billings (City) charges a System Development Fee (SDF) designed to recoup, in part, the costs of building and holding excess system capacity to serve future growth. This SDF is based on the value of existing infrastructure and reasonable expectations of costs for future infrastructure. These costs are then apportioned by anticipated demand placed on the system in conjunction with the benefits provided to new development.

Using information provided by the City, AE2S Nexus performed a multi-step analysis for each utility to:

1. Identify the area served by the utility on which to levy an SDF,
2. Evaluate the existing system and determine available capacity based on level of service determinants,
3. Forecast future demand for system growth,
4. Allocate capital costs to either existing or future capacity,
5. Calculate the value of the applicable system assets,
6. Assign system values equitably based on capacity and standard system service profiles, and
7. Ultimately, determine the final SDF charge.

The residential Water SDF recommendations are reflected in the Water SDF fees in Table ES-1 to Table ES-2. Remaining water SDF are provided in table ES-3 with multi-family greater than 4 units being treated under the standard non-residential schedule. The maximum supportable SDF charges for the Water and Wastewater systems for the FY26-FY27 period from the above analysis are presented in Tables ES-3 and ES-4, respectively, each service area identified.

The most notable change this year is during a review of the level of service for the non-commercial water use, it was determined that a ¾” base for that service was more reflective of the actual connections from the existing 1” base. As a result, the fee schedule was adjusted to use the updated base for non-residential connections.

**Table ES-1
Detailed Residential Water SDF – Current**

	1 Unit	2 Unit	3 Unit	4 Unit
Tier 1	\$2,020	\$3,410	\$4,800	\$6,190
Tier 2	\$2,660	\$4,050	\$5,440	\$6,830
Tier 3	\$3,255	\$4,645	\$6,035	\$7,425
Tier 4	\$6,285	\$7,675	\$9,065	\$10,455

**Table ES-2
Detailed Residential Water SDF – Updated**

	1 Unit	2 Unit	3 Unit	4 Unit
Tier 1	\$2,440	\$4,121	\$5,801	\$7,481
Tier 2	\$3,215	\$4,896	\$6,576	\$8,256
Tier 3	\$3,935	\$5,616	\$7,296	\$8,976
Tier 4	\$7,590	\$9,271	\$10,951	\$12,631

**Table ES-3
Maximum Supportable SDF Water Charge FY26 – FY27**

Meter Size	Non-Residential (Including Multi-Family Above 4 Units)		Seasonal Irrigation	
	Current	Updated	Current	Updated
3/4" or less	\$8,925	\$18,490	\$11,075	\$13,475
1"	\$15,140	\$31,345	\$18,775	\$22,850
1 1/2"	\$30,270	\$62,695	\$37,550	\$45,705
2"	\$48,435	\$100,315	\$60,090	\$73,135
3"	\$96,875	\$200,635	\$120,175	\$146,240
4"	\$151,370	\$313,495	\$187,780	\$228,505
With 4% Administration Charge				

**Table ES-4
Maximum Supportable SDF Wastewater Charge FY26 – FY27**

Wastewater				
Meter Size	City Service Area		Lockwood Service Area	
	Current	Updated	Current	Updated
3/4" or less	\$2,800	\$2,540	\$1,270	\$1,050
1"	\$8,600	\$7,805	\$3,895	\$3,220
1 1/2"	\$24,970	\$22,650	\$11,315	\$9,350
2"	\$43,100	\$39,100	\$19,530	\$16,150
3"	\$111,830	\$101,455	\$50,670	\$41,905
4"	\$261,800	\$237,520	\$118,630	\$98,110
With 4% Administration Charge				

1.0 Introduction

The City of Billings, Montana (City) retained AE2S Nexus to conduct a water and wastewater system utility rate study to include an evaluation and update to the System Development Fees (SDF) charged by the City for new or upgraded connections. This analysis evaluated and updated the SDF to ensure the revised SDF continues to be equitable and proportionate to benefits received based on the City's existing assets, planned infrastructure, and changes in usage.

The City provides water and wastewater service to over 35,000 retail and wholesale customers throughout the region. Access to water and wastewater service is a critical factor for ongoing development and growth within the community and the region. Cities generally build and hold excess capacity within their treatment systems so they have the ability to serve new residents and businesses as they look to build and grow within their community. The City of Billings is no exception and takes proactive steps to have capacity ready for new connections. Building and holding this excess capacity comes with a cost that is borne by existing customers of the system. To recoup a portion of these costs, the City has historically charged an SDF to new or upgraded connections based on the additional service capacity required to serve that new connection with water and/or wastewater service.

An SDF is a charge directly tied to the cost of excess capacity to serve new growth. This direct linkage is important to the legal basis for such fees and is called the rational nexus. The three major components to the rational nexus test are 1) the connection between the need for a facility and the development being charged, 2) a demonstrable benefit to the new growth, and 3) that the charge is proportionate to the benefit received. This analysis is designed to demonstrate compliance with the rational nexus as well as all other requirements under Montana law.

Impact Fees (or SDFs as in the case of Billings) are developed based on the requirements set forth in Title 7, Chapter 6, Part 16 of the Montana Code. Per subsection 7, an impact fee must meet the following requirements:

- “The amount of the impact fee must be reasonably related to and reasonably attributable to the development’s share of the cost of infrastructure improvements made necessary by the new development.
- The impact fees imposed may not exceed a proportionate share of the costs incurred or to be incurred by the governmental entity in accommodating the development. The following factors must be considered in determining a proportionate share of public facilities capital improvements costs:
 - the need for public facilities capital improvements required to serve new development; and
 - consideration of payments for system improvements reasonably anticipated to be made by or as a result of development in the form of user fees, debt service payments, taxes, and other available sources of funding the system improvements.

- Costs for correction of existing deficiencies in a public facility may not be included in the impact fee.
- New development may not be held to a higher level of service than existing users unless there is a mechanism in place for the existing users to make improvements to the existing system to match the higher level of service.
- Impact fees may not include expenses for operations and maintenance of the facility.”

In order to ensure the analysis does meet all of Montana’s legal requirements for impact fees, the following basic outline was used to calculate the water and wastewater system development charges:

1. Identify service area;
2. Evaluate existing facility conditions;
3. Forecast growth-related demands;
4. Determine capital improvements needed to serve both existing and future capacity;
5. Calculate value of existing assets and capital improvements;
6. Determine unit value for capacity;
7. Establish level of service standards for each user class; and
8. Assign the proportionate share of costs based on established level of service.

The specifics of how this outline was applied to each system is described in more detail within the individual system analyses described herein. The final SDF arrived at through this process is a combination of the value of existing system assets, credited for the component of debt and equity in the system, along with the value of planned improvements that benefit growth.

2.0 Water System Development Fee

1. Service Area

While the City of Billings' water system is designed with a number of zones within the system itself, the service area of the system as a whole is considered to be the entire City area (including areas to be annexed with planned provision for water service) and is not divided down to the pressure zones. All new customers to the City's system are included in this service area.

2. Existing Facility Conditions

Existing water assets are currently estimated at 86.2 percent capacity. The available capacity was calculated based on the peak day usage for the water treatment plant from 2009 through 2024. As the capacity used can fluctuate in any given year due to a number of factors, historic peak day usage was used to represent the maximum amount of capacity needed to serve the user base. The resultant peak capacity utilization is 51.7 million gallon per day output from fiscal year 2012. All other facility conditions are outlined in the most recent facility plan on file with the City.

3. Growth-Related Demands

Growth-related demands are forecast based on the 2017 Integrated Water Plan adjusted for growth realized since the adoption of the facility plan. Additional capacity will be brought on when the West End Treatment Plant is online with anticipated overall system capacity of 23 percent available by the end of the 10-year timeframe.

4. Capital Improvements

The City maintains an extensive capital improvements plan (CIP) to identify the investments needed to both expand the water system as well as increase the capacity to serve growth over a 10-year period. The analysis evaluated this CIP in conjunction with City staff to determine which projects contribute to expanding system capacity and to what level those projects contribute to system expansion. Projects designed to increase the overall treatment capacity, the trunk transmission system, and improve operations at the plant in a way that still benefits excess capacity were included and assigned a value applicable to growth to weight the overall cost of the project. The overall SDF charge is calculated to coincide with this same 10-year CIP planning period. The CIP used in the analysis is included in Appendix A.

5. Facility Valuations

Future Facilities

The CIP identifies nearly \$369 million in capital improvements from FY25 – FY36, including \$36.8 million in construction work in progress in FY23. The facility determination and growth percentages identified during the CIP process were used to adjust the overall CIP valuation and ensure that it accounts solely for projects that benefit future connections. This adjustment for

growth results in approximately \$200,058,353 in growth-related capital projects over the time horizon.

Existing Facilities

The existing system value is based on the Replacement Cost New less Depreciation (RCNLD) for all applicable assets. The starting point for this calculation is the City's existing listing of all current assets for the system. The process then reviews the existing asset information listing and excludes all assets that were classified as contributed capital, i.e. not paid for with ratepayer funds. Once the asset list was defined, the original cost was adjusted to 2025 dollars using the *Engineering News Record Construction Cost Index (CCI)* for Denver to determine the replacement cost new of the assets. Accumulated depreciation percentage was then netted off the replacement cost new to identify the final RCNLD. The system valuations are shown below.

- **RCLND of all water assets:** \$270,621,655
- **RCLND of water assets, less contributed capital:** \$223,036,290

Cash Equity

The third piece of identifying the overall facility valuation is accounting for the value of cash that ratepayers have contributed to the system over the years, the outstanding debt on existing assets, and the SDF's currently available to buy-down future assets. Cash values are estimated based on current utility budgeting data and cash-flow trends through the end of FY25. Projected cash on hand is equal to \$22,957,839. Both the value of existing debt and the outstanding SDF fund balance are then netted off the value of cash on hand to arrive at the cash equity value. Outstanding debt is calculated to be \$80,075,000 based on current debt issuances and FY25 principal payments. SDF values are set at \$245,204 based on budgeted expenditures. Total cash equity portion is (\$57,362,365).

6. Determine unit value for capacity

To arrive at a single unit value for capacity, the analysis looks at existing facilities (less cash equity) and future facilities separately and then combines them into a single unit value. The total treatment capacity was used as the capacity basis for existing system and is set at 60 MGD. The value for planned capital improvements is divided by the currently available capacity of 8.3 MGD plus the new capacity additions in the CIP of 18 MGD to determine that unit value. Facility valuations are divided by these unit values to calculate the unit capacity values on a gallon per day basis. Table 2-1 provides the resulting unit capacity values.

**Table 2-1
Water Unit Capacity Values**

Component	Facility Value	Capacity	Value*
Existing Capital	\$223,036,290	60 MGD	\$3.72 / gpd
Cash Equity	(\$57,362,365)	60 MGD	(\$0.96) / gpd
Planned Capital	\$200,058,353	26.3 MGD	\$7.61/ gpd
		Total	\$10.37 / gpd

**Values rounded to the nearest whole cent*

7. Level of Service Standards

Level of service standards are identified for three separate user classes: residential, non-residential, and seasonal irrigation. The overall level of service is determined by the demands placed on the system from each user class. These various user classes have dramatically different usage profiles and as such are separated accordingly. To determine the overall demand from each user class, recent historical usage from 2010 through 2024 was evaluated. Since many factors contribute to the variation in usage of system capacity from year to year, the peak annual average usage from this data set (FY 2013) was selected for inclusion to the analysis to represent peak capacity utilization, consistent with prior years. The non-residential meter size standard was updated based on a review of typical new connections for that meter class. The majority of meters now reflect a ¾” base usage for that class from a previous 1”. Table 2-2 outlines identified level of service standards for the user classes. Residential indoor and outdoor demand was based on estimated lawn watering values and should be reviewed during each subsequent update.

**Table 2-2
Water Level of Service Standards**

User Class	Usage (gpd)	Standard Meter Size
Residential - Outdoor	176	¾”
Residential - Indoor	156	¾”
Non-Residential	1,715	¾”
Seasonal Irrigation	6,782	2”

8. Proportionate Share of Costs

To fairly assign a proportionate share of costs to the various user classes, the level of service standard set by those classes was multiplied by the unit cost per gpd capacity to arrive at a standard SDF per user class. The resulting residential indoor SDF is a per unit basis for service at four unit and lower developments. The residential outdoor standard SDF is then scaled based on the tier factors developed. Those factors are provided in table 2-3. For commercial and seasonal user classes, industry standard equivalent meter factors are applied to the standard SDF to adjust these costs into charges across the variety of meter sizes that those user classes could have.

By breaking down the system values into the unit cost and assigning it proportionately based water service standards, it provides a total cost associated with the proportionate share of growth and growth-related costs by new users. This calculated total cost was rounded down to the nearest \$5 equivalent to ensure that the recommended maximum supportable impact fee to ensure the final adopted impact fee does not exceed the maximum supportable. After the proportionate share of costs were calculated, a 4.0 percent administrative charge was added to reflect the ongoing costs associated with managing an SDF program. The resulting final SDF charges are outlined in Table 2-3.

**Table 2-3
Detailed Residential Water SDF – Current**

	1 Unit	2 Unit	3 Unit	4 Unit
Tier 1	\$2,020	\$3,410	\$4,800	\$6,190
Tier 2	\$2,660	\$4,050	\$5,440	\$6,830
Tier 3	\$3,255	\$4,645	\$6,035	\$7,425
Tier 4	\$6,285	\$7,675	\$9,065	\$10,455

**Table 2-4
Detailed Residential Water SDF – Updated**

	1 Unit	2 Unit	3 Unit	4 Unit
Tier 1	\$2,440	\$4,121	\$5,801	\$7,481
Tier 2	\$3,215	\$4,896	\$6,576	\$8,256
Tier 3	\$3,935	\$5,616	\$7,296	\$8,976
Tier 4	\$7,590	\$9,271	\$10,951	\$12,631

**Table 2-5
Maximum Supportable SDF Water Charge FY26– FY27**

Water System SDF				
Meter Size	Non-Residential		Seasonal Irrigation	
	Current	Updated	Current	Updated
3/4" or less	\$8,925	\$18,490	\$11,075	\$13,475
1"	\$15,140	\$31,345	\$18,775	\$22,850
1 1/2"	\$30,270	\$62,695	\$37,550	\$45,705
2"	\$48,435	\$100,315	\$60,090	\$73,135
3"	\$96,875	\$200,635	\$120,175	\$146,240
4"	\$151,370	\$313,495	\$187,780	\$228,505

In instances where the meter size needed to service a new connection is greater than 4” or when the unique characteristics of a larger water user may require, the SDF should be calculated by multiplying the anticipated average daily demand of the user by the unit rate of \$10.37 per gallon. An additional 4.0 percent administrative fee should then be added to the resulting SDF. In instances where the characteristics of the user may result in a change in capital use patterns, a special study may be required to calculate the charge.

3.0 Wastewater System Development Fee

1. Service Area

The wastewater system has two separate service areas resulting in two distinct SDF calculations. These service areas are: the City of Billings and Lockwood Water & Sewer District. Lockwood Water & Sewer District connects directly at the plant and does not use any of the City's collection system, necessitating modifications to the baseline SDF for this benefit of use of a smaller overall asset base.

2. Existing Facility Conditions

The capacity of the wastewater system is currently set at 34 MGD based on average day treatment capacity. The available capacity was calculated based on the average day usage for the wastewater treatment plant from 2009 through 2022. As the capacity used can fluctuate in any given year due to a number of factors, historic plant influent average day recordings were used to represent the maximum amount of capacity needed to serve the in-place user base. For these reasons, a maximum average day usage of 24.4 million gallon per day of plant influent from FY22 was incorporated into the analysis. This existing system capacity is applicable to both service areas. All other facility conditions are outlined in the most recent facility plan on file with the City.

3. Growth-Related Demands

The City evaluates the existing plant capacity and the demands placed on it by new connections on an ongoing basis. The most recent comprehensive engineering study on current treatment facilities, including an evaluation of in-place capacity and the demands of growth, was the 2016 study (updated January 2017) done in conjunction with the ongoing nutrient upgrade, expansion, and plant improvement work. The overall capacity and the demands growth continues to place on available capacity is derived from this report.

4. Capital Improvements

The City maintains an extensive capital improvements plan (CIP) to identify the investments needed to both expand the system treatment and collection system as well as increase the capacity to serve growth over a 10-year period. The analysis evaluated the currently adopted CIP in conjunction with City staff to determine which projects contribute to expanding system capacity and to what level those projects contribute to system expansion. Particular care is taken to adjust out projects that do not affect overall system capacity such as the local collection system. The SDF charge is calculated to coincide with this same 10-year CIP planning period. The biggest change in capital improvements was moving additional treatment enhancements to beyond the 10-year window.

5. Facility Valuations

Future Facilities

The CIP identifies over \$153 million in capital improvements from FY25 – FY35, including \$15.4 million in construction work in progress in FY25. As part of the process to identify which projects expand system capacity, all small line collection system projects are removed from the system growth value calculation due to assessment policy. The remaining project costs are weighted based on the proportion of the project benefiting growth-related capacity as estimated at the time of improvement (based on growth-related demand calculations). This results in \$8,106,180 in growth-related capital projects identified for the City service area. Further reductions are necessary for the Lockwood service area since it does not share in any of the large, trunk collection infrastructure. While there is a reduction, the majority of the City’s investment for growth throughout the system is targeting capacity at the plant. As a result, these reductions reflect the limited use of the overall system by Lockwood and are equal to growth related capital of \$7,801,074 for Lockwood.

Existing Facilities

The existing system value is based on the Replacement Cost New less Depreciation (RCNLD) for all applicable assets. The starting point for this calculation is the City’s existing listing of all current assets for the system. The process then reviews the existing asset information listing and excludes all assets that were classified as contributed capital, i.e. not paid for with ratepayer funds. Once the asset list was defined, the original cost was adjusted to 2025 dollars using the *Engineering News Record Construction Cost Index (CCI)* for Denver to determine the replacement cost new of the assets. Accumulated depreciation percentage was then netted off the replacement cost new to identify the final RCNLD. The system valuations are shown below.

- **RCLND of all wastewater assets:** \$302,772,016
- **RCLND of wastewater assets, less contributed capital:** \$217,665,319
- **Lockwood benefitting wastewater assets, less contributed capital:** \$93,177,356

Cash Equity

The third piece of identifying the overall system valuation is accounting for the value of cash that ratepayers have contributed to the system over the years, the outstanding debt on existing assets, and the SDF balances currently available to buy-down future assets. Cash values are estimated based on current utility budgeting data and cash-flow trends through the end of FY25. Projected cash on hand is equal to \$14,097,937. Both the value of existing debt and the outstanding SDF fund balance are then netted off the value of cash on hand to arrive at the cash equity value. Outstanding debt is calculated to be \$47,651,000 based on current debt issuances and FY25 principal payments. SDF values are set at \$2,174,121. Total cash equity portion is \$(35,727,184). Lockwood’s adjustment nets off items not applicable to the service area and results in a total cash equity of \$(33,546,859).

6. Determine unit value for capacity

To arrive at a single unit value for capacity, the analysis looks at existing facilities (less cash equity) and future facilities separately and then combines them into a single unit value. In this instance, the total treatment capacity was used as our capacity factor for existing system and is set at 34 MGD. Average day flows are set to recent historical maximums of 24.4 MGD, resulting in the capacity value for existing system components of 9.6 MGD. The capacity value for planned capital is based on the currently available capacity for growth plus direct new treatment capacity added by capital improvements of 0 MGD. The resulting available capacity value is 9.6 MGD for planned capital improvements. Tables 3-1 and 3-2 provide the resulting unit capacity values. Both service areas share in the capacity equally without any adjustments.

**Table 3-1
Wastewater Unit Capacity Values (City Service Area)**

Component	Facility Value	Capacity	Value for City Service Area*
Existing Capital	\$217,665,319	34 MGD	\$6.40 / gpd
Cash Equity	\$(35,727,184)	34 MGD	\$(1.05) / gpd
Planned Capital	\$8,106,180	9.6 MGD	\$0.84 / gpd
		Total	\$6.19 / gpd

**Values rounded to the nearest whole cent*

**Table 3-2
Wastewater Unit Capacity Values (Lockwood Service Area)**

Component	Facility Value	Capacity	Value for Lockwood Service Area*
Existing Capital	\$93,177,356	34 MGD	\$2.74 / gpd
Cash Equity	\$(33,546,859)	34 MGD	\$(0.99) / gpd
Planned Capital	\$7,801,074	9.6 MGD	\$0.81/ gpd
		Total	\$2.56 / gpd

**Values rounded to the nearest whole cent*

7. Level of Service Standards

One level of service standard has been identified for the wastewater system. The overall level of service is determined by the demands placed on the system by the contributing users. To determine the overall demand, total equivalent dwelling units (EDUs) contributing to the system were analyzed. Total capacity and EDUs were used to identify an average gallon capacity use per EDU per day. This established a level of service of 395 gallons per day per EDU.

8. Proportionate Share of Costs

Proportionate share of costs were determined by taking the calculated unit value by the level of service standard. As the standard units associated with the level of service standard are provided in an EDU meter size of ¾”, industry standard equivalent meter factors are applied to translate these costs into charges for the appropriate meter size. This provides a total cost associated with the proportionate share of growth and growth-related costs by new users. The total cost is rounded down to the nearest \$5 to ensure the actual charge is at or just less than the maximum supportable. After the proportionate share of costs were determined, a 4.0 percent administrative charge was added, under the state maximum allowance of 5 percent. The resulting final SDF charges are outlined in the Table 3-3.

**Table 3-3
Maximum Supportable SDF Wastewater Charge FY24– FY25**

Meter Size	Wastewater			
	City Service Area		Lockwood Service Area	
	Current	Updated	Current	Updated
¾" or less	\$2,800	\$2,540	\$1,270	\$1,050
1"	\$8,600	\$7,805	\$3,895	\$3,220
1 ½"	\$24,970	\$22,650	\$11,315	\$9,350
2"	\$43,100	\$39,100	\$19,530	\$16,150
3"	\$111,830	\$101,455	\$50,670	\$41,905
4"	\$261,800	\$237,520	\$118,630	\$98,110

In instances where the meter size needed to service a new connection within the City service area is greater than 4” or when the unique characteristics of a larger wastewater user may require a more in-depth review, the SDF should be calculated by identifying the key usage characteristics of flow, Biochemical Oxygen Demand (BOD) loading, Total Suspended Solids (TSS), and Total Kjeldahl Nitrogen (TKN) loading and using the formula below.

$$(\$6.19 * \text{Flow} * (0.578 + (\text{BOD} * 0.182/200) + (\text{TSS} * 0.147/200) + (\text{TKN} * 0.093/45))) * 1.04$$

Where \$6.19 is the total unit cost identified through the analysis, 0.578 is the weighted capital allocation (across all assets) from the cost of service model applicable to flow, 0.182 is the weighted capital allocation applicable to BOD, 0.147 is the weighted capital allocation to TSS, 0.093 is the weighted capital allocation applicable to TKN, and 1.04 represents the administrative charge. These weighted capital allocations are available from the 2026 capital allocations in the retail rate model.

In instances where the user requesting connection to the system presents a demand that may result in different allocation factors used above, a special study may be required to calculate the charge.

4.0 Summary

The SDFs calculated in this analysis are based on the value of the in-place assets and the reasonably expected costs of future capital to expand and improve the City’s water and wastewater systems. The fees calculated are based on the proportionate share of the capital costs tied to the demand placed by new development. Tables 4-1, 4-2, 4-3, and 4-4 present the SDF fee schedule in its entirety for the water system and the wastewater service areas, respectively.

Table 4-1
Detailed Residential Water SDF – Current

	1 Unit	2 Unit	3 Unit	4 Unit
Tier 1	\$2,020	\$3,410	\$4,800	\$6,190
Tier 2	\$2,660	\$4,050	\$5,440	\$6,830
Tier 3	\$3,255	\$4,645	\$6,035	\$7,425
Tier 4	\$6,285	\$7,675	\$9,065	\$10,455

Table 4-2
Detailed Residential Water SDF

	1 Unit	2 Unit	3 Unit	4 Unit
Tier 1	\$2,440	\$4,121	\$5,801	\$7,481
Tier 2	\$3,215	\$4,896	\$6,576	\$8,256
Tier 3	\$3,935	\$5,616	\$7,296	\$8,976
Tier 4	\$7,590	\$9,271	\$10,951	\$12,631

**Table 4-3
Maximum Supportable SDF Water Charge FY24– FY25**

Meter Size	Non-Residential (Including Multi-Family Above 4 Units)		Seasonal Irrigation	
	Current	Updated	Current	Updated
3/4" or less	\$8,925	\$18,490	\$11,075	\$13,475
1"	\$15,140	\$31,345	\$18,775	\$22,850
1 1/2"	\$30,270	\$62,695	\$37,550	\$45,705
2"	\$48,435	\$100,315	\$60,090	\$73,135
3"	\$96,875	\$200,635	\$120,175	\$146,240
4"	\$151,370	\$313,495	\$187,780	\$228,505
With 4% Administration Charge				

**Table 4-3
Maximum Supportable SDF Wastewater Charge FY24– FY25**

Meter Size	Wastewater			
	City Service Area		Lockwood Service Area	
	Current	Updated	Current	Updated
3/4" or less	\$2,800	\$2,540	\$1,270	\$1,050
1"	\$8,600	\$7,805	\$3,895	\$3,220
1 1/2"	\$24,970	\$22,650	\$11,315	\$9,350
2"	\$43,100	\$39,100	\$19,530	\$16,150
3"	\$111,830	\$101,455	\$50,670	\$41,905
4"	\$261,800	\$237,520	\$118,630	\$98,110

Appendix A

Water Capital Improvement Plan

D? Project	Percent Growth	Current FY 25											Total Cost	Adj.		
		FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	Percent Growth		Growth Total		
West End Reservoir*	100%	78,190,910	-	-	-	-	-	-	-	-	-	-	-	78,190,910	100%	78,190,910
West End Distribution*	50%	5,000,000	-	-	-	-	-	-	-	-	-	-	-	5,000,000	0%	0
West End Treatment Plant	100%	63,420,586	-	-	-	-	-	-	-	-	-	-	-	63,420,586	100%	63,420,586
Zone 4 PS Improvements*	50%	7,339,253	-	-	-	-	-	-	-	-	-	-	-	7,339,253	50%	3,669,627
Zone 4 Water Line	50%	566,298	-	-	-	-	-	-	-	-	-	-	-	566,298	0%	0
Intake Catwalk*	0%	4,379,034	-	-	-	-	-	-	-	-	-	-	-	4,379,034	14%	605,766
Willet and Christensen PS	0%	57,974	-	-	-	-	-	-	-	-	-	-	-	57,974	14%	8,020
HSPS Zone 2 Piping Modifications	25%	75,950	-	-	-	-	-	-	-	-	-	-	-	75,950	25%	18,988
Voelker Pump Station PRV	0%	332,635	-	-	-	-	-	-	-	-	-	-	-	332,635	14%	46,015
Belknap Service Center Fiber	0%	300,000	-	-	-	-	-	-	-	-	-	-	-	300,000	14%	41,500
Central Water Extension	100%	502,013	-	-	-	-	-	-	-	-	-	-	-	502,013	0%	0
Water Main Replacements	0%	10,633,078	6,315,000	6,320,000	7,740,000	8,000,000	8,800,000	9,270,000	9,548,000	9,800,000	10,094,000	10,400,000	96,920,078	0%	0	
Compensation Agreements (oversized lines)	0%	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	3,000,000	0%	0	
Equipment Replacements	0%	1,130,370	929,515	575,124	852,667	780,000	852,313	940,000	780,000	795,000	800,000	950,000	9,384,989	23%	2,183,532	
New Equipment	100%	23,249	80,000	80,000	80,000	80,000	80,000	80,000	650,000	80,000	80,000	80,000	1,393,249	100%	1,393,249	
Water Plant Electrical Improvements	0%	980,260	200,000	500,000	315,000	325,000	250,000	350,000	325,000	325,000	350,000	350,000	4,270,260	22%	922,093	
Waterline extensions	100%	1,800,000	1,000,000	1,000,000	1,000,000								4,800,000	0%	0	
Daniels to Moore Ln Water extension	100%		85,000	720,000									805,000	0%	0	
Water Treatment Plant Air Scour Line Replacement	0%		1,050,000										1,050,000	12%	130,725	
Water Treatment Plant Post Chlorination Improvements	0%		105,000										105,000	12%	13,073	
Zone 1 Water Storage Improvements	50%	102,960		7,200,000									7,302,960	50%	3,651,480	
Grand Avenue Water Extension	100%			700,000									700,000	0%	0	
Water Treatment Plant Leaks Mitigation	0%				2,200,000								2,200,000	32%	709,775	
Zone 6 Storage and Looping Improvements	50%	110,000			1,100,000	10,400,000							11,610,000	50%	5,805,000	
Skyway Drive Water Line Loop	75%					300,000	2,900,000						3,200,000	0%	0	
Water Treatment Plant 750kW Solar PV Generation	0%						1,010,000						1,010,000	29%	297,908	
South 32nd St W/I-90/S Frontage Loop	0%						325,000	3,300,000					3,625,000	0%	0	
Water - Fox Reservoir #1 Replacement	0%						440,000	4,050,000					4,490,000	28%	1,268,338	
Water Treatment Plant Facility Plan	0%								350,000				350,000	27%	93,552	
Staples	50%								700,000	6,300,000			7,000,000	50%	3,500,000	
Water Storage Improvements Zone 4	100%										825,000	7,700,000	8,525,000	100%	8,525,000	
O'Malley St area / Oak St to 7th St West	0%	291,359											291,359	0%	0	
Briarwood Blvd; Turnberry Cir to McMasters Rd	0%	56,838											56,838	0%	0	
Water Master Plan Update	50%	421,649											421,649	50%	210,825	
West End Reservoir	100%	7,343,474											7,343,474	100%	7,343,474	
WO 19-42 West End Water Treatment Plant Project	100%	17,240,072											17,240,072	100%	17,240,072	
Zone 1 Water Storage Improvements	50%	582,450											582,450	50%	291,225	
Water/Sewer Main Replacement	0%	4,055,182											4,055,182	0%	0	
Zone 4 Pump Station & Waterline Improvements	50%	515,144											515,144	50%	257,572	
High Service Pump Station Piping Modifications	50%	32,801											32,801	50%	16,401	
HSPS Zone 2 Piping Modification	50%	95,642											95,642	50%	47,821	
Belknap Service Center Remodel	0%	213,600											213,600	14%	29,548	
FEMA Intake Rehabilitation	0%	410,381											410,381	14%	56,769	
Water/Sewer Main Replacement	0%	4,499,313											4,499,313	0%	0	
West End Raw Water Unloader	50%	7,419											7,419	50%	3,709	
Central Avenue Water Extension	100%	49,584											49,584	0%	0	
Voelker Pump Station PRV	0%	43,870											43,870	14%	6,069	
2024 GE Switchgear Services Agreement	0%	101,149											101,149	14%	13,992	
Charles St	0%	500,809											500,809	0%	0	
VertexOne Utility Billing Software Implementation	0%	330,656											330,656	14%	45,741	
Total		212,035,961	10,064,515	17,395,124	13,587,667	20,185,000	14,957,313	18,290,000	12,653,000	17,600,000	12,449,000	19,780,000	368,997,580		200,058,353	

Projects that will be debt funded are in boxes

CWIP



Wastewater Capital Improvement Plan

C?/IE	Project	Percent Growth	Percent											Adj.			
			Current FY 25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	10-Yr Total	Percent Growth	Growth Total	Lockwood Total
1	Digester Boiler	0%	2,141,281											2,141,281	28%	604,597	604,597
1	Belknap Service Center Fiber	0%	300,000											300,000	28%	84,706	84,706
1	Influent Lift Station	20%	156,000											156,000	20%	31,200	31,200
1	Nutrient Recovery	50%	747,565											747,565	50%	373,783	373,783
C 0	Wastewater Compensation Agreements	0%	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	3,300,000	0%	0	0	
C 0	Wastewater Main Replacements	0%	10,175,557	6,300,000	6,800,000	7,400,000	8,000,000	8,800,000	9,270,000	9,548,000	9,800,000	10,094,000	10,400,000	96,587,557	0%	0	0
1	Wastewater Treatment Plant Electrical	0%	322,443	300,000	300,000	300,000	300,000	300,000	350,000	350,000	350,000	350,000	350,000	3,572,443	16%	569,631	569,631
1	Equipment Replacements	0%	463,294	938,403	582,000	599,000	617,000	635,000	653,000	673,000	693,000	693,000	693,000	7,239,697	16%	1,167,602	1,167,602
1	New Equipment	100%	23,249	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	1,343,249	100%	1,343,249	1,343,249
C 0	Sewer Extensions	0%	1,200,000	1,000,000	1,000,000	1,000,000								4,200,000	0%	0	0
1	Hydrogen Sulfide Mitigation (Phase 2 and 3)	0%	933,624		520,000									1,453,624	27%	395,753	395,753
C 0	Monad Sewer	0%	187,208		530,000	4,800,000								5,517,208	0%	0	0
1	Digester Gas Interior Piping Display	0%		1,290,000										1,290,000	25%	327,812	327,812
1	Laboratory Remodel	0%							400,000					400,000	11%	45,176	45,176
C 0	Hesper Sewer Extension (Sholoh to 48th)	100%	3,800,000											3,800,000	0%	0	0
C 0	Central Avenue Sewer Extension (Shiloh to 44th)	100%	859,724											859,724	0%	0	0
1	Replace Buried Digester Gas and Sludge Pipe	0%		536,000										536,000	25%	136,207	136,207
C 0	Grand Avenue Sewer Extension (60th to 62nd)	100%			885,000									885,000	0%	0	0
0	Rehberg Ranch Lift Station	0%						180,000	1,700,000					1,880,000	14%	270,494	0
C 0	Highway 3 Sanitary Sewer Extension	100%				200,000	1,500,000							1,700,000	0%	0	0
1	Wastewater Treatment Plant Intercom	0%								200,000				200,000	11%	22,588	22,588
C 0	Monad Road Sewer Extension	100%	3,076,990.00											3,076,990	0%	0	0
1	WRF Digester Boiler	0%	58,748.87											58,749	28%	16,588	16,588
1	WRF Nutrient Recovery & Biosolids Facilities Plan	50%	203,306.45											203,306	50%	101,653	101,653
1	WRF Nutrient Recover Improvements Project	50%	4,373,267.54											4,373,268	50%	2,186,634	2,186,634
1	WRF Electrical Improvements	0%	295,291.86											295,292	28%	83,377	83,377
C 0	Water/Sewer Replacement Project	0%	4,207,297.19											4,207,297	0%	0	0
0	Briarwood H2S Mitigation	0%	67,501.27											67,501	28%	19,059	0
1	Belknap Office Remodel Phase 2	0%	870,857.81											870,858	28%	245,889	245,889
C 0	Hesper Road Sewer Extension	100%	752,051.65											752,052	0%	0	0
0	Saraha Sands Lift Station	0%	55,082.65											55,083	28%	15,553	0
C 0	Sewer Main Replacement Project	0%	1,027,692.19											1,027,692	0%	0	0
C 0	Hesper Sewer	100%	26,300.00											26,300	0%	0	0
1	WRF Campus Electrical	0%	95,677.36											95,677	28%	27,015	27,015
C 0	Charles St	0%	191,616.01											191,616	0%	0	0
1	VertexOne Software	0%	133,221.07											133,221	28%	37,615	37,615
Total			37,044,847	10,744,403	10,997,000	14,679,000	10,797,000	10,295,000	12,353,000	11,551,000	11,223,000	12,037,000	11,823,000	153,544,250		8,106,180	7,801,074
CWIP																	