

CITY OF BLACK DIAMOND

November 23, 2010 Workstudy Agenda 25510 Lawson St., Black Diamond, Washington

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

4:00 P.M. – CALL TO ORDER, ROLL CALL

- 1.) Possible Utility Rate Increases –Ms. Miller
- 2.) Adjournment

Utility Rate Analysis



November 23, 2010

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November 23, 2010

To: Mayor Olness and City Council

From: May Miller, Finance Director

Re: City of Black Diamond, Washington Utility Rate Increase – Workstudy

On November 2, 2010 the Public Works Committee met to review the 2011 Budgets and ending Cash and Investment Reserves for the City of Black Diamond's three Utility Operating Funds. Handouts were distributed showing the proposed 2011 Budgets with columns for the portions of the operating budget where specific revenues cover specific costs, such as Metro, or Funding Agreement revenues and expenditures. An additional column shows the net user charge revenue and the expenditures it covers, and the effect this has on the ending Cash and Investment reserves in each utility fund.

After considerable review, the Public Works Committee endorsed bringing the following rate increase proposals to the full council Workstudy session on November 23, 2010.

Stormwater Fund:

The preliminary budget includes the final rate increase of the three years of increases adopted by Ordinance 09-901 on April 23, 2009. This increase is from \$11.50 per month per resident or (ERU-Equivalent Residential Unit) to \$13.00 per month. This rate increase in needed to cover costs and keep the Ending Cash and Investment Reserves at the three months of expenditures required by Black Diamond's Financial Management Policy.

Wastewater Fund:

The preliminary 2011 budget only included the Metro rate increase from 31.90 per month to \$36.10 per month. This rate increase is required by King County for providing wastewater treatment under the long-term agreements with local sewer agencies in its service area. The preliminary budget still included pass through revenue and expenditures for Soos Creek for wheeling charges and did not include any rate increase for the City portion of the wastewater rate.

On November 2 the Public Works Director received confirmation from King County that King County will take over the wheeling charges and that Black Diamond will not need to budget the Soos Creek portion of the Wastewater revenue and expenditures for 2011. This amounts to a savings of approximately \$47,894.

The City portion of the wastewater rate has not been increased in many years and has fallen significantly below what is needed to cover the maintenance and operation expenditures. The last few years we have used approximately \$50,000 of Wastewater Reserves each year and in 2011 would have had to use approximately \$76,000 to maintain the ending Cash & Investment reserve.

The Public works committee endorsed bringing the increasing to the city portion of the wastewater rate using only the \$3.87 of Soos Creek rate that will be saved next year. This will increase the City share of the rate from \$15.29 to \$19.16 per month. They noted that the shortfall may need to be offset over two years to soften total increase to customers. This increase will reduce the transfer needed from reserves from \$76,000 to \$28,000 in 2011 and if a similar amount is approved in 2012, the use of reserves would be eliminated.

Water Fund:

The Water Fund did not include a rate increase in the preliminary budget. In this budget, the user rate revenue did not cover the expenditures and resulted in a reduction of \$60,837 in ending Cash & Investment Reserves. This dropped the reserves below the three months of expenditures required by Black Diamond's Financial Management Policy.

In 2008 the City completed a Water Rate Study that gave three options for needed rate increases. Council adopted the least intrusive rate increase that was recommended at 15% each year for the next three years. Council approved the first year of rate increases of 15% for 2009, but did not increase rates for 2010 due to the poor economy and the fact that we were adding a Stormwater Utility Fund and rates. Since this time the Water Operating Fund has continued to decrease reserves to an unacceptable level.

The Public Works Committee endorsed bringing the rate study that Council approved in 2008 to the workstudy session which included a 15% increase in Water Rates for 2011 and 2012 to be in compliance with the approved rate study. A 15% rate increase for 2011 will cover the shortfall and decrease in ending Cash and Investment reserves from \$60,837 to \$1,837 and maintain the three month expenditure reserve with approximately \$43,000 that could be used to begin to accumulate funds for future needed capital maintenance improvements. The base rate is proposed to increase from \$17.88 to \$20.53 and the capacity charge to increase from \$1.82 per unit to \$2.09. This would increase a customer who uses 859 Cu Ft a month from \$34.21 to \$39.29 or an additional \$4.98 per month.

Attached are worksheets showing the three Utility Funds as they are in the preliminary budget and showing both the Wastewater and Water Funds with described rate increases. Also attached is the 2008 Rate Study, comparisons of water rates with other jurisdictions, and a summary showing the impact of the increases on a sample utility customer using 859 Cu Ft of Water per month.

410 Stormwater Fund with Rate increase from \$11.50 to \$13.00 per month as approved by Ord 09-901 4/23/09

		2011 Budget	User Charges	Funding Agreement	Fund Balance	Total
	REVENUE					
1	1755 ERU's @ 11 mo.@ \$10.00	ATTENDED TO THE REAL PROPERTY OF THE PARTY O		and continues contain domain	Seal Self Lead to Localis	Ala de production production
_	1755 ERU's @ 11 mo.@ \$11.50					
		272 000	273,000			273,000
3		273,000				
4	Low Income Discount-estimate	(4,200)	(4,200)			(4,200)
5	Operating Revenue	268,800	268,800	0		268,800
	Other Revenue					
8		55,124		55,124		55,124
	Funding-PW Dir Reimburse Insurance recovery - Legal Costs	33,124		33,124		33,124
	Investment Interest	350	350			350
	Total Other Revenue	55,474	350	55,124		55,474
	Total Revenue	324,274	269,150	55,124		324,274
13	Beginning Cash & Investments	49,262			49,262	49,262
14	Total Sources	373,536	269,150	55,124	49,262	373,536
15	Total Sources	373,530	203,130	33,124	13,202	070,500
	EXPENDITURES					
16	Salary and Benefits	162,929				
17	Furlough Days	(1,384)				
	Total Salaries & Benefits	161,545	106,421	55,124		161,545
	Operating Supplies and Uniforms	1,560				
	Allocated Office Supplies, Copies, Postage	6,945				1.5
	Fuel	2,300		0.04		
	Small Tools and Equipment	600	44 405			44.405
	Total Supplies	11,405	11,405			11,405
	Insurance	4,417 1,900				
	Repairs, Maintenance	2,000				175
	Professional Services KC Water Quality-Lk Sawyer	6,500				
	Dept of Ecology Permitting	2,000				
	Travel, memberships and training	1,300				
	WRIA 9 - Water Quality	3,735				
	Tele, DSL, Radio, Post, Advertising	3,600				
	Utilities (elect, gas, water, sewer, etc)	1,650				
	Legal Services	16,500				
	Legal Services - Insurance Reimbursement					
	Audit - share of costs	3,750				
	Cost Allocation- Administration	25,456		5		
	Utility Tax	16,128				
38	Total Service & Charges	88,936	88,936	37		88,936
39	Total Operating Expenses	261,886	206,762	55,124		261,886
40	Transfer out to Equipment Reserve	10,000				
	Transfer out to RR Ave Drainage			- 2		
	Debt repayment-100,000	20,400				
43	Debt Repayment-50,000	10,200				
	Total Other Expenditures	40,600	40,600	0		40,600
	Total Expenditures	302,486	247,362	55,124	0	302,486
46	Ending Cash & Investments	71,050	21,788		49,262	71,050
47	Total Uses This increases Ending C & Legspyo to \$71,050 with 3	373,536	269,150	55,124	49,262	373,536

This increases Ending C & I reserve to \$71,050 with 3 months Stormwater expenditures of \$65,472 required.

NOTE: This does not include rates for user charges to cover the two funding agreement positions at \$55,124 which would require an additional 21% increase.

What do my stormwater rates pay for?

Storm System Maintenance

- Clearing debris from drainage paths, ditches, culverts and catch basins
- Inspecting the function of all of the storm ponds and treatment systems
- Inspect all 570 catch basins
- Pump all the catch basins that need it
- Repair catch basins
- Clean ditches
- Maintain solids handling site
- Prepare and maintain soil and mulch composting site
- Repair and/or replace culverts
- Clear debris away from stormwater outfall locations
- Remove beaver dams at permitted problem locations
- Develop and update standard procedures
- Storm pond maintenance including:
 - Removing trees
 - Removing sediment
 - o Fence repair
 - o Outfall repairs to prevent erosion
 - Mowing
 - Pumping basins

City Facilities and Operations Pollution Prevention

- Inspect all City facilities
- Develop and implement a Stormwater Pollution Prevention Plan
- Staff training
- Adjust operations and retrofit facilities where possible and practical

Policy Development and Enforcement

- Illicit Discharge and Detection
 - Develop an ordinance
 - Train City staff
 - Enforce the code
 - Survey the city receiving waters and outfalls and follow up on illicit discharges identified
- 2005 DOE Stormwater Manual
 - Adopt Stormwater codes for construction and new development
 - o Educate City staff in the enforcement of new Stormwater codes
 - Planning, managing, reviewing, presenting and adopting Stormwater Comprehensive Plan

Construction Monitoring

- Construction Site Inspections
 - Pre-construction inspections

- o Inspections throughout construction
- Post-construction inspections
- Permitting
 - o Review of plans

Water Quality Monitoring, Record Keeping and Reporting

- Lake Sawyer water quality sampling and testing
- Additional water quality testing to establish baseline data around Black Diamond
- Maintaining records of maintenance activities
- Preparing the Annual report on all of the storm permit activities of the previous year
- Reporting to the Department of Ecology

Public Education

- Educate the public by providing information on how the public will be able to reduce their impact to stormwater by implementing best management practices on their own lot and activities around the City by sending out newsletters and bill stuffers.
- Educate school kids by working with the local school district to include an
 impact of urban living on our natural water systems and how individuals can
 reduce their impact to local natural water systems by implementing best
 management practices at their home.

Administration

- Grant administration: applications, bidding, overseeing, billing, quarterly reporting
- Customer billing and collection
- Share of support for City administration costs

	407 Wastewater Fund with	METRO Incre	ease & I	NO incr	ease City	y Rates	
		2011	User	Funding	Soos Creek	Fund	
		Budget	Charges	Agreement	and Metro	Balance	Total
	REVENUE						
1	Metro Sewer Charges	438,396		PROPERTY AND ADDRESS OF	438,396		438,396
2	Soos Creek Charges	47,894			47,894		47,894
3	Wastewater City Charges	164,106	164,106				164,106
4	Operating Revenue	650,396	164,106	•	486,290	liver vector	650,396
5	Other Revenues			2			4.000
6	Miscellaneous Reimbursements	1,000	1,000	FF 12F			1,000 55,125
7	Funding - PW Director Reimburse	55,125 400	400	55,125			400
8 9	Investment Interest Total Other Revenue	56,525	1,400	55,125		15.1 Sec. (7.26.2)	56,525
10	Total Revenue	706,921	165,506	55,125	486,290		706,921
		93,949	103,300	33,123	400,230	93,949	93,949
11	Beginning Cash & Investments	CONTRACTOR DESCRIPTION OF THE PARTY OF THE P				AND DESCRIPTION OF THE PARTY OF	ENGINEER WHEN THE PROPERTY OF THE PERSON OF
12	Total Sources	800,870	165,506	55,125	486,290	93,949	800,870
	EXPENDITURES				na de la companya de		
13	Salaries and Benefits	163,519					
	Furlough Days	(1,383)					
	Total Salaries & Benefits	162,136	107,011	55,125			162,136
16	Office & Operating Supplies, Uniforms	3,200					
17	Allocated Office Supplies, Copies, Postage	6,945		=			
18	Fuel	2,300					
	Small Tools	500					
20	Total Supplies	12,945	12,945				12,945
21		10,672					
	Professional Services						
	Repairs & Maintenance	1,500			3.0		
24		1,200					
25		2,100					
	Utilities	1,130					
27		5,300		¥			
28	0	16,500					
	Audit - share of costs	6,250					
	Cost Allocations	25,465					
	Taxes Utility	36,150 6,000					
	Taxes B&O	112,267	112,267	Barrier Control		Ereka Galagoria	112,267
33		287,348	232,223	55,125			287,348
34	19 To 9 1 The Colon State Colo	201,340	252,225	33,123			207,340
35	Other Expenses	420,200			120 206		438,396
36	King County Metro	438,396			438,396		438,396
37	Soos Creek	47,894			47,894		
38		486,290			486,290		486,290
39		773,638	232,223	55,125	486,290		773,638
40							46.000
41		10,000					10,000
	Pressure Treatment Plant			100			46.000
44	Subtotal Other Expenditures	10,000	10,000				10,000
45	Total Expenditures	783,638	242,223	55,125	486,290		783,638
46	Ending Cash & Investments	17,232	(76,717)			93,949	17,232
47	Total Uses	800,870	165,506	55,125	486,290	93,949	800,870

^{★ 3} MO. Exp = \$72,336 User Charges reflect reductions in Ending C & I reserve of (\$76,717). This leaves the 3 months of reserves short by \$55,104.

407 Wastewater Fund with METRO rate increase, elimination of Soos Ck charge of \$3.87 per month & applying \$3.87 increase to City share of rate

		2011 Budget	User Charges	Funding Agreement	Soos Creek and Metro	Fund Balance	Total
	REVENUE						
1	Metro Sewer Charges	438,396			438,396	ANTERNA SONO CONTRACTOR OF THE PARTY OF THE	438,396
2	-Soos Creek Charges						0
3	Wastewater City Charges	212,006	212,006				212,006
4	Operating Revenue	650,402	212,006		438,396		650,402
5	Other Revenues				- 1		
6	Miscellaneous Reimbursements	1,000	1,000			- 1	1,000
7	Funding - PW Director Reimburse	55,125		55,125		- 1	55,125
8	Transfer in from Reserves	7,204	7,204			1	7,204
9	Investment Interest	400	400				400
10	Total Other Revenue	63,729	8,604	55,125			63,729
11	Total Revenue	714,131	220,610	55,125	438,396		714,131
12	Beginning Cash & Investments	93,949				93,949	93,949
13	Total Sources	808,080	220,610	55,125	438,396	93,949	808,080
	EXPENDITURES						
14	Salaries and Benefits	163,519					
	Furlough Days	(1,383)					
	Total Salaries & Benefits	162,136	107,011	55,125	46 th 100 46		162,136
17	Office & Operating Supplies, Uniforms	3,200				- 1	
18	Allocated Office Supplies, Copies, Postage	6,945				- 1	
19	Fuel	2,300				- 1	
20	Small Tools	500					
21	Total Supplies	12,945	12,945				12,945
22	Insurance	10,672			- 1		
23	Professional Services					- 1	
24	Repairs & Maintenance	1,500				- 1	
25	Travel, Memberships and Training	1,200				- 1	
26	Electricity & Gas	2,100					
27	Utilities	1,130					
28	Telephone & Postage	5,300			- 1	- 1	
29	Legal Services	16,500			Sec. 1	- 1	
30	Audit - share of costs	6,250					
31	Cost Allocations	25,465			-		
32	Taxes Utility	36,150			- 1		_
33	Taxes B&O	6,000					
34	Total Services & Charges	112,267	112,267				112,267
35	Subtotal Operating Expenses	287,348	232,223	55,125	•		287,348
36	•						
37	King County Metro	438,396			438,396		438,396
38	Soos Creek						
	Total Payment Sewer Treatment	438,396			438,396		438,396
40	Total Operating Expenditures	725,744	232,223	55,125	438,396		725,744
41							
42		10,000				-	10,000
43	Pressure Treatment Plant		Story to a		- 1		
44	Manhole Rehabilitation						
45		10,000	10,000				10,000
46	Total Expenditures	735,744	242,223	55,125	438,396		735,744
47	Ending Cash & Investments	72,336	(21,613)			93,949	72,336
48	Total Uses	808,080	220,610	55,125	438,396	93,949	808,080
4			3				

Rate increase reduces shortfall in ending C & I reserve from (\$76,717) to (\$21,613) for 2011 and maintains 3 months of expenditures of \$72,336.

This does not include rates for user charges to cover the two funding agreement positions at \$55,124 which would require an additional 26% increase.

Summary of Loans from Wastewater to other Funds and repayment schecule

Fund Receiving	Orig Loan Amount	2011	2012	2013	2014	2015	2016 Total 2011	Total 2011-2016
Police Records	\$200,000	\$42,000	\$42,000	\$42,000	\$0	\$0	\$0	\$126,000
Stormwater Stormwater	\$100,000	\$20,400	\$20,400	\$20,400	\$10,200	\$0	0\$	\$61,200
Total Storm		\$30,600	\$30,600	\$30,600	\$10,200			\$102,000
Water for	\$230,000	\$48,300	\$48,300	\$48,300	\$48,300	\$48,300	\$0	\$241,500
Meters								
Total Prin &								
Intest by Yr		\$120,900	\$120,900	\$120,900	\$58,500	\$48,300	\$0	\$469,500
to Wastewater								

Wastewater Capital Reserve Bal Before Payment

62229

After Payments

\$796,599 \$917,499 \$1,038,399 \$1,096,899 \$1,145,199

mm/11/17/10

	2011	User		Water	Developer	Fund	
	Budget	Charges	Funding	Reserves	Reimburse	Balance	Tot
Without R	ate Increase						
REVENUE				Bary St.	328635400		
1 User Charges	395,000	395,000		de l'illing and confer of			395,00
2 Surcharge @ \$2.30 per customer			- 1			-	,
3 Deposits and Reimbursements	600	600	- 1				60
4 Late Charges & Name Changes	16,000	16,000					16,00
5 Operating Revenue	411,600	411,600					411,60
6 Funding PW Reimbursement	55,125		55,125				55,12
7 Investment Interest	500	500	- 1				50
8 Transfer from Water Capital Fund	125,000			125,000			125,00
9 Subtotal Other Revenue	180,625	500	55,125	125,000			180,62
10 Total Revenue	592,225	412,100	55,125	125,000	-	•	592,22
Debt PWTF & Tacoma Water	686,446				686,446		686,44
11 Beginning Cash & Investments	133,745					133,745	133,74
12 Total Sources	1,412,416	412,100	55,125	125,000	686,446	133,745	1,412,41
EXPENDITURES				we the second	34288		
3 Salary and Benefits	165,622		Late description (procedure)			STATE OF PERSONS AND ADDRESS.	
.4 Furlough Days	(1,384)						
5 Total Salaries and Benefits	164,238	109,113	55,125				164,23
6 Operating & Office Supplies/Uniforms	3,150	103,113	33,123				104,2
7 Allocated Office Supplies, Copies, Postage	6,945					- 1	
	12,000		- 1				
	2.5				1		
19 Fuel	2,300		20 000			200	
20 Small tools	1,000	25 205					25.20
Total Supplies Insurance	25,395 19,551	25,395	-				25,39
23 Telephone/DSL/Radios	2,500		- 1				
Prof Services (Sensus Software Supt & Maint)	4,500		- 1				
25 Water Testing	1,500				- 1		
6 Health Dept and Other Permits	1,700						
7 Repairs & Maintenance/locates	5,800		2		- 1		
8 Travel, Memberships and Training	1,900		*	- 0			
9 Electricity/Gas 0 Water, Sewer, Drainage and Garbage	34,000 1,060					112	
1 Legal Services	16,500		1	E- 2-	- 1		
2 Postage/Printing	2,500		-		- 1	5.7	
3 Advertising and Misc.	500				- 1	- 1	
4 Audit - Share of costs	6,250				- 1		
5 Cost Allocation	25,465		- 1		- 1		
6 Taxes Utility 7 Taxes B&O	24,696 17,000		- 1	-50	- 1		
8 Total Services & Charges	165.422	165,422					165,42
9 Total Operating Expenditures	355,055	299,930	55,125			2 4 1 4 4 5	355,05
0 Transfer for Equipment	10,000	10,000					10,00
1 Debt Service for Water Meters	48,300	48,300					48,30
2 PWTF 95 Wtr Dep	13,314	13,314	- 1		- 1		13,31
3 PWTF 2006 Corr Cont.	11,925	11,925	- 1	125 000	101 716		11,92
4 Debt Service 2006 PWTF Loan 5 Tacoma Water Dev Wtr Cr	316,184	89,468		125,000	101,716		316,18
	584,730	172 007		125 000	584,730		584,73
Subtotal Other Expenditures	984,453	173,007		125,000	686,446	-	984,45
7 Total Expenditures	1,339,508	472,937	55,125	125,000	686,446	122 745	1,339,50
8 Ending Cash & Investments 9 Total Uses	72,908 1,412,416	(60,837) 412,100	55,125	125,000	686,446	133,745 133,745	1,412,41

	401 Water Fu	und with	propos	ed 15%	Rate Inc	crease		
		2011	User		Water	Developer	Fund	
		Budget	Charges	Funding	Reserves	Reimburse	Balance	Total
							-	
		Rate Increase						
	REVENUE							45.400
1	User Charges	454,000	454,000					454,000
2	Surcharge @ \$2.30 per customer	600	600					600
3	Deposits and Reimbursements Late Charges & Name Changes	16,000	16,000				4	16,000
5	Operating Revenue	470,600	470,600					470,600
6	Funding PW Reimbursement	55,125	470,000	55,125				55,125
7	Investment Interest	500	500	33,123				500
8	Transfer from Water Capital Fund	125,000	300		125,000		190	125,000
9	Subtotal Other Revenue	180,625	500	55,125	125,000		_	180,625
10	Total Revenue	651,225	471,100	55,125	125,000	•		651,225
	Debt PWTF & Tacoma Water	686,446				686,446		686,446
11	Beginning Cash & Investments	133,745					133,745	133,745
12	Total Sources	1,471,416	471,100	55,125	125,000	686,446	133,745	1,471,416
	EVACABLITUACE					Charles and American		Shirt day
13	EXPENDITURES Salary and Benefits	165,622						
14	Furlough Days	(1,384)		-			-	
15	Total Salaries and Benefits	164,238	109,113	55,125				55,125
16	Operating & Office Supplies/Uniforms	3,150	105,115	33,123				33,123
17	Allocated Office Supplies, Copies, Postage	6,945						
18	Caustic (potassium hydroxide)	12,000				- 1		
19	Fuel	2,300		-				
	Small tools	1,000						- 1
21	Total Supplies	25,395	25,395					25,395
22	Insurance	19,551						
23	Telephone/DSL/Radios	2,500						
24	Prof Services (Sensus Comp Supt & Maint)	4,500						
25	Water Testing	1,500						
26	Health Dept and Other Permits	1,700						
27	Repairs & Maintenance/locates	5,800						
28		1,900						
29	Electricity/Gas	34,000						
	Water, Sewer, Drainage and Garbage	1,060						
31	Legal Services	16,500		- 1				
	Postage/Printing	2,500						
	Advertising and Misc.	500				-		
34 35	Audit - Share of costs Cost Allocation	6,250 25,465						
	Taxes Utility	24,696						
	Taxes B&O	17,000						7
	Total Services & Charges	165,422	165,422					165,422
	Total Operating Expenditures	355,055	299,930	55,125				355,055
	Transfer for Equipment	10,000	10,000					10,000
41	Debt Service for Water Meters	48,300	48,300					48,300
42		13,314	13,314	- 1				13,314
	PWTF 2006 Corr Cont.	11,925	11,925					11,925
44	Debt Service 2006 PWTF Loan	316,184	89,468		125,000	101,716		316,184
45	Tacoma Water Dev Wtr Cr	584,730				584,730		584,730
46	Subtotal Other Expenditures	984,453	173,007	· .	125,000	686,446	-	984,453
47	Total Expenditures	1,339,508	472,937	55,125	125,000	686,446	•	1,339,508
48	Ending Cash & Investments+P248	131,908	(1,837)				133,745	131,908
49	Total Uses	1,471,416	471,100	55,125	125,000	686,446	133,745	1,471,416

Rate Increase covers all expenditures except \$1,837 which still leaves an ending C & I bal of \$131,908. This covers 3 months of expenditures of \$88,764 and leaves \$43,144 in reserves which can be used for capital or emergencies.

NOTE: This does not include rates for user charges to cover the two funding agreement positions at \$55,124\$ which would require an additional 12% increase.

City of Black Diamond

Water Debt Analysis

A TOTAL CONTRACTOR OF THE PARTY									2011	2011	2011	2011	
Issue	enssi :		2	Maturity	12/31/2010	2011	2011	2011	Water	Water	Total	Developer	Developer Total Debt
Date	Amount	t Type	Purpose	Date	debt owed	Principal	Interest	Debt Svs	Operating	Capt Res	Water	Reimb	Service
1995	200,000	PWTF Wtr Repair	tr Repair	2015	53,248	10,651	2,663	13,314	13,314		13,314	0	13.846
2006	180,000	PWTF Cor Contri	r Contrl	2022	135,000	11,250	675	11,925	11,925		11,925	0	11982
2005			Tac 500mg	2024	4,136,814	295,500	20,684	316,184	89,468	125,000	214,468	101,716	316,184
	2,040,757		Pump Fac, Res & lines			2							
	5,447,820	PWTF											
2004		11,334,510 Tac Water Deve Wtr Cr	ve Wtr Cr	2013	1,688,190	562,730	22,000	584,730	0	0	0	584,730	584,730
2010		230,000 W/W Loan Wtr Meters	tr Meters	2015	230,000	46,000	2,300	48,300	48,300	0	48,300	0	48,300
Totals	22,840,150				6,243,252	926,131	48,322	974,453	163,007	125.000	288.007	686.446	975.042
Total ne	t Water fund 2	Total net Water fund 2010 Debt Service	ce e						163,007	\$125,000	\$288,007		
	1/1/2011												

1/1/2011 *Black diamond hold a letter of credit from Palmer Coking for their balance owing of \$1,424,024 of PWTF Loan. Fourteen payments of \$101,716.

**Black Diamond holds a letter of credit from BD Partners for the \$1,688,190 balance owing To Tacoma Water. Three Payments of Principal & Interest.

3/4" WATER METER		Oct-10	3/4" WATER METER		
OLD RATES	#503800.2	2	NEW RATES	#503800.2	
WATER CONSUMPTION	829	69	WATER CONSUMPTION	859	Γ
BASE WATER RATE 1ST UNIT	\$17.88		NEW BASE WATER RATE 1ST UNIT	\$20.56	
WATER OVERAGE - TIER 1	\$1.82		WATER OVERAGE - TIER 1 NEW	\$2.09	
009-0	600 \$10.92		009-0	600 \$12.54	
WATER OVERAGE - TIER 2	\$2.09		WATER OVERAGE - TIER 2 NEW	\$2.40	
601-1200	259 \$5.41		601-1200	259 \$6.22	
WATER OVERAGE - TIER 3	\$2.40		WATER OVERAGE - TIER 3 NEW	\$2.76	
1201+	00.0\$0		1201+	00:00	
BASE CITY SEWER RATE	\$15.29		BASE CITY SEWER RATE	\$19.16	
METRO SOOS BASE RATE	\$35.77		METRO SOOS BASE RATE	\$36.10	
STORMWATER IMPERVIOUS (ERU)	\$11.50		STORMWATER IMPERVIOUS (ERU)	\$13.00	
WATER			WATER		
WATER CONSUMPTION	859		WATER CONSUMPTION	859	
CU FT OF WATER (100 CU FT = 748 GAL)	100		CU FT OF WATER (100 CU FT = 748 GAL)	100	
TOTAL CUBIC FEET OF WATER USED	8.59		TOTAL CUBIC FEET OF WATER USED	8.59	
FIRST TIER	600 \$10.92		FIRST TIER	600 \$12.54	
SECOND TIER	259 \$5.41		SECOND TIER	259 \$6.22	
THIRD TIER	0 \$0.00		THIRD TIER	0 \$0.00	
TOTAL OF THREE TIERS	\$16.33		TOTAL OF THREE TIERS	\$18.76	
BASE WATER RATE 1ST UNIT	\$17.88		NEW BASE WATER RATE 1ST UNIT	\$20.56	
WATER BILL DUE		\$34.21	WATER BILL DUE	5	\$39.32
CITY SEWER			CITY SEWER		
BASE CITY SEWER RATE	\$	15.29	BASE CITY SEWER RATE	\$	19.16
CITY SEWER BILL DUE	\$	15.29	CITY SEWER BILL DUE	\$	19.16
METRO/SOOS			METRO/SOOS		
METRO SOOS BASE RATE	\$	35.77	METRO SOOS BASE RATE	\$36.10	
METRO SOOS BALANCE DUE	\$	35.77	METRO SOOS BALANCE DUE	\$	36.10
STORMWATER			STORMWATER		
STORMWATER IMPERVIOUS (ERU)	φ.	11.50	STORMWATER IMPERVIOUS (ERU)	\$13.00	-
STORMWATER BALANCE DUE		\$11.50	STORMWATER BALANCE DUE	V	\$13.00
TOTAL BALANCE DUE	\$96.77		TOTAL BALANCE DUE	\$107.58	

Water Rates Comparison

				% SURCHARGE	
CITY	COUNTY	CONNECTIONS	* TOTAL	CONNECTIONS * TOTAL OUTSIDE CITY	NOTES
Buckley (Summer)	Pierce	1818	\$20.74	1	City unsure of increase
Enumclaw	King	5497	\$21.41	20%	No increases for 2011
Covington WD (Summer)	King	14080	\$29.15	r	Increase amounts to approx. 7.4%
Carnation	King	843	\$29.28	%09	No increases for 2011
Goldendale (2011)	Klickitat	1500	\$29.85	%09	Rates 2% higher from 2010
Black Diamond (2011)	King	846	\$31.01	ī	(\$2.09/100 CF)
Snoqualmie	King	4052	\$31.87	30 - 35%	Doubtful rates will increase
Fife (2011)	Pierce	1631	\$32.73	20%	Rates 20% higher from 2010
Chelan	Chelan	1572	\$37.10	%09	No increases for 2011
Eatonville	Pierce	1039	\$39.78	ī	No increases for 2011
Leavenworth	Chelan	1200	\$47.00	20 - 25%	\$2 increase to base from 2010

* Total price includes base meter charge and 500 CF of usage

City of Black Diamond Water User Rates Study

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BACKGROUND & PURPOSE

PacWest Engineering has been retained by the City to complete a water rate study and recommend updated rates for adoption by the City Council. The City is currently operating under a development moratorium which is anticipated to be lifted in late 2008. Significant growth is anticipated to occur within the City following the removal of the moratorium. The City desires to adopt updated water rates to ensure that the City's water rates adequately cover existing and projected costs associated with operating a water utility and providing adequate water service to its customers.

The City's water rates are comprised of two components: 1) <u>User rates</u> based on monthly meter rates as well as charges based on actual water consumption; and 2) <u>Connection charges</u> (also known as capital facility charges) which fund system improvements required as a result of new growth. This report analyzes the City's Water User Rates. An analysis of the City's Water Connection Charges is covered in a separate report.

ANALYSIS METHODOLOGY

Water rates have been analyzed for a three year period from 2009 to 2011. Since there are many assumptions incorporated into these rates based on projections of new development, it is recommended that a rate study be conducted in the future for years beyond this planning period.

A water billing consumption history for the period of June 2006 through May 2007 was utilized in developing user rate revenue assumptions. It is assumed that this time period is representative of the City of Black Diamond's water use and does not include lower than average or higher than average use due to irregular weather patterns or use consumptions.



An annual population growth rate of 2.85% has been utilized for growth projections within the existing developed City for the period following the removal of the moratoium. Additionally, the addition of new customers has been projected based on conversations with Yarrow Bay due to the fact that significant development is anticipated to occur within the City of Black Diamond during the period of analysis covered by this Water Rate Study.

Growth projections for new development are based on conversations with Yarrow Bay regarding potential build rates for development that is anticipated to occur within the City of Black Diamond. A two-year delay in projected growth has been included to provide for a more realistic assumption in projected revenues. Projections for growth have assumed a water consumption rate of 230 gallons per day per single family residence, as this is the established amount calculated for one ERU (equivalent residential unit) in the agreements between developers and the City of Black Diamond. It is assumed that connections to the system will be made in one calendar year and user rates will be charged for the new ERU's in the following year. No credit for partial years has been assumed.

PROJECTED NEW ERU (User rates assumed to begin bi			g year)	
ERU Type	2008	2009	2010	2011
ERU's (with connection charge credit)	0	0	0	0
ERU's (without connection charge credit)	0	33	34	35
TOTAL NEW ERU'S	0	33	34	35

WATER FUNDS STRUCTURE & RESERVE RECOMMENDATIONS

The City of Black Diamond currently operates with three water-related funds, as follows: Fund 401 – Water Fund; Fund 402 – Water Supply & Facility Fund; and Fund 404 – Water Reserve Fund.

It is recommended that the City restructure their water funds into the following three funds: Operating Fund; Capital Fund; and Developer Contribution Fund. The Operating and Capital funds should maintain a reserve within the fund rather than as a separate fund.

Operating Fund: The Operating Fund shall be funded by monies collected for Water User Rates and shall fund the City's Water Operations and Maintenance Program. The State requires that the City maintain a minimum reserve equivalent to 1/8 of its annual operating budget which is the equivalent of 1.5 months reserve. It is recommended that the City maintain an operating reserve that is equivalent to three months. The City currently has sufficient cash on hand to meet this reserve recommendation. This reserve helps balance cash flows due to lower revenues during winter months.

Capital Fund: The Capital fund shall be funded primarily by Water Connection Charges and shall fund expenditures related to the City's Water Capital Improvements Program. Additional funding sources such as grants and loans may supplement connection charges. Also, transfers from the Operating fund should occur to support those capital projects deemed to benefit the existing rate base.



The State requires an Emergency reserve that is equivalent to the City's most vulnerable water system facility component. The City of Black Diamond has an insurance policy which covers the transmission main crossing the Green River (the most vulnerable component of the system), which is sufficient to meet the emergency reserve requirement. In addition to the emergency reserve, the Capital fund should also maintain a reserve based on any outstanding debt service. It is recommended that a capital reserve in the amount of 50% of the annual debt service requirements be maintained in the capital fund.

Developer Contribution Fund: The City currently maintains a developer contribution fund (Fund 402 – Water Supply & Facility Fund). It is recommended that this fund be utilized to receive developer contributions for capital projects, but that the contributed funds be transferred to the capital fund as needed in support of the capital project for which the funds were contributed.

CURRENT RATES

The City's current rates are a flat structure rate and do not promote conservation by the customers. The City of Black Diamond's current user rates are as shown below:

	CURRENT RATES					
Meter Size	Meter Rate	Meter Rate per Additional Unit	Commodity Charge per 100 CF			
5/8" or 3/4"	\$15.55	\$13.00	\$1.58			
1"	\$19.65	\$13.00	\$1.58			
1 1/2"	\$21.20	\$13.00	\$1.58			
2"	\$37.00	\$13.00	\$1.58			
3"	\$44.88	\$13.00	\$1.58			
4"	\$84.30	\$13.00	\$1.58			

BUDGET REQUIREMENTS

The following are the projected budget requirements for a three year period. They have been developed based on the City's draft 2009 budget, which includes forecasts for 2010 and 2011. It should be noted that there are significant increases in the projected Operations and Maintenance budget over this time period. A portion of these increases is due to an additional staff person that is projected to be assigned half-time to the water system starting in 2011.

The City of Black Diamond is estimated to have approximately \$1,000,000 in reserve funds between the three existing water funds at the beginning of 2009. It is recommended that the City assign \$81,000 of the existing reserves as the three-month Operations and Maintenance reserve. Unless specified otherwise in the description of the alternatives, the remaining balance of the existing reserve funds are recommended to be placed in the Capital fund to augment the City's water connection charges in paying off debt and funding



capital projects. The revenue generated by these water user rates is intended to fund system operational costs only.

BUDGET REQUIREMENTS						
	2009	2010	2011			
Operations, Maintenance, & Administration	\$324,000	\$344,000	\$404,000			
Project costs / Transfer to Capital Fund (improve existing deficiencies)	\$0*	\$0*	\$0*			
O&M Reserve	\$0 **	\$5,000	\$15,000			
Debt Service	\$243,000	\$241,000	\$239,000			
Yarrow Bay PWD Reimbursement	-\$36,000***	-\$38,000***	-\$40,000***			
TOTAL – O&M FUND REQ.	\$567,000	\$590,000	\$658,000			

^{*} Proposed project improvements have been included in the City's Water System Plan (draft). Costs have not been included in the water rate budget requirements as it is recommended that these projects improvements be delayed and be completed as funds are available.

USER RATES ANALYSIS

The Municipal Water Law was passed by the Washington State Legislature in 2003 and included language that all municipal water suppliers must use water more efficiently in exchange for water right certainty and flexibility to help them meet future demands. The City of Black Diamond is required to develop and monitor a Water Use Efficiency (WUE) program. One component of the City's Water Use Efficiency Program is to evaluate rate structures that promote water savings.

Several alternative water rates were evaluated for the City of Black Diamond. Details regarding each of the alternatives considered, as well as a summary of projected revenue for each alternative are listed on the following pages:



^{**} The initial O&M reserve balance of \$81,000 recommended to be funded by existing reserve funds and preserved. Amounts shown reflect the necessary annual increase.

^{***} The reimbursement for Public Works Director salary expenses is included for informational purposes only. This credit has not been included in the water user rate establishment as it is a temporary credit that will soon expire. It is recommended that these funds be utilized to fund capital projects to address existing deficiencies.

Alternative "A" – Debt Service (Fixed Rates & Commodity Rates increase at same percent – Constant increase over 3 years):

Alternative "A" evaluated a 27% increase in rates for each of the three years. The increase was applied to all components of the user rate calculations (meter rate, meter rate per additional unit, and commodity charges). Alternative "A" meets the City's Operation and Maintenance budget needs and also addresses debt service requirements. It is a "rate predictable" alternative. Alternative "A" does not encourage conservation by the customers.

	ALTERNATIVE "A" - 2009					
Meter Size	Meter Rate	Meter Rate per Additional Unit	Commodity Charge per 100 CF			
5/8" or 3/4"	\$19.75	\$16.51	\$2.01			
1"	\$24.96	\$16.51	\$2.01			
1 ½"	\$26.92	\$16.51	\$2.01			
2"	\$46.99	\$16.51	\$2.01			
3"	\$57.00	\$16.51	\$2.01			
4"	\$107.06	\$16.51	\$2.01			

ALTERNATIVE "A" – ANNUAL % INCREASES					
Year	% Increase (Meter Rates)	% Increase (Commodity Charge)			
2008 to 2009	27%	27%			
2009 to 2010	27%	27%			
2010 to 2011	27%	27%			

ANTICIPATED REVENUE ANALYSIS – IF CURRENT RATES WERE MAINTAINED FOR THE NEXT THREE YEARS					
	2009	2010	2011	2009 - 2011	
Anticipated	\$354,000	\$366,000	\$379,000	\$1,099,000	
Revenue		300	322 96	54 921 24	

ANTICIPATED REVENUE ANALYSIS – ALTERNATIVE "A"					
	2009	2010	2011	2009 - 2011	
Anticipated Revenue	\$450,000	\$590,000	\$775,000	\$1,815,000	
Budget Requirements	\$567,000	\$590,000	\$658,000	\$1,815,000	
Difference	-\$117,000	\$0	\$117,000	\$0	



Alternative "B" – Conservation Rates + Debt Service (Fixed Rates & Commodity Rates increase at same percent – Constant increase over three years):

Alternative "B" evaluated a tiered commodity rate system to encourage conservation efforts. Base meter rates and rates for additional units increased at the same percentage (23%) as the first tier for commodity charges (0-600 CF). Meter rates and commodity charge rates continue to increase at this same rate for the subsequent two years. Subsequent tiers increase at a 15% increase per tier in order to generate sufficient revenue to fund current debt service payments. It is assumed that existing reserve funds would be utilize to fund debt service costs initially and these monies would be repaid as rate revenues were received.

	ALTERNATIVE "B" – 2009 RATES					
Meter Size	Meter Rate	Meter Rate per Additional Unit	Commodity Charge per 100 CF (0-600 CF)	Commodity Charge per 100 CF (601 – 1,200 CF)	Commodity Charge per 100 CF (1,200+ CF)	
5/8" or 3/4"	\$19.13	\$15.99	\$1.94	\$2.23	\$2.57	
1"	\$24.17	\$15.99	\$1.94	\$2.23	\$2.57	
1 ½"	\$26.08	\$15.99	\$1.94	\$2.23	\$2.57	
2"	\$45.51	\$15.99	\$1.94	\$2.23	\$2.57	
3"	\$55.20	\$15.99	\$1.94	\$2.23	\$2.57	
4"	\$103.69	\$15.99	\$1.94	\$2.23	\$2.57	

ALTERNATIVE "B" – ANNUAL % INCREASES					
Year	% Increase (Meter Rates)	% Increase (Commodity Charge – Tier 1)			
2008 to 2009	23%	23%			
2009 to 2010	23%	23%			
2010 to 2011	23%	23%			

ALTERNATIV	ALTERNATIVE "B" -COMMODITY CHARGE % INCREASES				
Year	% Increase (Tier 1 to Tier 2)	% Increase (Tier 2 to Tier 3)			
2009	15%	15%			
2010	15%	15%			
2011	15%	15%			

ANTICIPATED REVENUE ANALYSIS – ALTERNATIVE "B"					
	2009	2010	2011	2009 - 2011	
Anticipated	\$467,000	\$594,000	\$754,000	\$1,815,000	
Revenue		74V			
Budget	\$567,000	\$590,000	\$658,000	\$1,815,000	
Requirements					
Difference	-\$100,000	\$4,000	\$96,000	\$0	



Alternative "C" – Conservation Rates + Debt Service (Fixed Rates & Commodity Rates increase at same percent – Constant Increase over three years – Debt service partially subsidized by existing fund balance):

Alternative "C" is similar in structure to Alternative "B", with the exception that \$243,000 of the debt service is assumed to be funded by the existing fund balance over the three year period. This results in an annual increase of 15% in order to generate sufficient funds. Any additional monies, such as revenues for growth beyond that which is assumed, or the funding of the Public Works Director could also be used to help fund the debt service.

	ALTERNATIVE "C" – 2009 RATES					
Meter Size	Meter Rate	Meter Rate per Additional Unit	Commodity Charge per 100 CF (0-600 CF)	Commodity Charge per 100 CF (601 – 1,200 CF)	Commodity Charge per 100 CF (1,200+ CF)	
5/8" or 3/4"	\$17.88	\$14.95	\$1.82	\$2.09	\$2.40	
1"	\$22.60	\$14.95	\$1.82	\$2.09	\$2.40	
1 ½"	\$24.38	\$14.95	\$1.82	\$2.09	\$2.40	
2"	\$42.55	\$14.95	\$1.82	\$2.09	\$2.40	
3"	\$51.61	\$14.95	\$1.82	\$2.09	\$2.40	
4"	\$96.95	\$14.95	\$1.82	\$2.09	\$2.40	

ALTE	ALTERNATIVE "C" – ANNUAL % INCREASES				
Year	% Increase (Meter Rates)	% Increase (Commodity Charge – Tier 1)			
2008 to 2009	15%	15%			
2009 to 2010	15%	15%			
2010 to 2011	15%	15%			

ALTERNATIVE "C" -COMMODITY CHARGE % INCREASES				
Year	% Increase (Tier 1 to Tier 2)	% Increase (Tier 2 to Tier 3)		
2009	15%	15%		
2010	15%	15%		
2011	15%	15%		

ANTICIPATED REVENUE ANALYSIS – ALTERNATIVE "C"						
	2009	2010	2011	2009 - 2011		
Anticipated Revenue	\$437,000	\$519,000	\$616,000	\$1,572,000		
Budget Requirements	\$486,000	\$509,000	\$577,000	\$1,572,000		
Difference	-\$49,000	\$10,000	\$39,000	\$0		



Comparison of Alternatives:

ANTICIPATED REVENUE – RATE ALTERNATIVES						
	2009	2010	2011	2009-2011		
"A"	\$450,000	\$590,000	\$775,000	\$1,815,000		
"B"	\$467,000	\$594,000	\$754,000	\$1,815,000		
"C"	\$437,000	\$519,000	\$616,000	\$1,572,000		

COMPARISON OF ALTERNATIVES						
Alternative	Meet O&M Budget Needs	Meet Exist. Deficiency Budget Needs	Max of 10% Increase +/-	Funds Debt Service	Encourage Conservation	
"A"	Yes	No	No	Yes	No	
"B"	Yes	No	No	Yes	Yes	
"C"	Yes	No	No	Yes	Yes	

USER RATE RECOMMENDATIONS

It is recommended that the City of Black Diamond adopt updated water user rates as outlined in Alternative "C" above. Alternative "C" represents a 15% annual increase across the board (meter rates, meter rates per additional units, and commodity charges).

Alternative "C" will provide sufficient revenue from user rates to support the City's project Operations and Maintenance budget needs, as well as to pay off debt. This alternative also promotes conservation with a 15% increase between tiers on the commodity charges.

Alternative "C" does not address funding of projects to address existing system deficiencies. However, none of the alternatives considered generate sufficient revenue. Revenues collected in excess of budget expenses can be dedicated to capital projects and may allow for an opportunity to begin early design or construction of some projects. The City has not raised their rates in quite some time and a larger increase would be required in order to fully fund all system needs. However, due to the financial effects on customers, it is recommended that the City push back some of these improvement projects to later years or utilize reserve funds and adopt these lower rates and continue to adjust the rates as necessary in order to eventually have the water user rates be in line with the budgetary needs.

The revenue assumptions included in this study are conservative in that they assume only residential users with a single meter. In reality, there is a mix of user types which will result in increased revenues due to higher meter rates for larger meter sizes, as well s the additional revenues associated with meter rates for additional units. These conservative assumptions help to offset any reductions in anticipated revenues due to a reduction in water use. A tiered water rate system which encourages conservation could result in a decrease of water use typically in the range of two to five percent.

PACWEST ENGINEERING LLC

	RECOMMENDED WATER USER RATES – YEAR 2009						
Meter Size	Meter Rate	Meter Rate per Additional Unit	Commodity Charge per 100 CF (0-600 CF)	Commodity Charge per 100 CF (601 – 1,200 CF)	Commodity Charge per 100 CF (1,200+ CF)		
5/8" or 3/4"	\$17.88	\$14.95	\$1.82	\$2.09	\$2.40		
1"	\$22.60	\$14.95	\$1.82	\$2.09	\$2.40		
1 ½"	\$24.38	\$14.95	\$1.82	\$2.09	\$2.40		
2"	\$42.55	\$14.95	\$1.82	\$2.09	\$2.40		
3"	\$51.61	\$14.95	\$1.82	\$2.09	\$2.40		
4"	\$96.95	\$14.95	\$1.82	\$2.09	\$2.40		

BUDGET ANALYSIS

The water user rates that have been recommended for the City of Black Diamond are adequate to meet anticipated budget expenses as summarized in the following table. It should be noted that the revenue predictions are a conservative estimate and assume that all future growth will be single family residential growth. Any multi-family or commercial growth will result in additional revenue generated. It is recommended that the rates be reevaluated in the future should actual growth vary greatly from these assumptions.

	BUDGET EX	PENSES VS	REVENUE	
Alternative	2009	2010	2011	2009-2011
Operations, Maintenance, & Administration Expenses	\$324,000	\$344,000	\$404,000	\$1,072,000
O&M Reserve funded by Rates*	\$0	\$5,000	\$15,000	\$20,000
Debt Service	\$243,000	\$241,000	\$239,000	\$723,000
Subtotal Expenses	\$567,000	\$590,000	\$658,000	\$1,815,000
Anticipated Revenue	\$437,000	\$519,000	\$616,000	\$1,572,000
Debt Service Revenue funded by Existing Fund Balance	\$130,000	\$71,000	\$42,000	\$243,000
Revenue less Expenses	\$0	\$0	\$0	\$0

*Initial balance of \$81,000 recommended to be funded by existing reserve funds and preserved. The amounts shown reflect the necessary annual increase.



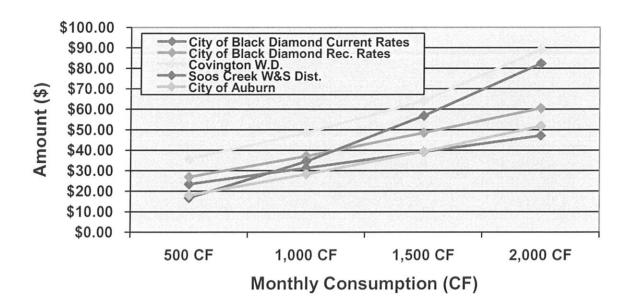
It is recommended that the City dedicate any excess funds that may be collected from water user rates towards capital project expenses that address existing system deficiencies and are not typically funded by connection charges. Additionally, it is recommended that the temporary Yarrow Bay Reimbursement of the Public Works Director salary be dedicated towards capital project expenses as well. Should a lower amount of revenue be collected than anticipated, these excess funding will also be available to fund Operations and Maintenance expenses if necessary. These funds are able to cover any fluctuations in rate collections.

JURISDICTIONAL COMPARISON OF USER RATES

The water user rates that have been recommended for the City of Black Diamond are consistent with rates that have been adopted by nearby jurisdictions of similar size. The City of Black Diamond is in the middle of the range for low consumption users for both the current user rates and the recommended user rates. With the current rates, the City of Black Diamond is at the bottom of the range for high users. With the recommended rates, the City will be in the middle of the range for high users, while still significantly below Covington Water District and Soos Creek Water and Sewer District. The following table provides a comparison of monthly water user rates between a typical single family residential user for various levels of consumption.

JURISD	ICTIONAL C	OMPARISO	N (SFR USE	R)	
	City of Black Diamond (Current Rates)	City of Black Diamond (Rec. Rates)	Covington Water (Summer Rates)	Soos Creek (Summer Rates)	City of Auburn
A	dopted / Re	commende	d Rates		
Meter Base Rate	\$15.55	\$17.88	\$25.00	\$8.85	\$9.08
Consump. Rate for 500 CF	\$1.58	\$1.82	\$2.15	\$1.58	\$1.80
Consump. Rate for 1,000 CF	\$1.58	\$2.09	\$3.15	\$3.56	\$2.21
Consump. Rate for 1,500 CF	\$1.58	\$2.40	\$3.15	\$4.46	\$2.21
Consump. Rate for 2,000 CF	\$1.58	\$2.40	\$5.45	\$5.10	\$2.50
	Typica	Monthly B	ill		
500 CF	\$23.45	\$26.98	\$35.75	\$16.75	\$18.08
1,000 CF	\$31.35	\$37.16	\$48.50	\$34.55	\$28.31
1,500 CF	\$39.25	\$48.54	\$64.25	\$56.85	\$39.36
2,000 CF	\$47.15	\$60.54	\$89.20	\$82.35	\$51.86





City of Black Diamond Storm Drainage User Rates Study

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BACKGROUND & PURPOSE

The City of Black Diamond is operating under a National Pollution Discharge Elimination System (NPDES) Phase II Municipal Stormwater Permit. As part of meeting the permit requirements, the City is pursuing the establishment and adoption of a storm drainage utility. This user rate study has been prepared to determine the appropriate storm drainage user rates to be imposed on customers.

The City is currently operating under a development moratorium which is anticipated to be lifted in late 2008. Significant growth is anticipated to occur within the City following the removal of the moratorium. The City desires to adopt storm drainage user rates to ensure that collected revenue adequately covers existing and projected costs associated with operating a storm utility and providing adequate service to its customers.

The City's storm rates are comprised of two components: 1) <u>User rates</u> based on monthly storm rates as well as charges based on impervious surface areas; and 2) <u>Connection charges</u> (also known as capital facility charges) which fund system improvements required as a result of new growth. This report analyzes the City's Storm Drainage User Rates. An analysis of the City's Storm Drainage Connection Charges is covered in a separate report.

ANALYSIS METHODOLOGY

Storm drainage user rates have been analyzed for a three year period from 2009 to 2011. Since there are many assumptions incorporated into these rates based on projections of new development, it is recommended that a rate study be conducted in the future for years beyond this planning period.

An annual population growth rate of 2.85% has been utilized for growth projections within the existing developed City for the period following the removal of the moratorium. Additionally, the addition of new customers has been projected based on conversations with Yarrow Bay due to the fact that significant development is anticipated to occur within the City of Black Diamond during the period of analysis covered by this Storm Rate Study.

Growth projections for new development are based on conversations with Yarrow Bay regarding potential build rates for development that is anticipated to occur within the City of

City of Black Diamond Storm Drainage User Rate Study (10.20.08)



Black Diamond. A two-year delay in projected growth has been applied to Yarrow Bay projections to provide for a more realistic assumption in projected revenues.

It should be noted that the customer basis for the stormwater utility is different than the customers for either the water or sewer utility billings. The stormwater utility will be imposed on all developed properties within the City of Black Diamond, regardless of the purveyor for sewer and/or water service. The inclusion of storm drainage utility customers in the Lake Sawyer area is the most important distinction between the customers for the various utility billings.

Storm drainage utility needs have been analyzed on a per Equivalent Residential Unit (ERU) basis. 2,500 square feet has been established as one equivalent residential unit. All single-family residences are equal to one ERU, duplexes are equal to two ERU's, and triplexes are equal to three ERU's. The number of ERUs for all other developed properties were determined by field measuring the area of impervious ground cover and dividing by 2,500 square feet per ERU. The number of ERU's for each developed property has been rounded up to the nearest half of an ERU. Each developed property has been assumed to contain a minimum of one ERU. The storm drainage utility rates are not imposed on undeveloped parcels nor public roadway right-of-ways.

It is assumed that connections to the system will be made in one calendar year and user rates will be charged for the new ERU's in the following year. No credit for partial years has been assumed.

(Us	OJECTED ERU er rates assum following year	ed to begin bil	lling
2008	2009	2010	2011
2345.5	2412.5	2481.5	2552.5

STORM DRAINAGE FUNDS STRUCTURE & RESERVE RECOMMENDATIONS

It is recommended that the City of Black Diamond establish two storm-related funds, as follows: Fund #1 – Storm Operating Fund; and Fund #2 – Storm Capital Fund. The Operating and Capital funds should maintain a reserve within the fund rather than as a separate fund.

Operating Fund: The Operating Fund shall be funded by monies collected for Storm Drainage User Rates and shall fund the City's Storm Operations and Maintenance Program. It is recommended that the City maintain an operating reserve that is equivalent to three months. It is recommended that this reserve be built up over the first three years that the fund is established. This reserve helps balance cash flows.

Capital Fund: The Capital fund shall be funded primarily by Storm Drainage Connection Charges and shall fund expenditures related to the City's Storm Drainage Capital Improvements Program. Additional funding sources such as grants and loans may supplement connection charges. Also, transfers from the

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Operating fund should occur to support those capital projects deemed to benefit the existing rate base. It is recommended that the City maintain a capital reserve based on any outstanding debt service. It is recommended that at a minimum a capital reserve in the amount of 50% of the annual debt service requirements be maintained in the capital fund.

BUDGET REQUIREMENTS

The following are the projected budget requirements for a three year period. They have been developed based on the City's preliminary 2009 budget, which also includes forecasts for 2010 and 2011.

BUDGET REQUIREMENTS						
	2009	2010	2011			
Operations, Maintenance, & Administration	\$222,000	\$237,000	\$290,000			
Sewer Debt Repayment	\$20,000	\$20,000	\$20,000			
O&M Reserve *	\$23,000	\$25,000	\$25,000			
Project costs / Transfer to Capital Fund ** Phase II Implementation	\$100,000	\$100,000	\$100,000			
Yarrow Bay PWD Reimbursement ***	-\$36,000	-\$38,000	-\$40,000			
TOTAL – O&M FUND REQ.	\$365,000	\$382,000	\$435,000			

^{*} The O&M reserve balance is recommended to be \$73,000 over the three year period. It is recommended that this be built up over the three year period.

USER RATE RECOMMENDATIONS

The table below outlines the recommended stormwater user rate for the next three years. It is recommended that the City of Black Diamond adopt a three-year rate. At the end of the three year period, it is recommended that the City evaluate and revise the rate as necessary. The proposed rate increase for 2010 is 4.6% and 4.4% for 2011.

The rate has been established at a level that will support an annual budget for project costs to address existing system deficiencies. This will allow for the collection of monies early after the storm rates are established. These monies can be used to start design of capital improvement projects or the City may elect to direct these monies to early repayment of debt to the sewer fund.

RECOMMI	RECOMMENDED STORM USER RATES				
2009	2010	2011			
\$13.00	\$13.60	\$14.20			

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^{**} Proposed project improvements will be included in the City's Storm Comprehensive Plan currently being developed.

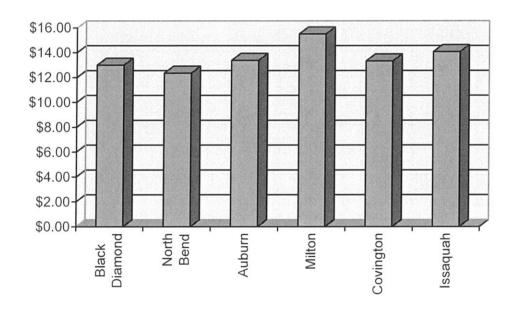
^{***} The reimbursement for Public Works Director salary expenses is included for informational purposes only. This credit has not been included in the storm user rate establishment as it is a temporary credit that will soon expire. It is recommended that these funds be utilized to retire the sewer loan early or to fund capital projects to address existing system deficiencies.

BUDGET EXPENSES VS REVENUE (STORM USER RATES)						
	2009	2010	2011	2009 - 2011		
Revenue	\$366,000	\$394,000	\$423,000	\$1,183,000		
Expenses	\$365,000	\$382,000	\$435,000	\$1,182,000		
Difference	\$1,000	\$12,000	-\$12,000	\$1,000		

JURISDICTIONAL COMPARISON OF USER RATES

The storm user rates that have been recommended for the City of Black Diamond are consistent with rates that have been adopted by nearby jurisdictions of similar size. The City of Black Diamond recommended rates are towards the middle of the various rates for the jurisdictions included in the comparison. The following table provides a comparison of monthly storm user rates for a single family residential user.

	JURISI	DICTIONA	L COMP	ARISON (SFI	R USER)	
City of Black Diamond (Rec. Rates)	City of North Bend	City of Auburn	City of Milton	City of Covington	City of Issaquah	Average (not. Incl. Black Diamond)
\$13.00	\$12.36	\$13.38	\$15.50	\$13.33	\$14.08	\$13.73







City of Black Diamond Proposed Rate Increases

Single Family Customer (500 CF water consumption)

		Water		Storm		Total
			200000000	ainage	10000000	Total
2008	Current Rate	\$ 23.45	\$	-	\$	23.45
	Proposed Rate	\$ 26.98	\$	13.00	\$	39.98
	\$ Increase	\$ 3.53	\$	13.00	\$	16.53
2009	% Increase	15.1%		N/A		70.5%
	Proposed Rate	\$ 31.03	\$	13.60	\$	44.63
	\$ Increase	\$ 4.05	\$	0.60	\$	4.65
2010	% Increase	15.0%		4.6%		11.6%
	Proposed Rate	\$ 35.68	\$	14.20	\$	49.88
	\$ Increase	\$ 4.65	\$	0.60	\$	5.25
2011	% Increase	15.0%		4.4%		11.8%

City of Black Diamond, Washington

Utility Rate Comparison

	2010 Rate	2011 Rate	Monthly Increase	Annual Increase	\$ Increase
Stormwater	\$11.50	\$13.00	\$1.50	\$18.00	\$31,000.00
Sewer					
Metro	\$31.90	\$36.10	\$4.20	\$50.00	\$60,896.00
Soos Creek	\$3.87	\$0.00	(\$3.87)	(\$46.44)	(\$47,900.00)
City rate	\$15.29	\$19.16	\$3.87	\$46.44	\$47,900.00
Total Sewer	\$51.06	\$55.26	\$4.20	\$50.00	\$60,896.00
****(+()///					
Vvaler	0071	000	, ,	000	
Dase	00.710	\$20.03	\$2.55	\$30.00	
Consumption	\$16.33	\$18.76	\$2.43	\$29.16	
Total Water	\$34.21	\$39.29	\$4.98	\$64.74	\$59,000.00
Grand total	\$96.77	\$107.55	\$10.68	\$132.74	\$150,896.00

**uses a customer example of 859 Cu Ft per month

mm/11/10/2010