



**CITY OF BLACK DIAMOND**  
**November 14, 2019 Regular Work Session**  
25510 Lawson Street, Black Diamond, Washington

Work Sessions are meetings for Council to review upcoming and pertinent business of the City. Public testimony is only accepted at the discretion of the Council.

**6:00 P.M. – CALL TO ORDER, FLAG SALUTE, ROLL CALL**

- 1) Discussion and Review of Sewer Rate Study – Ashley Emery, Seth Boettcher, May Miller
- 2) Adjournment

# 2019 UTILITY RATE STUDY

*Prepared by Peninsula  
Financial Consulting*



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# Summary

## **2019 Rate Study elements**

- **Sewer rates**
  - **Excise tax**
- **Water Rates**
- **Stormwater Rates**

## **Financial Budget Forecast**

- **Forecast Model**

## **Review Projected Utility Cash Flows & Monthly Rates**

## **Financial Summary & Outlook**

# Financial Forecast Modeling

- Largely based on a review of historical expenses and the City's 2020 budget
  - Forecast uses annual adjustment factors e.g.
    - Inflation 2.5%
    - Labor (COLA) 2.5%
    - Benefits 3%
  - Baseline growth for all utilities is forecasted at:
    - 125 New ERUs in 2020
    - 100 New ERUs in 2020 thru 2025
- ¼ New employee in 2022 and 2025 at \$82K/year
- Limited capital costs

# Sewer Utility Budget Forecast

- Largely based on a review of historical expenses and the City's 2020 budget
- Revenue and expenses associated with King County sewer services are assumed to offset each other (grow @ 2.3%/yr)
- Baseline growth of 125 ERUs in 2020 & 10 ERUs in 2020-2025
- Projected growth and City fees/costs are used to project some revenues and expenses directly related to new customers
  - Connection charges are only collected on infill growth and this is assumed to be 4% of total growth (about 6 a year)
- Projected ¼ New employee in 2022 and 2025 at \$82K/year
- Limited capital costs & zero debt

# Sewer Financial Model with Existing Rates

Residential Sewer Monthly Bill for City Service	\$21.78	\$21.78	\$21.78	\$21.78	\$21.78	\$21.78
% City Rate Increase	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Residential Sewer Monthly Bill for Metro	\$46.37	\$47.44	\$48.53	\$49.65	\$50.79	\$51.96
Total Monthly SFR Rate	\$68.15	\$69.22	\$70.31	\$71.43	\$72.57	\$73.74

Accounts	2020	2021	2022	2023	2024	2025
<b>OPERATIONAL SUMMARY</b>						
(+) Total Operating Revenues	1,049,500	1,148,000	1,252,700	1,360,400	1,471,300	1,653,000
(-) Total Operation & Maintenance	1,162,500	1,242,900	1,377,600	1,465,300	1,582,000	1,746,600
(-) Total Debt	32,800	32,800	32,800	0	0	0
<b>NET REVENUE</b>	<b>80,200</b>	<b>62,100</b>	<b>92,100</b>	<b>104,900</b>	<b>110,700</b>	<b>93,600</b>
<b>CAPITAL SUMMARY</b>						
<b>Start of Year Cash</b>	<b>400,000</b>	<b>298,000</b>	<b>246,400</b>	<b>163,800</b>	<b>67,000</b>	<b>37,100</b>
(+) Connection Charges & Interest Inc.	13,200	10,500	9,500	8,100	6,600	10,500
(+) Transfer from Operations	0	0	0	0	0	0
(+) Total Loan Funds	0	0	0	0	0	0
(+) Total CIAC Funds	25,000	0	0	0	0	0
(-) Total Capital Expenses	60,000	0	0	0	0	0
(-) Transfer to Operations	80,200	62,100	92,100	104,900	110,700	93,600
<b>NET CAPITAL REVENUE</b>	<b>102,000</b>	<b>51,600</b>	<b>82,600</b>	<b>96,800</b>	<b>104,100</b>	<b>83,100</b>
<b>End of Year Cash</b>	<b>298,000</b>	<b>246,400</b>	<b>163,800</b>	<b>67,000</b>	<b>37,100</b>	<b>120,200</b>

# Sewer Budget Forecast Summary

- **Growth is a major contributor to future revenues**
  - **With the indicated rate enhancements the fund will be balanced even if growth is 30% less than forecasted**
- **Existing and planned rates do not provide capacity for:**
  - **Future capital costs**
  - **Ability to debt fund capital projects**
  - **Long term depreciation/repair funding**

# Sewer Financial Model with Rate Enhancements

Residential Sewer Monthly Bill for City Service	\$21.78	\$25.05	\$27.56	\$28.94	\$29.66	\$30.40	\$31.16
% City Rate Increase		15.0%	10.0%	5.0%	2.5%	2.5%	2.5%
Residential Sewer Monthly Bill for Metro	\$45.33	\$46.37	\$47.44	\$48.53	\$49.65	\$50.79	\$51.96
Total Monthly SFR Rate	\$67.11	\$71.42	\$75.00	\$77.47	\$79.31	\$81.19	\$83.12
	<b>Baseline Budget</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
<b>OPERATIONAL SUMMARY</b>							
(+) Total Operating Revenues		1,097,400	1,239,700	1,374,900	1,504,500	1,639,400	1,854,600
(-) Total Operation & Maintenance		1,167,100	1,252,000	1,389,600	1,479,600	1,598,700	1,766,600
(-) Total Debt		32,800	32,800	32,800	0	0	0
<b>NET REVENUE</b>		<b>36,900</b>	<b>20,500</b>	<b>18,100</b>	<b>24,900</b>	<b>40,700</b>	<b>88,000</b>
<b>CAPITAL SUMMARY</b>							
<b>Start of Year Cash</b>		<b>400,000</b>	<b>341,700</b>	<b>374,000</b>	<b>404,300</b>	<b>441,900</b>	<b>496,000</b>
(+) Connection Charges & Interest Inc.		13,600	11,800	12,200	12,700	13,400	18,700
(+) Transfer from Operations		0	20,500	18,100	24,900	40,700	88,000
(+) Total Loan Funds		0	0	0	0	0	0
(+) Total CIAC Funds		25,000	0	0	0	0	0
(-) Total Capital Expenses		60,000	0	0	0	0	0
(-) Transfer to Operations		36,900	0	0	0	0	0
<b>NET CAPITAL REVENUE</b>		<b>58,300</b>	<b>32,300</b>	<b>30,300</b>	<b>37,600</b>	<b>54,100</b>	<b>106,700</b>
<b>End of Year Cash</b>		<b>341,700</b>	<b>374,000</b>	<b>404,300</b>	<b>441,900</b>	<b>496,000</b>	<b>602,700</b>

\* These rates are provided to illustrate the magnitude of needed revenue enhancements

# Water Utility Budget Forecast

- Largely based on a review of historical expenses and the City's 2020 budget
- Expense for Tacoma Capacity estimated at \$75k in 2020, \$150K in 2021 and annual 2.5% inflation
- Baseline growth of 125 ERUs in 2020 & 10 ERUs in 2020-2025
- Projected growth and City fees/costs are used to project some revenues and expenses directly related to new customers
  - Connection charges are only collected on infill growth and this is assumed to be 4% of total growth (about 6 a year)
- Projected ¼ New employee in 2022 and 2025 at \$82K/year
- Limited capital costs & existing debt (\$220/yr) will be retired by 2024

# Water Financial Model with Existing Rates

Residential Water Monthly Bill	\$64.87	\$64.87	\$64.87	\$64.87	\$64.87	\$64.87
% Rate Increase	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Accounts	2020	2021	2022	2023	2024	2025
<b>OPERATIONAL SUMMARY</b>						
(+) Total Operating Revenues	1,043,500	1,083,700	1,142,400	1,200,800	1,259,400	1,318,100
(-) Total Operation & Maintenance	825,000	906,400	967,000	982,200	1,023,300	1,062,800
(-) Total Debt	<u>218,800</u>	<u>217,300</u>	<u>215,700</u>	<u>202,900</u>	<u>201,500</u>	<u>0</u>
<b>NET REVENUE</b>	<b>300</b>	<b>40,000</b>	<b>40,300</b>	<b>15,700</b>	<b>34,600</b>	<b>255,300</b>
<b>CAPITAL SUMMARY</b>						
<b>Start of Year Cash</b>	<b><u>950,000</u></b>	<b><u>729,200</u></b>	<b><u>595,600</u></b>	<b><u>212,400</u></b>	<b><u>244,600</u></b>	<b><u>296,200</u></b>
(+) Connection Charges & Interest Inc.	42,500	33,800	30,000	27,300	28,000	30,400
(+) Transfer from Operations	0	0	0	15,700	34,600	255,300
(+) Total Loan Funds	0	0	0	0	0	0
(+) Total CIAC Funds	0	499,900	362,500	0	0	0
(-) Total Capital Expenses	263,000	627,300	735,400	10,800	11,000	11,300
(-) Transfer to Operations	<u>300</u>	<u>40,000</u>	<u>40,300</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>NET CAPITAL REVENUE</b>	<b>220,800</b>	<b>133,600</b>	<b>383,200</b>	<b>32,200</b>	<b>51,600</b>	<b>274,400</b>
<b>End of Year Cash</b>	<b>729,200</b>	<b>595,600</b>	<b>212,400</b>	<b>244,600</b>	<b>296,200</b>	<b>570,600</b>

# Water Budget Forecast Summary

- **The water utility is currently generating positive cash flows and building capital reserves but the Tacoma capacity charge is a significant new factor to address for the City**
- **All existing water debts (\$220K/yr) are retired in 2024**
- **Existing rates are adequate, when combined with the additional revenue from growth and the temporary use of existing capital reserves, to offset the Tacoma charge**
- **In the next 5 years the water budget forecast is sensitive to growth and if growth is less than projected action may be required**
- **In 2025, after all debt has been retired (and with reasonable growth) the water utility is forecasted to be generating sufficient revenue to fund long term capital requirements**

# Stormwater Utility Budget Forecast

- Largely based on a review of historical expenses and the City's 2020 budget
  - Incorporates the 2019 rate increase to \$19.00/month and an cost adjustment (CPI)
- Baseline growth of 125 ERUs in 2020 & 10 ERUs in 2020-2025
- Projected  $\frac{1}{4}$  New employee in 2022 and 2025 at \$82K/year
- Zero debt
- Limited capital costs

# Stormwater Financial Model with Existing Rates

Residential Storm Monthly Bill	\$19.51	\$19.96	\$20.42	\$20.89	\$21.37	\$21.86
% Rate Increase	2.7%	2.3%	2.3%	2.3%	2.3%	2.3%

Accounts	2020	2021	2022	2023	2024	2025
<b>OPERATIONAL SUMMARY</b>						
(+) Total Operating Revenues	522,700	519,100	553,700	589,700	626,900	665,900
(-) Total Operation & Maintenance	480,500	485,600	537,500	543,700	574,900	582,400
(-) Total Debt	0	0	0	0	0	0
<b>NET REVENUE</b>	<b>42,200</b>	<b>33,500</b>	<b>16,200</b>	<b>46,000</b>	<b>52,000</b>	<b>83,500</b>
<b>CAPITAL SUMMARY</b>						
<b>Start of Year Cash</b>	<b>101,000</b>	<b>145,000</b>	<b>180,900</b>	<b>200,000</b>	<b>249,400</b>	<b>305,600</b>
(+) Connection Charges & Interest Inc.	1,800	2,400	2,900	3,400	4,200	5,300
(+) Transfer from Operations	42,200	33,500	16,200	46,000	52,000	83,500
(+) Total Loan Funds	0	0	0	0	0	0
(+) Total CIAC Funds	117,700	943,000	0	0	0	0
(-) Total Capital Expenses	117,700	943,000	0	0	0	0
(-) Transfer to Operations	0	0	0	0	0	0
<b>NET CAPITAL REVENUE</b>	<b>44,000</b>	<b>35,900</b>	<b>19,100</b>	<b>49,400</b>	<b>56,200</b>	<b>88,800</b>
<b>End of Year Cash</b>	<b>145,000</b>	<b>180,900</b>	<b>200,000</b>	<b>249,400</b>	<b>305,600</b>	<b>394,400</b>

# Stormwater Budget Forecast Summary

- **The stormwater is projected to generate positive cash flows with existing rates and annual CPI adjustments enacted by ordinance**
- **The stormwater utility budget forecast is less sensitive to growth than sewer or water**
- **The impact of the annual CPU adjustment allows the stormwater to slowly build needed capital reserves**
- **The City should investigate the adoption of a stormwater connection charge**

# Conclusion

- **The City is appropriately leveraging the impacts of growth to minimize future rate increases**
- **Due to the importance of growth it should be closely monitored and corrective actions taken if for example water reserves are too severely depleted before the retirement of debt in 2024**
- **The discussed rates do not address long term capital needs or the repair and replacement of aging infrastructure**
- **The City is somewhat atypical in that it doesn't supply its own water or sewer treatment that are two of the most capital intensive cost in the respective utilities**