## Public Utility District No. 1 of Whatcom County

2021 Budget

Final Draft

PUD No. 1 of Whatcom County 2021 Operating Budget BUDGET AT A GLANCE	INDUS	STRIAL WATER UTILITY	G	RANDVIEW UTILITY		ELECTRIC UTILITY	C	TOTAL COMBINED BUDGET
		403	(P. )	411		481		
BUDGETED OPERATING REVENUE	(Cherr	y Point Ind., Irrig.)		able, Non-potable & Fire Protection)				
TOTAL DISTRICT SERVICE REVENUE (Incudes Irrigation)	\$	9,020,392	\$	257,570	\$	2,203,956	\$	11,481,91
TOTAL ELECTRIC "PASS-THRU" REVENUE	*	-,,	T		,	9,688,816		9,688,81
TOTAL BUSNESS SERVICES REVENUE		400,000				-		400,00
TOTAL INTEREST AND OTHER REVENUE		234,516		8,565		46,889		289,96
TOTAL BUDGETED OPERATING REVENUE	\$	9,654,908	\$	266,134	\$	11,939,661	\$	21,860,70
BUDGETED OPERATING COSTS	7	5,000,000			1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2 T	
ABOR AND BENEFITS	Φ.	4 000 745	•	04.000	Φ.	040 444	•	4.044.44
TOTAL LABOR & BENEFITS - OPERATIONS & MAINTENANCE	\$	1,003,745	\$	64,262	\$	243,441	\$	1,311,44
TOTAL LABOR & BENEFITS - ADMINISTRATION		1,102,137		3,747	•	542,099		1,647,98
TOTAL LABOR AND BENEFITS	\$	2,105,882	\$	68,009	\$	785,540	\$	2,959,43
TOTAL LABOR		1,386,535		43,863		523,179		1,953,57
TOTAL BENEFITS		719,348		24,146		262,361		1,005,85
ARIABLE O&M EXPENSE	- 2,							
TOTAL PURCHASED WATER	\$	-	\$	4,047	\$		\$	4,04
TOTAL PURCHASED POWER		594,067		7,278		9,108,442		9,709,78
TOTAL TAXES ON "PASS-THRU" POWER COSTS		-		_		562,252		562,25
TOTAL WATER PURIFICATION		266,402		1,301		_		267,70
TOTAL VARIABLE O&M EXPENSE	\$	860,469	\$	12,626	\$	9,670,694	\$	10,543,78
IVED OOM EVDENCE								
TOTAL ORM SERVICES	ф.	111 210	¢	7 246	¢	44 700	¢	166,36
TOTAL O&M SERVICES	\$	114,319	\$	7,346	\$	44,702	\$	
TOTAL MATERIAL AND SUPPLIES		236,712		2,476		26,074		265,26
TOTAL EXTRAORDINARY MAINTENANCE  TOTAL FIXED O&M EXPENSE	\$	707,000 <b>1,058,031</b>	\$	80,000 <b>89,822</b>	\$	70,776	\$	787,00 <b>1,218,6</b> 3
	Ψ	1,000,001	Ψ	00,022	¥	10,110		1,210,00
ADMINISTRATION, PLANNING & BUSINESS DEVELOPMENT (P&BD)	Φ.	404 507	Φ.	40.404	φ	004.000	•	707.0
TOTAL OUTSIDE SERVICES - ROUTINE	\$	494,507	\$	18,484	\$	224,260	\$	737,25
TOTAL OUTSIDE SERVICES - PLANNING & DEV		291,428		847		7,725		300,00
TOTAL INSURANCE		94,824		7,028		28,798		130,68
TOTAL OFFICE EXPENSE		207,773		9,042		86,088		302,90
TOTAL SUBSCRIPTIONS & MEMBERSHIPS		21,650		793		36,447		58,89
TOTAL FEES, PERMITS, & ASSESSMENTS		844		713		492		2,04
TOTAL ADVERTISEMENTS & NOTICES		5,118		202		1,845		7,10
TOTAL MILEAGE & VEHICLES EXPENSE		2,993		69		3,975		7,0
TOTAL EDUCATION & CONFERENCES		26,237		733		13,898		40,8
TOTAL PAYMENT TO ELECTRIC		79,956		-		-		79,9
TOTAL MISCELLANEOUS AND ELECTIONS				-				
SUBTOTAL ADMIN AND P&BD BEFORE TAXES	\$	1,225,331	\$	37,912	\$	403,527	\$	1,666,7
TOTAL OTHER TAXES		489,596	¢	13,333	¢	143,041	· c	645,9
TOTAL ADMIN, PLANNING & BUSINESS DEV	\$	1,714,927	\$	51,245	\$	546,568	\$	2,312,7
SUBTOTAL OPERATING BUDGET	\$	5,739,310	\$	221,702	\$	11,073,578	\$	17,034,59
USINESS SERVICES								
TOTAL BUSINESS SERVICES - DIRECT COSTS	\$	400,000	\$	*	\$	_	\$	400,0
TOTAL BUSINESS SERVICES	\$	400,000	\$	•	\$	•	\$	400,0
		,						
APITAL COSTS	ф	4 400 700	ø	00.000	φ	200 000	œ.	4 400 7
TOTAL TRANSFERS FOR CAPITAL PROJECTS	\$	1,188,738	\$	80,000	\$	200,000	\$	1,468,7
TOTAL CAPITAL COSTS	\$	2,162,788 3 351 526	\$	80,000	\$	536,434 <b>736,434</b>	\$	2,699,23 <b>4,167,9</b>
TOTAL CAPITAL COSTS	φ	3,351,526	φ	00,000	φ	130,434	Ψ	4, 107,9
SUBTOTAL BUDGET BEFORE RESERVES	\$	9,490,836	\$	301,702	\$	11,810,012	\$	21,602,5
TOTAL CHANGE IN OPERATING RESERVES	\$	164,072	\$	(35,568)	\$	129,649	\$	258,1
TOTAL DUDGETED OPERATING COSTS	¢	0 654 000	¢	266 424	¢	11 020 664	¢	24 050 7
TOTAL BUDGETED OPERATING COSTS	\$	9,654,908	\$	266,134	\$	11,939,661	\$	21,860,7

PUD No. 1 of Whatcom County				/		Allocation to O	ther Funds	/	
2021 Operating Budget INTERNAL SERVICE FUND - 500	INTE	DNAL GEDWICE	INDI	IOTDIAL WATER	ODA	NDVIEW LITTLE TV			
Allocation of Costs to Other Funds	INTER	RNAL SERVICE FUND		STRIAL WATER JTILITY - 403	GRAI	NDVIEW UTILITY - 411	ELECTRIC - 481	тот	AL ALLOCATIO
LABOR & BENEFITS - ADMINISTRATION									
TOTAL LABOR & BENEFITS - ADMINISTRATION	\$	1,647,983	\$	1,102,137	\$	3,747	\$ 542,099	\$	1,647,983
Allocation Factors ->		100.0%		71.4%		2.8%	25.8%		100%
ADMINISTRATION AND PLANNING & BUSINESS DEVELOPMENT (P	&BD)								
TOTAL CONTRACT SVC COSTS - DISTRICT	\$	265,080	\$	189,278	\$	7,473	\$ 68,329	\$	265,080
TOTAL CONTRACT SVC COSTS - P&BD		30,000		22,043			7,957		30,000
TOTAL INSURANCE		79,713		56,918		2,247	20,547	1	79,713
TOTAL OFFICE EXPENSE		275,863		197,594		6,938	71,331		275,863
TOTAL SUBSCRIPTIONS & MEMBERSHIPS		28,090		20,108		722	7,259		28,090
TOTAL FEES, PERMITS, & ASSESSMENTS		332		237		9	86		332
TOTAL ADVERTISEMENTS / NOTICES		7,165		5,264		-	1,900		7,165
TOTAL MILEAGE & MEETINGS	* -	2,449		1,799		-	650		2,449
TOTAL EDUCATION & CONFERENCE		25,963		19,077		-	6,887		25,963
TOTAL MISCELLANEOUS		-					<b>-</b>		-
SUBTOTAL ADMIN AND P&BD BEFORE TAXES	\$	714,654	\$	512,319	\$	17,390	\$ 184,945	\$	714,654
TAXES		-		-		-			-
TOTAL ADMINISTRATION AND P&BD (Net of Labor)	\$	714,654	\$	512,319	\$	17,390	\$ 184,945	\$	714,654
CAPITAL COSTS						***			1 - 4 - 2
TOTAL RATE FUNDED CAPITAL TRANSFER	\$	-	\$	-	\$	-	\$ -	\$	
TOTAL TRANSFER TO RURAL ELEC DEV FUND		-		-		-	-		-
TOTAL CAPITAL COSTS	\$	•	\$	-	\$	•	\$ -	\$	
TOTAL INTERNAL SERVICE FUND - 500	\$	2,362,637	\$	1,614,455	\$	21,137	\$ 727,044	\$	2,362,637

S.\Accounting\BUDGET AND RATES\BUDGET & RATES 2021\PRINT ONLY BUDGET REPORTS\[21 Budget 500.x|sx]EXPENSE Matrix

PUD No.1 of Whatcom County 2021 Operating Budget	INTERNAL SERVICES FUND - 500		RIAL WATE		ΓΙLITY - 403 rigation.)	GRAND	VIE	EW UTIL	ITY	- 411	ELECT	RIC UTILI	ITY ·	- 481		TOTAL OMBINED
ALL FUNDS SUMMARY Internal Service Fund Transfers Highlighted	Allocated to Other Funds	Direct	Allocated from IS	<u>}</u>	Net	Direct		llocated rom IS	1	Vet	Direct	Allocated from IS		Net	_	BUDGET
BUDGETED OPERATING REVENUE			7//////	2			1/2						-			
TOTAL DISTRICT SERVICE REVENUE (Incudes Irrigation)				\$	9,020,392				\$ 2	57,570			\$	2,203,956	\$	11,481,91
TOTAL ELECTRIC "PASS-THRU" REVENUE					,,,					,				9,688,816		9,688,81
TOTAL BUSNESS SERVICE REVENUE					400,000									-		400,00
TOTAL INTEREST AND OTHER REVENUE				2	234,516					8,565				46,889		289,96
TOTAL BUDGETED OPERATING REVENUE	\$ -	\$ -	.,,,,,,,,	\$	9,654,908	\$ -		,,,,,,	\$ 2	66,134	\$ -	<del></del>	\$ 1	1,939,661	\$	21,860,70
BUDGETED OPERATING COSTS																
LABOR AND BENEFITS														040.444		
TOTAL LABOR & BENEFITS - OPERATIONS & MAINTENANCE	44 047 000	\$ 1,003,745	4 400 407	\$	1,003,745	\$ 64,262		2247	\$	64,262	\$ 243,441	540,000	\$	243,441	\$	1,311,44
TOTAL LABOR & BENEFITS - ADMINISTRATION	(1,647,983)	÷ 4.002.745	1,102,137		1,102,137	- c4000	1/2	3,747	•	3,747	£ 242.444	542,099	•	542,099	•	1,647,98
TOTAL LABOR AND BENEFITS	\$ (1,647,983)	\$ 1,003,745	\$ 1,102,137	>	2,105,882			3,747	\$	68,009		\$ 542,099	\$	785,540	\$	2,959,43
TOTAL LABOR TOTAL BENEFITS		1,386,535 719,348			1,386,535 719,348	43,863				43,863 24,146	523,179 262,361			523,179 262,361		1,953,57 1,005,85
TOTAL BENEFITS		719,340			119,340	24,146				24,140	202,301			202,301	*	1,000,00
VARIABLE O&M EXPENSE				3												
TOTAL PURCHASED WATER		\$ -		\$		\$ 4,047			\$	4,047	\$ -		\$		\$	4,04
TOTAL PURCHASED POWER		594,067			594,067	7,278				7,278	9,108,442			9,108,442		9,709,78
TOTAL WATER PURISHED ATTOM		200 402			266 402	1 201				1 201	562,252			562,252		562,25
TOTAL WATER PURIFICATION	\$ -	266,402 \$ 860,469	\$ -	\$	266,402 860,469	1,301 \$ 12,626	\$	/////	\$	1,301 12.626	\$ 9.670.694	7/////	•	0 670 604	•	267,70
TOTAL VARIABLE O&M EXPENSE	<b>&gt;</b> -	\$ 860,469	•	Þ	800,409	\$ 12,020	7//	7/////	\$	12,020	\$ 9,070,094	4//////	\$	9,670,694	Þ	10,543,78
FIXED O&M EXPENSE (Net of Labor and Benefits)						-										
TOTAL O&M SERVICES		\$ 114,319		\$	114,319	\$ 7,346			\$	7,346	\$ 44,702		\$	44,702	\$	166,36
TOTAL MATERIAL AND SUPPLIES		236,712			236,712	2,476				2,476	26,074			26,074		265,26
TOTAL EXTRAORDINARY MAINTENANCE		707,000	9//////		707,000	80,000	7/	7///2		80,000	-	9/////		-		787,00
TOTAL FIXED O&M EXPENSE	\$ -	\$ 1,058,031	\$ .	\$	1,058,031	\$ 89,822	\$	<del>,,,,,,</del>	\$	89,822	\$ 70,776	\$ .	\$	70,776	\$	1,218,63
ADMINISTRATION, PLANNING & BUSINESS DEVELOP	MENT (P& RI	) )				9				575 575						
TOTAL OUTSIDE SERVICES - ROUTINE	\$ (265,080)	1.	\$ 189,278	\$	494,507	\$ 11,010	\$	7,473	\$	18,484	\$ 155,931	\$ 68,329	s	224,260	\$	737,25
TOTAL OUTSIDESERVICES - PLANNING	(30,000)	269,385	22,043	₹. 1	291,428	847	7/		•	847	(232)	7,957	, T	7,725	Ť	300,00
TOTAL INSURANCE	(79,713)	37,906	56,918		94,824	4,781		2,247		7,028	8,251	20,547		28,798		130,65
TOTAL OFFICE EXPENSE	(275,863)	10,180	197,594		207,773	2,104		6,938		9,042	14,757	71,331		86,088		302,90
TOTAL SUBSCRIPTIONS & MEMBERSHIPS	(28,090)	1,541	20,108		21,650	71		722		793	29,188	7,259		36,447		58,89
TOTAL FEES, PERMITS, & ASSESSMENTS	(332)	607	237		844	704		9		713	406	86		492		2,04
TOTAL ADVERTISEMENTS & NOTICES	(7,165)	(147)	5,264		5,118	202				202	(55)	1,900		1,845		7,16
TOTAL MILEAGE & VEHICLES EXPENSE	(2,449)	1,194	1,799		2,993	69				69	3,325	650		3,975		7,03
TOTAL EDUCATION & CONFERENCES	(25,963)	7,161	19,077		26,237	733				733	7,011	6,887		13,898		40,86
TOTAL PAYMENT TO ELECTRIC		79,956			79,956	-					-			-		79,95
TOTAL MISCELLANEOUS AND ELECTIONS		-	44444			-	14			-	-			-		
SUBTOTAL ADMIN AND P&BD BEFORE TAXES	\$ (714,654)		7777777	, \$	1,225,331		\$	77777		37,912		\$ 184,945	\$	403,527	\$	1,666,77
TOTAL OTHER TAXES	A (744.0F4)	489,596	* F40.040		489,596	13,333	1//	47.000		13,333	143,041	A 404 045		143,041	4	645,97
TOTAL ADMINISTRATION AND P&BD	\$ (714,654)	\$ 1,202,609	\$ 512,319	\$	1,714,927	\$ 33,855	*	17,390		51,245	\$ 361,623	\$ 184,945	7	546,568	\$	2,312,74
Administration and P & BD Including Labor & Benefits			30000	3	\$2,817,064	1	34			54,992				\$1,088,667		\$3,960,723
SUBTOTAL OPERATIONS	\$ (2,362,637)	\$ 4,124,855	\$ 1,614,455	\$	5,739,310	\$ 200,565	\$	21,137	\$ 2	21,702	\$ 10,346,534	\$ 727,044	\$ 1	1,073,578	\$	17,034,59
BUSINESS SERVICES																
TOTAL BUSINESS SERVICES - DIRECT COSTS	·/////-	400,000			400,000	-				-	-			-	\$	400,00
TOTAL BUSINESS SERVICES	\$ -	\$ 400,000	\$ -	\$	400,000	\$ -	\$		\$	•	\$ -	\$ -	\$		\$	400,000
CAPITAL COSTS																
TOTAL TRANSFERS FOR CAPITAL PROJECTS	\$	\$ 1,188,738			1 188 738	\$ 80,000			\$	80,000	\$ 200,000		\$	200,000	s	1,468,73
TOTAL DEBT SERVICE - OPERATING FUNDS		2,162,788			2,162,788	30,000			Ψ	-	536,434		Ψ	536,434	•	2,699,22
TOTAL CAPITAL COSTS	\$ -	\$ 3,351,526	\$ -	\$	3,351,526	\$ 80,000	\$		\$	80,000		\$ -	\$	736,434	\$	4,167,95
TOTAL BUDGET BEFORE RESERVES	\$ (2,362,637)	\$ 7,876 380	\$ 1,614,455	\$	9,490 836	\$ 280 565	\$	21,137	\$ 3	01.702	\$ 11,082,968	\$ 727 044	\$ 1	1.810 012	Ś	21,602,55
			9//////				1/1	1////				7//////				
TOTAL CHANGE IN OPERATING RESERVES	\$ -	\$ 164,072	\$ .	\$	164,072	\$ (35,568)	\$	/////	\$ (	35,568)	\$ 129,649	\$ .	\$	129,649	\$	258,15
TOTAL BUDGETED OPERATING COSTS	\$ (2,362,637)		7////////				11	11/1/1			\$ 11,212,617	9111111				21,860,70

S:\Accounting\BUDGET AND RATES\BUDGET & RATES 2021\PRINT ONLY BUDGET REPORTS\[21\Budget ALL FUNDS\alsa\]Detailed Summary

# PUD No. 1 of Whatcom County 2021 Operating Budget

#### **Revenue Budget**

OPERATING REVENUE - SUMMARY	403 -	Industrial Water Utility	411 - Grandview Utility	481 - Electric Utility			TOTAL
Service Revenue	\$	9,020,392	\$ 257,570	\$	11,892,772	\$	21,170,734
Business Services Revenue		400,000	-		, , -		400,000
Interest and Other Revenue		234,516	8,565		46,889		289,969
TOTAL OPERATING REVENUE	\$	9,654,908	\$ 266,134	\$	11,939,661	\$	21,860,704

Service Revenue		403 - Industrial Water Utility	411 - Grandview Utility	481 - Electric Utility	TOTAL
WATER SALES					
INDUSTRIAL					
Operations		\$ 3,133,100	\$ 35,971		\$ 3,169,071
Fire Protection		19,571	77,518		97,090
Fixed Capital		4,145,296			4,145,296
Variable		1,644,560	144,080		1,788,640
TOTAL INDUSTRIAL		8,942,527	257,570	-	9,200,097
IRRIGATION					
Fixed		16,091			16,091
Variable		61,775			61,775
TOTAL IRRIGATION		77,865	-	-	77,865
SUBTOTAL WATER SALES		9,020,392	257,570	-	9,277,962
ELECTRIC SALES					
DIRECT SALES					
Power				8,136,249	8,136,249
Transmission				990,315	990,315
Taxes				562,252	562,252
DISTRICT SERVICES				2,203,956	2,203,956
SUBTOTAL ELECTRIC SALES		-	-	11,892,772	11,892,772
	Total Service Revenue	\$ 9,020,392	\$ 257,570	\$ 11,892,772	\$ 21,170,734

Business Services Revenue	403 - Industrial Water Utility	411 - Grandview Utility	481 - Electric Utility	TOTAL
1) Water Supply Plan	100,000	-	-	100,000
2) California Creek Project	200,000	-	-	200,000
3) Education and Outreach	100,000	-	-	100,000
				-
Total Business Services Revenue	\$ 400,000	\$ -	\$ -	\$ 400,000

Revenues received for business services - see page 8 under Business Services.

Interest and Other Revenue	403 - 1	Industrial Water Utility	411 - Grandview Utility	481	- Electric Utility	TOTAL
Interest Revenue	\$	207,476	\$ 8,565	\$	46,889	\$ 262,930
Other Revenue		27,039	-		-	27,039
Total Interest and Other Revenue	\$	234,516	\$ 8,565	\$	46,889	\$ 289,969

Other revenues include cell tower rent, reimbursement from customers for customer specific projects and land rental.

# PUD No. 1 of Whatcom County 2021 Operating Budget

#### **Labor and Benefits Budget**

LABOR & BENEFITS - SUMMARY	403	- Industrial Water Utility	411 - Grandview	481 - Electric	TOTAL
Labor & Benefits -Operations & Maintenance	\$	1,003,745	\$ 64,262	\$ 243,441	\$ 1,311,449
Labor & Benefits - Administration		1,102,137	3,747	542,099	1,647,983
TOTAL LABOR & BENEFITS	\$	2,105,882	\$ 68,009	\$ 785,540	\$ 2,959,431

#### Labor & Benefits -Operations & Maintenance

Labor and benefits for O&M activities - does not include time spent on capital projects.

#### Labor & Benefits - Administration

Labor & benefits for administration are for the Commissioners, District Manager, Admin Assistant, Accounting staff, and Operations management, not allocated to planning and business development or capital projects. Cost are allocated to specific funds based on unique allocation factors for each employee.

#### Variable O&M Expense Budget

VARIABLE O&M EXPENSE - SUMMARY	403 - Industrial Water Utility	411 - Grandview	481 - Electric Utility	TOTAL
Purchased Water	\$ -	\$ 4,047	\$ -	\$ 4,047
Purchased Power & Transmission	594,067	7,278	9,108,442	9,709,787
Water Purification	266,402	1,301		267,703
"Pass-Thru" Utility Taxes (Electric)	-	-	562,252	562,252
TOTAL VARIABLE O&M EXPENSE	\$ 860,469	\$ 12,626	\$ 9,670,694	\$ 10,543,789

#### **Purchased Water**

In 2019 a connection was made from the Industrial Water System to the Grandview Fire System in order to move away from the well and pond which were failing. This is the charge from the Industrial Water System.

#### Purchased Power & Transmission

Power	\$	594,067	\$ 7,278	\$ 8,118,127	\$ 8,719,472
Transmission	* ;			990,315	990,315
Total Power & Transmission Expense	\$	594,067	\$ 7,278	\$ 9,108,442	\$ 9,709,787

Power is purchased from the BPA for resale to Phillips 66 and to supply the pumping requirements of Plant #1 and Plant #2. This also includes the transmission costs from PSE as some PSE lines are used to transmit power to the Enterprise Substation.

#### Water Purification

Plant #1 Chemicals	\$ 98,528	\$ 1,301		\$ 99,830
Plant #2 Chemicals	167,873	7.		167,873
Total Water Purification	\$ 266,402	\$ 1,301	\$ -	\$ 267,703

Water purifications costs are for the chemicals used to treat water at plant #1 and plant #2, as well as the Grandview potable system.

#### "Pass-Thru" Utility Taxes (Electric)

State Utility excise and privilege taxes for electric power sales.

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#### 2021 Operating Budget

#### **Fixed O&M Expense Budget**

FIXED O&M EXPENSE - SUMMARY	403 -	Industrial Water Utility	411 - Grandview	481	- Electric Utility	TOTAL
O&M Services	\$	114,319	\$ 7,346	\$	44,702	\$ 166,367
Material & Supplies		236,712	2,476		26,074	265,262
Extraordinary Maintenance		707,000	80,000		_	787,000
TOTAL FIXED O&M EXPENSE	\$	1,058,031	\$ 89,822	\$	70,776	\$ 1,218,630

#### **O&M Services**

Cost of O&M services performed by outside vendors.

#### Material & Supplies

Cost of material and supplies needed to perform O&M functions.

#### **Extraordinary Maintenance**

Large maintenance projects that are performed by in-house staff or outside vendors. These are identified in the Extraordinary Maintenance section of the Capital Budget.

Administration, Planning & Business Development Budget										
OUTSIDE SERVICES - SUMMARY		403 - Industrial Water Utility	411 - Grandview	481 - Electric Utility		TOTAL				
Accounting / Financial Services		\$ 88,479	\$ 3,427	\$ 31,174	\$	123,080				
Computer Services		10,714	423	3,863	-	15,000				
Engineering		290,713	11,412	82,875		385,000				
Legal Services		60,713	1,412	32,875		95,000				
System Monitoring		2,143	1,085	773		4,000				
Outside Consulting - Other		39,571	734	12,695		53,000				
Power Regulations		2,171	-	60,000		62,171				
TOTAL OUTSIDE S	ERVICES S	\$ 494,504	\$ 18,492	\$ 224,255	\$	737,251				

#### Accounting / Financial Services

For maintenance and support of the District's accounting/financial software system and arbitrage consulting services. Also includes fees for the State Auditor's Office. The audit is performed on a two year cycle. The audit for years 2019-2020 is expected at the end of 2021. For 2021, an additional \$70,000 is budgeted for a rate study on the two water systems.

#### **Computer Services**

Hardware and software maintenance by Minimax, Softwired, Comcast.

#### Engineering

This includes cost for general, on-call engineering services. Project specific costs for capital projects are identified in the Capital Budget. For 2021 an additional \$125,000 was added for a hydraulic modeling and analysis and another \$100,000 for engineering review of work being done on the levy at Plant 1.

#### **Legal Services**

Legal services for the District's legal counsel, Chmelik, Sitkin & Davis, to attend the monthly commissioner meetings and perform other miscellaneous general legal services and other legal consulting specific to commission and general legal support. NOTE: Legal services for planning or capital activities are charged directly to those functions. Legal services for water and electric contracts are included under planning and business development.

#### System Monitoring

Security system monitoring costs.

#### Outside Consulting - Other

Miscellaneous consulting. Includes \$4,000 for ongoing pictometry agreement with Whatcom County, and costs for miscellaneous software maintenance. In 2021 an additional amount was budgeted for additional consultants needed to fulfill goals outlined in the strategic plan.

#### Power Regulations

Costs of power regulation. Includes WECC, Spill surcharge, Transmission Planner, Transmission Operator and Consultant charges.

# PUD No. 1 of Whatcom County 2021 Operating Budget

PLANNING AND BUSINESS DEVELOPMENT	403 - Industrial Water Utility	411 - Grandview	481 - Electric Utility	TOTAL
Community Education / Communications	71,428	\$ 847	7,725	80,000
2) Water Contracts	10,000			10,000
3) Habitat Restoration	20,000			20,000
4) Water Supply Management	50,000			50,000
5) Water System Services	40,000			40,000
6) Adjudication	100,000			100,000
Total Planning & Business Development	\$ 291,428	\$ 847	\$ 7,725	\$ 300,000

#### **DESCRIPTION:**

- 1) Community Education / Communications Program directed at informing the community of the PUD's activities and actions to create and sustain a communication dialogue.
- 2) Water Contracts Staff and consulting costs associated with new water service contracts with customers and interaction with state and federal authorities. Aligning water service contracts with District policies, debt management and state/federal laws.
- 3) Habitat Restoration Assisting agencies in protecting and restoring habitat by supporting stream habitat restoration projects.
- 4) Water Supply Management Support the development of PUD resources in the collection and management of data in managing water resources in Whatcom County and update the PUD water system plan.
- 5) Water System Services Continued support for water systems and associates.
- 6) Adjudication Legal, and other consultant expenses related to supporting, protecting and utilization of the District's water rights.

INSURANCE - SUMMARY	403 -	Industrial Water Utility	411 - Grandview	481	- Electric Utility	TOTAL
Insurance - Property	\$	38,638	\$ 4,807	\$	8,542	\$ 51,987
Insurance - Liability		56,186	2,221		20,256	78,663
TOTAL INSURANCE	\$	94,824	\$ 7,028	\$	28,798	\$ 130,650

#### Property - General Assessments & Excess Property

Annual self-insurance assessment for property damage under \$250,000. Public Utility Risk Management Services (PURMS) calculates the District's assessment based on a prorated share of the property values for the entire self-insurance pool, adjusted for risk factors.

#### **Excess Liability Insurance**

The annual insurance premiums for excess general and professional liability insurance (for losses above \$1,000,000). Public Utility Risk Management Services (PURMS) administers the self insurance pool, calculates the premium, and remits the District's share to AEGIS (Associated Electric & Gas Insurance Services Limited).

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#### 2021 Operating Budget

OFFICE EXPENSE - SUMMARY	403 - Industrial Water Utility	411 - Grandview	481 - Electric Utility	TOTAL
Office Supplies	\$ 12,110	\$ 329	\$ 3,408	\$ 15,847
Postage and Freight	1,711	68	708	2,486
Printing and Copies	1,148	45	13,418	14,611
Office Equip - Maint & Maint Contracts	2,894	114	1,043	4,052
Office Grounds Maintenance	4,944	195	1,782	6,922
Office Building Maintenance	16,323	645	5,885	22,852
Office - Computer Expenses	129,873	5,133	46,822	181,829
Office Expense - Other	360	3	32	395
Utilities - Communications	31,276	2,419	10,629	44,324
Utilities - Waste and Recycle	5,640	89	2,360	8,089
Utilities - Water	1,495		-	1,495
TOTAL OFFICE EXPENSE	\$ 207,773	\$ 9,042	\$ 86,088	\$ 302,903

#### Office Supplies

Paper, toner, pens, pencils, small office equipment, etc.

#### Postage and Freight

Postage for regular and special mailings

#### **Printing and Copies**

Oversized and specialized copies

#### Office Equipment - Maint & Maint Contracts

Maintenance contracts on copiers

#### Office Grounds Maintenance

Cost of landscaping maintenance services

#### Office Building Maintenance

Includes janitorial services, window cleaning and carpet cleaning for both the Administrative and Maintenance Building

#### Office - Computer Expenses

General equipment, licenses and computer equipment and supplies under the capital threshold.

#### Office Expense - Other

Other miscellaneous office needs.

#### **Utilities - Communications**

Includes charges for cell phones, DSL line, Scada and Grandview fire lines and land line

#### **Utilities - Waste and Recycle**

Waste and recycle expense from Sanitary Service Company for the main office

#### **Utilities - Water**

Water and storm water bill from the City of Ferndale for all facilities that use Ferndale water related services

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#### 2021 Operating Budget

SUBSCRIPTIONS & DUES - SUMMARY	403	- Industrial Water Utility	411 - Grandview	48	1 - Electric Utility	TOTAL
Subscriptions	\$	3,355	\$ 70	\$	3,554	\$ 6,979
Dues - Memberships		18,295	723		32,893	51,911
TOTAL SUBSCRIPTION & DUES	\$	21,650	\$ 793	\$	36,447	\$ 58,890

#### Subscriptions

Subscriptions to local newspapers and trade journals. Subscription to Platts - Megawatt Daily (electric), Clearing up, newspapers, and magazines.

#### Dues - Memberships

Dues and memberships for Pacific NW Utilities, American Water Works, Public Power Council, WPUDA, WFOA, WAPRO, NRU and Bellingham Whatcom Chamber of Commerce.

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FEES, PERMITS, LOCATES - SUMMARY	403 -	Industrial Water Utility	411 - Grandview	48	1 - Electric Utility	TOTAL
Miscellaneous Fees & Permits	\$	580	\$ 713	\$	492	\$ 1,785
Locates		264	-		-	264
TOTAL FEES, PERMITS, LOCATES	\$	844	\$ 713	\$	492	\$ 2,049

#### Miscellaneous Fees & Permits

Major contributors include wastewater permit from the Department of Ecology, DOH certification fees for water operators, and miscellaneous fees.

#### Locates

Underground locates.

ADVERTISEMENTS & NOTICES SUMMARY	403	- Industrial Water Utility	411 - Grandview	481	- Electric Utility	TOTAL
Advertisements & Notices	\$	5,118	\$ 202	\$	1,845	\$ 7,165
TOTAL ADVERTISEMENTS & NOTICES	\$	5,118	\$ 202	\$	1,845	\$ 7,165

#### **Advertisements & Notices**

Job advertisements, public notices, etc.

MILEAGE & MEETINGS - SUMMARY	403 -	Industrial Water Utility	411 - Grandview	48	31 - Electric Utility	TOTAL		
Mileage Reimbursement	\$	1,048	\$ 29	\$	555	\$	1,632	
Admin Vehicle Expense		1,946	40		3,420		5,405	
TOTAL MILEAGE & MEETINGS	\$	2,993	\$ 69	\$	3,975	\$	7,037	

#### Mileage Reimbursement

Direct mileage reimbursement to District staff for travel between plant and/or business locations.

#### Admin Vehicle Expense

Fuel and other expenses to operate and maintain the three PUD Admin vehicles spread across the utilities based on operating labor hours

#### 2021 Operating Budget

EDUCATION AND CONFERENCES - SUMMARY	403 - Industrial Water Utility	411 - Grandview	481 - Electric Utility	TOTAL		
Mileage Reimbursement	\$ 2,086	\$ 58	\$ 1,105	\$ 3,249		
Travel (Airfare, Parking)	1,106	31	586	1,722		
Lodging and Meals	7,452	208	3,947	11,607		
Registration	12,692	355	6,723	19,770		
Meeting Supplies	1,403	39	743	2,186		
Business Lunch	267	7	141	415		
Education Materials	1,232	34	653	1,919		
TOTAL EDUCATION AND CONFERENCES	\$ 26,237	\$ 733	\$ 13,898	\$ 40,868		

#### Mileage Reimbursement

Mileage reimbursement to District staff for travel related to meetings, conferences and classes.

#### Travel (Airfare, Parking)

Airfare, parking fees, and other direct travel cost reimbursements to District staff for travel related to meetings, conferences and classes.

#### Lodging and Meals

Lodging and meal costs for District staff related to meetings, conferences and classes.

Registration fees for conferences and seminars for District staff.

#### Meeting Supplies

Supplies or refreshments used during a District meeting.

#### **Business Lunch**

Reimbursement for District meetings occurring during a meal time.

#### **Education Materials**

Books and other resource materials directly related to a specific utility required for training classes or to update the District's library.

ELECTRIC GENERAL SERVICES CHARGE	403	- Industrial Water Utility	411 - Grandview	481 -	Electric Utility	TOTAL
Electric General Service Charge	\$	79,956	,			\$ 79,956
TOTAL ELECTRIC GENERAL SERVICE CHARGE	\$	79,956	\$ -	\$		\$ 79,956

#### **Electric General Service Charge**

A General Service Charge imposed on Industrial Water by the Electric Utility to cover overhead costs not otherwise allocated.

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403 -	Industrial Water Utility	411 - Grandview	481 -	Electric Utility	TOTAL
\$	489 596	\$ 13 333	\$	95 876	\$ 598 806

	TAXES - SUMMARY		403 -	Utility	411 - Grandview	481	- Electric Utility	TOTAL
ĺ	Utility Tax on District Services		\$	489,596	\$ 13,333	\$	95,876	\$ 598,806
	Privilege Taxes on District Services						47,165	47,165
		TOTAL TAXES	\$	489,596	\$ 13,333	\$	143,041	\$ 645,971

#### **Utility Tax on District Services**

State excise taxes for water (5.029%) and electric (3.873%) service revenues.

#### Privilege Taxes on District Services

Privilege tax on District Services portion of electric revenues at 2.14% paid to the Washington State Department of Revenue.

TOTAL ADMIN A	ND PLANNING & BUS DEV	\$ 1,714,924   \$	51,253 \$	546,563 \$	2,312,740
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# PUD No. 1 of Whatcom County 2021 Operating Budget

#### **Business Services**

BUSINESS SERVICES SUMMARY	403 - Industrial Water Utility	411 - Grandview	481 - Electric Utility	TOTAL
DIRECT EXPENSES				
1) Water Supply Plan	100,000			100,000
California Creek Project	200,000			200,000
3) Education and Outreach	100,000			100,000
REIMBURSEMENTS				
1) Water Supply Plan	(100,000)			(100,000
2) California Creek Project	(200,000)	-		(200,000
3) Education and Outreach	(100,000)			(100,000
TOTAL BUSINESS SERV	/ICES \$ -	\$ -	-	\$ -

#### DESCRIPTION:

- 1) Water Supply Plan WMB (Watershed Management Board) Puget Sound Partnership NTA Grant
- 2) California Creek Project Potential DOE grant to study using water from new Vista Line to supplement California Creek streamflow / mitigation
- 3) Education and Outreach Puget Sound Partnership Grant for education on water resources.

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# PUD No. 1 of Whatcom County 2021 Operating Budget

#### **Debt Service**

DEBT SERVICE SUMMARY		403 - Industrial Water Utility	411 - Grandview	481 - Electric Utility	TOTAL
2012 LTGO Series A		212,265			212,265
2012 LTGO Series B		144,320		61,903	206,223
2013 LTGO Bonds		451,350			451,350
2016 LTGO Bonds			167,088		167,088
2021 LTGO Bonds		1,310,521		474,531	1,785,052
EDI Loan		44,332			44,332
	TOTAL DEBT SERVICE	\$ 2,162,788	\$ 167,088	\$ 536,434	\$ 2,866,310

#### 2012 LTGO Series A

Debt service on the 2004 Series A bonds which paid for improvements on both Plant I and Plant II and a SCADA improvement. 2004 Series A was refinanced in 2012 to lower interest rate costs.

#### 2012 LTGO Series B

Debt service on the portion of the 2004 LTGO Series B bonds attributable to the closed Telecom Utility and Electric Utility upgrades. 2004 bonds were refinanced in 2012 to lower interest rate costs. Portion specific to the Electric Utility upgrades dropped off after 2019, leaving only the Telecom portion.

#### 2013 LTGO Bonds

Debt service on the 2013 bonds which completed the funding for the Plant 2 rebuild.

#### 2016 LTGO Bonds

Debt service on the 2007 bonds which funded the Grandview extension (LUD). 2007 bonds were refinanced in 2016 to lower interest rate costs. This will be paid with LUD assessments.

#### 2021 LTGO Bonds

Debt service on the refinance of the 2010 series B bonds which financed the Plant 2 rebuild and the purchase of the Enterprise and Ferndale Substation. Also included is new funding for the Refinery Substation rebuild.

#### **EDI Loan**

Debt service on the 2019 EDI loan to finance the connection of the Industrial Water System to the Grandview Fire System.

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PUD No. 1 of Whatcom County 2021 Operating Budget By Function		ERATIONS & INTENANCE	ļ	ADMIN, P&BD		USINESS ERVICES	RA	TE FUNDED CAPITA RESERVE CHAN			
INDUSTRIAL WATER UTILITY - 403 (Cherry Point Industrial, Irrigation)	Tota	al O&M Costs	То	tal Admin Costs	N	et Bus Ser Costs	ı		Alloc. from ner Functions	TO	TAL BUDGET
LABOR AND BENEFITS (Net of Capitalized Labor)					-		-				
TOTAL LABOR AND BENEFITS	\$	1,003,745	\$	1,102,137	\$		\$	- \$		\$	2,105,882
TOTAL LABOR	A Addison	661,851	100 100 100	724,684			320,000	-	-	12011	1,386,535
TOTAL BENEFITS		341,895		377,453		-			-		719,348
VARIABLE O&M EXPENSE					-		-			_	
TOTAL PURCHASED POWER	\$	594,067	\$	-	\$		\$	- \$	-	\$	594,067
TOTAL WATER PURIFICATION		266,402				-		-	-		266,402
TOTAL VARIABLE O&M EPENSE	\$	860,469	\$	-	\$	•	\$	- \$	-	\$	860,469
FIXED O&M EXPENSE					-						
TOTAL O&M SERVICES	\$	114,319	\$	-	\$	-	\$	- \$	-	\$	114,319
TOTAL MATERIAL/SUPPLY		236,712		-				-	-		236,712
TOTAL EXTRAORDINARY MAINTENANCE		707,000		-		-		-	-		707,000
TOTAL FIXED O&M EXPENSE	\$	1,058,031	\$	•	\$		\$	- \$		\$	1,058,031
ADMINISTRATION AND PLANNING & BUSINESS DEVELOPM		&BD)			_		-			•	40.4 507
TOTAL CONTRACT SVC COSTS - DISTRICT	\$		\$	494,507	\$	-	\$	- \$	-	\$	494,507
TOTAL CONTRACT SVC COSTS - P&BD		-		291,428		-	-	-			291,428
TOTAL INSURANCE		-		94,824	-	-	-		-		94,824
TOTAL OFFICE EXPENSE		-		207,773	_						207,773
TOTAL SUBSCRIPTIONS & MEMBERSHIPS				21,650		-	-	·	-		21,650
TOTAL FEES, PERMITS & ASSESSMENTS		•		844		-		•	-		844
TOTAL ADVERTISEMENTS & NOTICES				5,118	-			•	-		5,118
TOTAL MILEAGE & MEETINGS		•		2,993		-		-	-		2,993
TOTAL EDUCATION & CONFERENCES		•		26,237		-		•	-		26,237
TOTAL PAYMENT TO ELECTRIC				79,956		-		-	-		79,956
TOTAL MISCELLANEOUS & OTHER				-		-			-		
TOTAL TELECOM DEBT SERVICE (Noanet & Series B DS)		•		-		-					
SUBTOTAL ADMIN AND P&BD BEFORE TAXES	\$	•	\$	1,225,331	\$	•	\$	- \$	•	\$	1,225,331
TOTAL TAXES NET OF RURAL ELECTRIC CREDIT		• 	DP WARREN	489,596				-		•	489,596
TOTAL ADMIN, PLANNING & BUSINESS DEV	\$	•	\$	1,714,927	\$	•	\$	- \$	•	\$	1,714,927
BUSINESS SERVICES			l L								
TOTAL BUSINESS SERVICE DIRECT COSTS	\$		\$	•	\$	400,000	\$	- \$	-	\$	400,000
TOTAL BUSINESS SERVICES	\$		\$		\$	400,000	\$	- \$	•	\$	400,000
TOTAL BUDGET FOR OPERTIONS	\$	2,922,246	\$	2,817,064	\$	400,000	\$	- \$		\$	6,139,310
CAPITAL COSTS											
TOTAL RATE FUNDED CAPITAL TRANSFER - 403	\$		\$	-	\$	-	\$	1,188,738 \$	-	\$	1,188,738
TOTAL TRANSFER FROM GRANDVIEW FUND FOR CAPITAL		9 19 -		-				-			-
TOTAL DEBT SERVICE - 403		-		-		-		2,162,788	-		2,162,788
TOTAL CAPITAL COSTS	\$		\$	·	\$		\$	3,351,526 \$	•	\$	3,351,526
TOTAL BUDGET BEFORE RESERVES	\$	2,922,246	\$	2,817,064	\$	400,000	\$	3,351,526 \$		\$	9,490,836
CHANGES IN OPERATING RESERVES											
ADDITIONS TO MAINTAIN MINIMUM RESERVES											
TOTAL CHANGE IN RESERVES TO SMOOTH RATES	\$	-	\$	-	\$	-	\$	164,072 \$	-	\$	164,072
TOTAL CHANGES IN OPERATING RESERVES	\$		\$		\$		\$	164,072 \$		\$	164,072
TOTAL OPERATING BUDGET - 403	\$	2.922.246	\$	2.817.064	\$	400.000	1 \$	3.515.598 \$		\$	9,654,908

TOTAL OPERATING BUDGET - 403 \$ 2,922,246 \$ 2,817,064 \$ 400,000 \$ 3,515,598 \$ - \$ 9,654,908 \$ S:\Accounting\BUDGET AD RATES\BUDGET & RATES 2021\PRINT ONLY BUDGET REPORTS\[2] Budget 403.x\sxj\EXPENSE Matrix

PUD No. 1 of Whatcom County	OPE	ERATIONS &			BUSI	NESS	RATI	E FUNDED CA	PITAL	COSTS &		
2021 Operating Budget By Function		INTENANCE	,	ADMIN, P&BD	SERV			RESERVE C				
GRANDVIEW WATER UTILITY - 411									-			
(Potable and Fire)	Tota	al O&M Costs	Тс	otal Admin Costs		lus Ser osts	Di	rect Costs		oc. from Functions	ТОТ	AL BUDGET
LABOR AND BENEFITS (Net of Capitalized Labor)												
TOTAL LABOR AND BENEFITS	\$	64,262	\$	3,747	\$		\$		\$		\$	68,009
TOTAL LABOR		41,674		2,189		-		-		-		43,863
TOTAL BENEFITS	<b> </b>	22,588		1,558								24,146
VARIABLE O&M EXPENSE												
TOTAL PURCHASED WATER	\$	4,047	\$		\$		\$	-	\$	-	\$	4,047
TOTAL PURCHASED POWER		7,278		-		-		-		-		7,278
TOTAL WATER PURIFICATION		1,301		-						-		1,301
TOTAL VARIABLE O&M EPENSE	\$	12,626	\$		\$	•	\$		\$		\$	12,626
FIXED O&M EXPENSE	<del> </del>		-									
TOTAL O&M SERVICES	\$	7,346	\$	-	\$		\$		\$		\$	7,346
TOTAL MATERIAL/SUPPLY	P	2,476	Ψ	-	Ψ	-	P	-	Ψ	-	-	2,476
TOTAL MATERIAL/SUPPLY  TOTAL EXTRAORDINARY MAINTENANCE		80,000		-	-	-	-				-	80,000
TOTAL FIXED 0&M EXPENSE	\$	89,822	\$	-	\$	-	\$		\$	-	\$	89,822
ADMINISTRATION AND PLANNING & BUSINESS DEVELOPM TOTAL CONTRACT SVC COSTS - DISTRICT	MENT (P8	&BD)	\$	18,484	\$		\$		\$		\$	18,484
TOTAL CONTRACT SVC COSTS - DISTRICT			φ		P		φ		Ψ		φ	847
				7.029		-						
TOTAL OFFICE EXPENDE	-			7,028		•						7,028
TOTAL OFFICE EXPENSE		-		9,042				-		-		9,042
TOTAL SUBSCRIPTIONS & MEMBERSHIPS		-		793				•				793
TOTAL FEES, PERMITS & ASSESSMENTS	ļ	•		713				-		-		713
TOTAL ADVERTISEMENTS & NOTICES	-	-		202		-				-		202
TOTAL MILEAGE & MEETINGS	ļ	-		69				•		-		69
TOTAL EDUCATION & CONFERENCES		-		733						-		733
TOTAL MISCELLANEOUS & OTHER	ļ	-		-				-		-		
TOTAL TELECOM DEBT SERVICE (Noanet & Series B DS)		-	^	07.040		-	•		•	-	•	07.040
SUBTOTAL ADMIN AND P&BD BEFORE TAXES	\$	•	\$	37,912	\$	-	\$		\$	•	\$	37,912
TOTAL TAXES NET OF RURAL ELECTRIC CREDIT  TOTAL ADMIN, PLANNING & BUSINESS DEV	\$	- 8888888888	\$	13,333 51,245	\$	-	\$	-	\$	•	\$	13,333 51,245
TOTAL ADMIN, I LANGING & DUGINESS DEV	Ψ		Ψ	01,240	Ψ	6	Ψ	<u> </u>	Ψ	SE 45 S. P. 16 S.	Ψ	01,240
BUSINESS SERVICES	1											
TOTAL BUSINESS SERVICE DIRECT COSTS	<u> </u>			-		-		-		-		
TOTAL BUSINESS SERVICE REIMBURSEMENT	-					-		-		-		-
NET BUSINESS SERVICES	\$		\$		\$	•	\$		\$		\$	
TOTAL BUDGET FOR OPERTIONS	\$	166,710	\$	54,992	\$	•	\$		\$		\$	221,702
CAPITAL COSTS	-											
TOTAL RATE FUNDED CAPITAL TRANSFER - 403	\$		\$		\$		\$	80,000	\$		\$	80,000
TOTAL TRANSFER TO INDUSTRIAL WATER FOR CAPITAL	-	-		-	Ψ		-	30,000	Ψ		<b>"</b>	30,000
TOTAL TRANSFER TO INDUSTRIAL WATER FOR CAPITAL  TOTAL DEBT SERVICE SHORT - 411	-	-	-		-		-	<u>-</u>		-		
TOTAL CAPITAL COSTS	\$		\$	-	\$	-	\$	80,000	\$		\$	80,000
TOTAL DUDGET DEFODE DEGEDI/CO	•	466.740	•	E4 002	*		•	80,000	•		•	204 702
TOTAL BUDGET BEFORE RESERVES	\$	166,710	\$	54,992	\$	•	\$	60,000	Þ	•	\$	301,702
CHANGES IN OPERATING RESERVES												
ADDITIONS TO MAINTAIN MINIMUM RESERVES												
TOTAL CHANGE IN RESERVES TO SMOOTH RATES	\$	-	\$		\$	-	\$	(35,568)	\$	-	\$	(35,568
TOTAL CHANGES IN OPERATING RESERVES	\$	•	\$		\$	-	\$	(35,568)	\$	-	\$	(35,568
TOTAL OPERATING BUDGET - 411	\$	166,710	\$	54,992	\$		\$	44,432	\$	•	\$	266,134

 TOTAL OPERATING BUDGET - 411
 \$ 166,710
 \$ 54,992
 \$ \$ 44,432
 \$ \$ 266,134

 S:\Accounting\BUDGET AND RATES\BUDGET & RATES 2021\PRINT ONLY BUDGET REPORTS\(\frac{1}{2}\) Budget 411.x\(\frac{1}{2}\)x\(\frac{1}{2}\)EXPENSE Matrix

PUD No. 1 of Whatcom County 2021 Operating Budget By Function		ERATIONS & INTENANCE	AD	MIN, P&BD	BUSI SERV		RATE	FUNDED CA RESERVE C				
ELECTRIC UTILITY - 481	Tot	al O&M Costs	Tota	ıl Admin Costs		lus Ser osts	Dir	ect Costs		loc. from Other unctions	то	DTAL BUDGET
LABOR AND BENEFITS (Net of Capitalized Labor)											-	
TOTAL LABOR AND BENEFITS	\$	243,441	\$	542,099	\$		\$		\$	051505	\$	785,540
TOTAL LABOR	Ψ	166,983	Ψ	356,195	Ψ		4		4	-	Ψ	523,179
TOTAL BENEFITS		76,458		185,903								262,361
VARIABLE O&M EXPENSE											_	
TOTAL PURCHASED POWER	\$	9,670,694	\$	-	\$	-	\$		\$	-	\$	9,670,694
TOTAL WATER PURIFICATION		-		-	-	-		-		-		-
TOTAL VARIABLE O&M EPENSE	\$	9,670,694	\$	•	\$	•	\$	•	\$	•	\$	9,670,694
FIXED O&M EXPENSE				7								
TOTAL O&M SERVICES	\$	44,702	\$	-	\$	-	\$		\$	-	\$	44,702
TOTAL MATERIAL/SUPPLY		26,074		-		-		-		-		26,074
TOTAL EXTRAORDINARY MAINTENANCE				-		-		-		-		
TOTAL FIXED O&M EXPENSE	\$	70,776	\$		\$		\$		\$		\$	70,776
ADMINISTRATION AND PLANNING & BUSINESS DEVELOPM	AENT /	10 DD)									_	
	\$	αου	\$	224.260	\$	-	\$		\$		\$	224,260
TOTAL CONTRACT SVC COSTS - DISTRICT	Þ		•	224,260	P		φ		φ		φ	
TOTAL CONTRACT SVC COSTS - P&BD				7,725		-					-	7,725
TOTAL INSURANCE		-		28,798							-	28,798
TOTAL OFFICE EXPENSE	-	-		86,088		-		-		-	-	86,088
TOTAL SUBSCRIPTIONS & MEMBERSHIPS	-	-	*	36,447	- 7	-		-		-	-	36,447
TOTAL FEES, PERMITS & ASSESSMENTS	-			492		-		-		-		492
TOTAL ADVERTISEMENTS & NOTICES	-	-		1,845		-		-		-	-	1,845
TOTAL MILEAGE & MEETINGS		-		3,975		-		-		-	-	3,975
TOTAL EDUCATION & CONFERENCES	-	-		13,898		-				-		13,898
TOTAL MISCELLANEOUS & OTHER		-		-		-		-		-	-	-
TOTAL TELECOM DEBT SERVICE (Noanet & Series B DS)		-		-		-	_	-	•		•	100 507
SUBTOTAL ADMIN AND P&BD BEFORE TAXES	\$	•	\$	403,527	\$	•	\$	•	\$	-	\$	403,527
TOTAL TAXES NET OF RURAL ELECTRIC CREDIT		•		143,041		-		-	•	-	<b>*</b>	143,041
TOTAL ADMIN, PLANNING & BUSINESS DEV	\$		\$	546,568	\$	•	\$	•	\$		\$	546,568
BUSINESS SERVICES												
TOTAL BUSINESS SERVICE DIRECT COSTS	\$		\$	-	\$	-	\$	-	\$	-	\$	-
TOTAL BUSINESS SERVICE REIMBURSEMENT		-		-		-		-		-		-
NET BUSINESS SERVICES	\$	-	\$		\$	-	\$		\$		\$	
									aayaa			
TOTAL BUDGET FOR OPERTIONS	\$	9,984,912	\$	1,088,667	\$	•	\$	•	\$	•	\$	11,073,578
CAPITAL COSTS												
TOTAL RATE FUNDED CAPITAL TRANSFER - 403	\$		\$	-	\$	-	\$	200,000	\$	-	\$	200,000
TOTAL TRANSFER TO ELECTRIC FUND FOR CAPITAL		-		-		-		-		-		
TOTAL DEBT SERVICE		-		-		-		536,434		-		536,434
TOTAL CAPITAL COSTS	\$		\$		\$	•	\$	736,434	\$	•	\$	736,434
TOTAL BUDGET BEFORE RESERVES	\$	9,984,912	\$	1,088,667	\$		\$	736,434	\$	•	\$	11,810,012
CHANGES IN OPERATING RESERVES	-										-	
TOTAL ADDITIONS TO MAINTAIN MINUMUM RESERVES	\$	-	\$		\$	-	\$	-	\$	-	\$	
TOTAL CHANGE IN RESERVES TO SMOOTH RATES		-		-		-		129,649		-		129,649
TOTAL CHANGES IN OPERATING RESERVES	\$		\$		\$		\$	129,649	11725		\$	129,649
TO THE OTHER COMMON OF ENGLISHING THE CENTRE	-											

# PUBLIC UTILITY DISTRICT #1 of Whatcom County

Estimates for Alcoa Escrow Fund (490)

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2020-2028 TOTAL
Beginning Balance	\$253,897	\$258,975	\$119,154	\$121,537	\$123,968	\$258,975 \$119,154 \$121,537 \$123,968 \$126,447 \$118,744	\$118,744	\$93,445	\$57,313	\$253,897
Plus: Interest Revenue (net of fees)	5,078	5,179	2,383	2,431	2,479	2,529	2,375	1,869	1,146	25,470
Less: 1/2 LUD Short (est. 2025)						(10,232)	(10,232) (27,674)	(38,001)	34,565	(41,343)
Less: Study for energy related infrastructure projects including but not limited to wind, solar, natural gas, and hydrogen in Whatcom county.		(70,000)								(70,000)
Less: Fiberoptics Program - 1st Phase		(75,000)								(75,000)
Ending Balance	\$258,975	\$119,154	\$121,537	\$258,975 \$119,154 \$121,537 \$123,968 \$126,447 \$118,744	\$126,447	\$118,744	\$93,445	\$57,313	\$93,024	\$93,024

S: Accounting IBUDGET AND RATES IBUDGET & RATES 2021/SOURCE FILES (490 ALCOA ESCROW PROJECTIONS, XISYJCASH FLOW SUMMARIES CURRENT

PUD No. 1 of Whatcom County

# EMPLOYEE COST SUMMARY

	2021		2020		2019
EMPLOYEES w/o Commissioners	<b>Budget Count</b>	Change	Forecast Count	Change	Actual Count
Administration and Finance	15	4	11	0	1
O&M Management	7	0	7	0	2
Water Operations	9	0	9	-	ιΩ
Electric Operations	7	0	7	0	7
TOTAL EMPLOYEES*	25	4	21	I .	20
LABOR & BENEFIT COSTS	Budget	\$ Change Percent	Forecast	\$ Change Percent	Actual
Employee	\$ 3,184,268	\$ 294,275 10.2%	\$ 2,889,993	\$ 50,131 1.8%	\$ 2,839,862
Commissioner	218,795	13,391 6.5%	205,404	(12,490) -5.7%	217,894
TOTAL LABOR & BENEFITS	\$ 3,403,063	\$ 307,666 9.9%	\$ 3,095,397	\$ 37,641 1.2%	\$ 3,057,756
Operations	\$ 2,959,431	\$ 9,807	\$ 2,949,624	\$ 19,896	\$ 2,929,728
Capital	\$ 443,632	\$ 297,858	\$ 145,774	\$ 17,746	\$ 128,028

\* Employee count is as of December 31st

S:\Accounting\BUDGET AND RATES\BUDGET & RATES 2021\SOURCE FILES\[21 LABOR BUDGET.xlsx] slide

The state of the s		Perce	Percent of Labor Hours	ırs									
2021 LABOR & BENEFIT COST ALLOCATION	LABOR HOURS	Operations & Capital	Without Grandview	Tax & Cap Alloc (Exl. Alcoa Escrow)	LABOR COSTS	PENSION	SOC SEC & MEDICARE	WORKMANS	PFML	HEALTH BENEFITS	CLOTHING	TOTAL BENEFITS	TOTAL LABOR AND BENEFITS
INDUSTRIAL WATER UTILITY - 403 (Cherry Point Ind., Wholesale, Irrigation)	32,355.16	64%	73.5%	71.4%	1,386,534.53	150,413.85	108,079.57	12,048.93	3,905.17	442,954.14	1,945.99	719,347.66	2,105,882.19
TOTAL OPERATIONS	10,081.26				341,571.08	53,183.30	26,162.83	5,680.05	1,000.40	90,764.72	1,218.28	178,009.58	519,580.65
TOTAL MAINTENANCE TOTAL DI ANNING & BISINESS DEV	8,310.83				320,27,9.51	44,700.91	0/1860'07	47°CCI 'C	932.01	70.007,00	71.12	103,003.10	404,104.02
TOTAL BUSINESS SERVICES							1						
TOTAL ADMINISTRATION	13,963.06				724,683.94	52,529.64	56,316.98	1,213.64	1,971.96	265,420.75		377,452.98	1,102,136.92
GENERAL MANAGER	1,743.33				151,773.23	13,204.27	9,812.72	146.60	417.72	28,189.27		51,770.59	203,543.82
GENERAL ADMINISTRATION	1,743.33				58,758.91	5,112.03	4,886.13	155.21	161.72	16,309.56	•	26,624.64	85,383.55
CONTRACTS AND RESOURCE MANAGINT	8,071.25				323,369.81	26,313.86	26,419.00	698.43	889.46	108,143.87		162,464.62	485,834.43
FINANCE AND CUSTOMERS	2,229.15				90,798.71	7,899.49	7,550.41	213.40	249.90	37,282.70		53,195.91	143,994.62
COMMISSIONERS	176.01				99,983.28		7,648.72	. !	253.16	75,495.35		83,397.23	183,380.51
GRANDVIEW - POTABLE WATER - 411	1,096.34	2.2%		2.4%	37,432.82	6,518.54	2,897.08	608.37	111.41	10,341.58	140.99	20,617.96	58,050.78
TOTAL OPERATIONS	841.71		,		28,468.60	5,211.50	2,185.31	476.23	85.26	7,630.97	118.20	15,/0/.4/	44,176.07
TOTAL MAINTENANCE	213.65				7,808.73	1,211.82	97.079	128.32	73.14	2,124.55	27.78	4,131.3/	12,001.11
TOTAL PLANNING & BUSINESS DEV										.   .			
TOTAL ADMINISTRATION	40 08				1 094 49	95.22	91.01	3.82	3.04	586.05		779.12	1.873.60
CENERALIMISTRATION	0000				ot-too!	77:00		10:0		1			200
GENERAL MAINISTRATION													-
CONTRACTS AND RESOURCE MANAGINT									1				
FINANCE AND CUSTOMERS	40.98				1,094.49	95.22	91.01	3.82	3.01	586.05		779.12	1,873.60
COMMISSIONERS								•					
GRANDVIEW - FIRE PROTECTION - 411	181.16	0.4%		0.4%	6,430.02	860.64	515.97	90.00	18.59	2,030.16	13.02	3,528.38	9,958.40
TOTAL OPERATIONS	30.31				1,014.72	189.41	77.63	17.03	3.05	271.75	4.37	563.23	1,577.95
TOTAL MAINTENANCE	109.87				4,320.81	576.01	347.33	69.16	12.53	1,172.36	8.65	2,186.03	6,506.84
TOTAL PLANNING & BUSINESS DEV								1				1	
TOTAL BUSINESS SERVICES	- 00				1 004 40	- 00	. 60	- 000	- 000	- 208.08		- 270 40	1 972 60
TOTAL ADMINISTRATION	40.98				1,034.48	32.08	0.18	3.02	3.01	200000		119.12	1,073,00
GENERAL MANAGER													
CONTRACTS AND RESOURCE MANAGINT													
FINANCE AND CUSTOMERS	40.98				1,094.49	95.22	91.01	3.82	3.01	586.05		779.12	1,873.60
COMMISSIONERS					,			1		1			
SUBTOTAL - COSTS FOR WATER FUNDS	33,632.66	%99	73%	74.2%	1,430,397.37	157,793.03	111,492.62	12,747.30	4,035.17	455,325.88	2,100.00	743,494.00	2,173,891.37
ELECTRIC - 481	11,680.11	23%	26.5%	25.8%	523,178.89	42,307.68	42,272.64	3,247.02	1,425.54	173,108.14		262,361.02	785,539.91
TOTAL OPERATIONS	802.00				39,534.26	3,439.48	3,113.32	269.90	91.26	10,198.87		17,412.83	56,947.09
TOTAL MAINTENANCE	2,749.87			1	127,449.14	11,088.07	10,674.85	1,954.06	358.51	34,969.54	'	59,045.03	186,494.17
TOTAL PLANNING & BUSINESS DEV	1								-				
TOTAL ADMINISTRATION	R 128 23				346 195 50	27 7RO 12	28 484 47	723.06	975 77	127 939 73		185 903 16	542 098 66
GENERAL MANAGER	336.67				29,310.37	2,550.00	1,895.03	28.31	80.67	5,443.90		9,997.91	39,308.28
GENERAL ADMINISTRATION	336.67				11,347.49	987.23	943.61	29.97	31.23	3,149.69	,	5,141.74	16,489.23
CONTRACTS AND RESOURCE MANAGINT	5,572.01				221,838.77	17,770.95	17,982.77	487.95	610.23	74,002.67		110,854.57	332,693.34
FINANCE AND CUSTOMERS	1,848.89			~	74,390.15	6,471.94	6,185.95	176.83	204.74	30,763.85	,	43,803.31	118,193.46
COMMISSIONERS	33.99				19,308.72		1,477.12		48.89	14,5/9.62		16,105.63	35,414.35
SUBTOTAL - COSTS FOR ELECTRIC FUNDS	11,680.11	23%	27%	25.8%	523,178.89	42,307.68	42,272.64	3,247.02	1,425.54	173,108.14	•	262,361.02	785,539.91
SUBTOTAL - COSTS FOR OPERATING FUNDS	45,312.76	%68	100.0%	100.0%	1,953,576.26	200,100.71	153,765.26	15,994.33	5,460.71	628,434.02	2,100.00	1,005,855.03	2,959,431.29
00100001117707111010001000	r 0	7777			202 052 10	00 077 00	75 275 24	0000	000 20	04 469 22		430 670 30	00 655 644
CONSTRUCTION WORK-IN-PROGRESS	5,330.07	11%			303,952.70	26,443.88	45,275.34	2,960.29	836.30	84,163.22		139,679.30	443,032.00
TOTAL OPERATIONS & MAINTENANCE TOTAL ADMINISTRATION	5 330 07				303 952 70	26 443 88	25 275 34	2 960 29	836.56	84 163 22		139.679.30	443.632.00
CENEDAL MANAGED	0.0000				01:3001000	00:01103	10012102	2.00012		-		2000	-
GENERAL MANAGER GENERAL ADMINISTRATION	'					,	ľ						
GENERAL ADMINISTRATION CONTRACTS AND RESOURCE MANAGINT										•			
FINANCE AND CUSTOMERS	5,330.07				303,952.70	26,443.88	25,275.34	2,960.29	836.56	84,163.22		139,679.30	443,632.00

DIID No 1 of Whotoom County		Perce	Percent of Labor Hours	ours									
2021 LABOR & BENEFIT COST ALLOCATION	LABOR HOURS	Operations &	Without	Tax & Cap Alloc (Exl. Alcoa	LABOR COSTS	PENSION	SOC SEC & MEDICARE	WORKMANS	PFML	HEALTH BENEFITS	CLOTHING	TOTAL BENEFITS	TOTAL LABOR AND BENEFITS
COMMISSIONERS		Capital	Grandview	Escrow)									
TOTAL LABOR & BENEFIT COSTS	50,642.83	100%	100%	100%	2,257,528.96 226,544.59	226,544.59	179,040.60	18,954.62	18,954.62 6,297.27	712,597.24	2,100.00	2,100.00 1,145,534.32 3,403,063.29	3,403,063.29

COMBINED OPERATIONS & MAINT	23,139.50	46%	46%	46%	870,507.85	119,600.50	68,781.79	14,049.98	2,506.95	233,901.43	2,100.00	440,940.65	1,311,448.50
COMBINED PLANNING & BUSINESS DEV		%0	%0	%0									
COMBINED BUSINESS SERVICES		%0	%0	%0	1	1		1	i		,		
COMBINED ADMINISTRATION	27,503.33	24%	24%	24%	1,387,021.11	106,944.09	110,258.81	4,904.64	3,790.32	478,695.81	,	704,593.67	2,091,614.79
GENERAL MANAGER	2,080.00	4%	4%	4%	181,083.60	15,754.27	11,707.75	174.92	498.39	33,633.17		61,768.50	242,852.10
GENERAL ADMINISTRATION	2,080.00	4%	4%	4%	70,106.40	6,099.26	5,829.73	185.18	192.95	19,459.26		31,766.38	101,872.78
CONTRACTS AND RESOURCE MANAGINT	13,643.26	27%	27%	27%	545,208.58	44,084.80	44,401.77	1,186.38	1,499.69	182,146.54	,	273,319.18	818,527.76
FINANCE AND CUSTOMERS	9,490.07	19%	19%	19%	471,330.53	41,005.76	39,193.73	3,358.17	1,297.24	153,381.87	•	238,236.76	709,567.29
COMMISSIONERS	210.00	%0	%0	%0	119,292.00		9,125.84	•	302.05	90,074.97		99,502.86	218,794.86
TOTAL	50 642 83	400%	100%	400%	2 257 528 96	226 544 50	470 040 60	18 054 69	C 207 97	749 507 94	2 400 00	4 445 524 22	2 402 062 20

S. Mocounting BUDGET AND RATESIBUDGET & RATES 2027/SOURCE FILESIZ1 LABOR BUDGET xisx/Summary-Labor Benefits by Type

11/20/2020

CIP	Project Name	20	2020	20	2021	2022		2023		2024	2025		20%	2021-2025
Mulliber			Lighted	and a	nager	nañana nander		Dadger		nager	nañan		ם ו	nager
INTERNAL	"(F	e		e					ŧ		e	-		000
2.5	Administrative Staff Venicles	Ð	1 11000	A	40,000		40,000	' 00	Ð	1 00	Ð	1 00	A	80,000
10-12	Office Equipment and Computer HW & SW/ Benlace		31,077		47,000	)  -	20,000	25,000		40,000		19,000		169,000
15-17	Communications Backbone System Build-out and Undrade		51,689		400,000	3.	300,000	300,000		300,000		20,'0		1 300 000
S-12	Multi-Use Storage Building		20 1		175,000	8	2 '	1		0 1		1		175 000
IS-18	Main Server Room Back-up Power		33,783		1			1						1
	Sub-Total (IS) Internal Services CIP Projects	↔	147,725	↔	762,000	\$ 46	\$ 000,994	375,000	s	348,000	↔	53,000	€9	2,004,000
INDUSTRIAL	AL WATER													
RWL	PROJECT MANAGEMENT	€	,	€	142,479	\$ 10	105,944 \$	323,280	€	1,005,680	6	900,360	69	2,477,743
RW-14	Water Utility Vehicles		•		1	7	1	55,000		1		55,000		110,000
RW-22	Install Main Line Valves on Distribution System		1		50,000	36	350,000	400,000		400,000	4	400,000		1,600,000
RW-27	Water Utility Major Non Vehicle Equipment		1		10,000		10,000	10,000		10,000		10,000		50,000
RW-28	Plant 1 Projects		123,769		700,000	6	1 0			1		1		700,000
KW-33	Petrogas Meter/valve Relocate		403		33,000	77 / 6	247,000							280,000
RW-35	Plant 1 & 2 VFD Renlacement & Additions		20,537		450,000	7	0,1	1				1		450,000
RW-38	Plant 1 Rebuild		2,0,01		730,000	73	730.000	4.540.000		16.400.000	10.8	10.800.000		33.200.000
RW-40	Water Transmission Line Replacement				1		-	1		900,000	4,7	4,725,000		5,625,000
RW-41	Cathodic Protection		-1		1		1	1		1		50,000		50,000
RW-43	Douglas Rd Surge Protection		1		1		1	500,000		1		1		500,000
MISC	Contingency for Un-Planned Raw Water Projects		2,583											
	Sub-Total (RW) Industrial Raw Water CIP Projects	€9	162,716	\$	2,142,479	\$ 1,66	1,664,944 \$	5,828,280	↔	18,715,680	\$ 16,9	16,940,360	٠ ج	45,291,743
GRANDVIEW														
GVL	PROJECT MANAGEMENT	€		€	3,439	€	2,133 \$	1,990	€	1,947	€	1,483	€	10,992
GVP-3	Grandview Potable System Improvements				40,000		25,000	25,000		25,000		-		140,000
	Sub-Total (GV) Grandview Water CIP Projects	₩	1	€	43,439	€	27,133 \$	26,990	€9	26,947	€	26,483	€9	150,992
ELECTRIC														
E	PROJECT MANAGEMENT	69		69	297,714	\$ 27	270,483 \$	8,770	69	8,381	€	4,125	69	589,473
9-J	115 kV Transmission Structure/Conductor Upgrades		452,089		500,000	20	200,000	50,000		50,000		50,000		850,000
E-15	Electric Utility Vehicles		8,333	-	80,000		1			1		1	-	80,000
E-22	Upgrade/Replace Ferndale Substation		,201,652	8	3,000,000		1			1		1		3,000,000
E-25	Non-Vehicle Equipment		- 1		10,000		10,000	10,000		10,000		10,000		20,000
E-26	Substation Security		1 0		30,000	ì	1 0	1		1		•		30,000
E-27	Refinery Substation Upgrade		703,146		+		+		+	- 000	6	+	-	6,000,000
	Sub-Total (E) Electrical CIP Projects	N A	7,365,220	n A	5,411,714	4, 8,	4,980,483	68,770	A	08,381	<del>A</del>	04,125	A	10,599,473
EXTRAOR	EXTRAORDINARY MAINTENANCE											200		
RW-M-2	Clean Sediment Settling Ponds	€9	29,357	€		\$ 15	155,000 \$	155,000	↔	155,000	8	155,000	↔	775,000
RW-M-6	Douglas Rd Vault Power & SCADA Upgrades		894		152,000		1			1		1		152,000
RW-M-7	D Station Reliability Upgrades		805		150,000	25	250,000	1		1		1		400,000
RW-M-10	High Head Pump Re-build (Annual Maint Project)		179,211		250,000	1,	125,000	125,000		125,000		125,000		750,000
RW-M-11	Plant 1 Maintenance		16,664		1		1 0			1		1		1 0
GVF-M-2	Grandview Fire System Decommissioning		1		1		25,000	75,000		ı		1		100,000
GVF-M-3	Grandview Non-potable connection		1		80,000		1	1		ı		1		80,000
E-M-3	Refinery Substation Repair	6	- 200 300	4	- 000 202	4	- 000	255 000	4	- 000 000	•	- 000 000	6	2 257 000
	Sub-Total (M) Mallitellalice Flojects	9	766,077	<del>)</del>	825 830		589		128	700,000		100	9	4,437,000
	Grand Total	\$	2,902,593	6 \$	9,152,632	\$ 7,69	7,693,560 \$	6,654,040	€9	19,439,008	\$ 17,3	17,363,968	\$	60,303,208
	OU TO LOCATO CONTRACTOR FUNCTIONAL CONTRACTOR OF THE CONTRACTOR OF	ATION O NOT	J. OTHORIG											

| Grand Total | \$ 2,902,593 \$ 9,152,632 | \$ S:AccountingIBUDGET AND RATESIBUDGET & RATES 2021/SOURCE FILES\(\frac{1}{2}\) ICAPITAL BUDGETS:XISX\(\frac{1}{2}\)Summary

#### ALL FUNDS

CIP PLAN NUMBER:

PROJECT NAME:

Project Management (PM)

PROJECT LOCATION:

1705 Trigg Road

STATUS:

Existing

Priority: N/A

**ESTIMATED START DATE:** 

On-Going

ESTIMATED COMPLETION DATE: On-Going

#### PROJECT DESCRIPTION/SCOPE:

Starting with the 2018 budget, in-house labor associated with capital projects is budgeted on a percentage basis. The percentage is based on labor to total capital costs from the previous years. While this isn't an exact science, it should provide a more accurate labor cost to our fluctuating capital project loads. During the year, staff will charge actual time spent on capital projects and these costs will be capitalized at year-end.

	T	otal Capital			% of IS	% of IS	% of IS		Industrial				Electric
	Pr	oject Costs	ı	S Capital	Reallocated	Reallocated	Reallocated	W	ater Capital	G١	/ Capital	Ca	apital Costs
		b/f PM	Co	sts b/f PM	to RW	to Electric	to Grandview	С	osts b/f PM	Cos	sts b/f PM		b/f PM
2021	\$	7,922,000	\$	762,000	71.4%	25.8%	2.8%	\$	2,544,276	\$	61,403	\$	5,316,321
2022	\$	6,760,000	\$	466,000	71.4%	25.8%	2.8%	\$	1,891,851	\$	38,089	\$	4,830,060
2023	\$	5,965,000	\$	375,000	71.4%	25.8%	2.8%	\$	5,772,852	\$	35,533	\$	156,615
2024	\$	18,143,000	\$	348,000	71.4%	25.8%	2.8%	\$	17,958,567	\$	34,775	\$	149,659
2025	\$	16,178,000	\$	53,000	71.4%	25.8%	2.8%	\$	16,077,856	\$	26,489	\$	73,655
2021-2025	\$	54,968,000	\$	2,004,000	71.4%	25.8%	2.8%	\$	44,245,403	\$	196,288	\$	10,526,310

					% of IS	% of IS	% of IS	- 1	ndustrial				
5.6%	To	tal PM Labor	IS	PM Labor	Reallocated	Reallocated	Reallocated	١	Nater PM	G۷	PM Labor	El	ectric PM
		Costs		Costs	to RW	to Electric	to Grandview	La	abor Costs		Costs	La	bor Costs
2021	\$	443,632	\$	42,672	71.4%	25.8%	2.8%	\$	142,479	\$	3,439	\$	297,714
2022	\$	378,560	\$	26,096	71.4%	25.8%	2.8%	\$	105,944	\$	2,133	\$	270,483
2023	\$	334,040	\$	21,000	71.4%	25.8%	2.8%	\$	323,280	\$	1,990	\$	8,770
2024	\$	1,016,008	\$	19,488	71.4%	25.8%	2.8%	\$	1,005,680	\$	1,947	\$	8,381
2025	\$	905,968	\$	2,968	71.4%	25.8%	2.8%	\$	900,360	\$	1,483	\$	4,125
2021-2025	\$	3,078,208	\$	112,224	71.4%	25.8%	2.8%	\$	2,477,743	\$	10,992	\$	589,473
2021-2026 GT	\$	58,046,208											

#### PROJECT JUSTIFICATION:

To allocate project management costs in this manner will provide a consistent level of costs allocated between operations and capital on an annual basis for forecasting purposes.

PROPOSED BUDGET	2021	2022	2023	2024	2025	2	020-2025 Total
CAPITAL COST:	=						
District Labor Costs	\$ 443,632	\$ 378,560	\$ 334,040	\$ 1,016,008	\$ 905,968	\$	3,078,208
TOTAL CAPITAL COSTS	\$ 443,632	\$ 378,560	\$ 334,040	\$ 1,016,008	\$ 905,968	\$	3,078,208
REVENUE:							-
Industrial Water Service rates	\$ 142,479	\$ 105,944	\$ 323,280	\$ 1,005,680	\$ 900,360	\$	2,477,743
Grandview Service rates	3,439	2,133	1,990	1,947	1,483		10,992
Electric Service rates	297,714	 270,483	8,770	8,381	4,125		589,473
TOTAL REVENUE	\$ 443,632	\$ 378,560	\$ 334,040	\$ 1,016,008	\$ 905,968	\$	3,078,208

#### **INTERNAL SERVICE FUND - 500**

CIP PROJECT NUMBER:

IS-5

PROJECT NAME:

Administrative Staff Vehicles

PROJECT LOCATION:

1705 Trigg Road

STATUS:

Existing

Priority: Low

ESTIMATED START DATE: On-going

**ESTIMATED COMPLETION DATE:** On-going

PROJECT DESCRIPTION/SCOPE:

#### **Prior Years Budget Activities**

The District's vehicles utilized by administrative staff will be replaced on a planned basis, depending on condition and mileage. In 2020, the District did not purchase a new administrative vehicle; in 2018 the District purchased a new Toyota RAV SUV to replace the existing 2009 Ford Escape. The District will consider the purchase of all electric powered vehicles in the future as it continues to replace and upgrade its vehicle fleet.

#### 2021 Budget Projected Activities

In 2021, the District plans to purchase a new administrative vehicle to replace the 2011 Toyota Prius due to its age. The next planned purchase is currently scheduled for 2022 and will replace the Chevy Colorado.

#### **Project Budget Estimate**

Replacement of 2011 Toyota Prius Hybrid 4 Door with new comparable vehicle with signage

40,000

Replacement of 2012 Chevy Colorado with new comparable vehicle with signage

40,000

Replacement of 2018 Toyota RAV4 hybrid with new comparable vehicle with signage

40,000

Year	Description	Planned	Es	stimated
rear	Description	Replacement		Cost
2011	Toyota Prius	2021	\$	40,000
2012	Chevrolet Colorado	2022		40,000
2018	Toyota Rav4	2028		40,000

#### PROJECT JUSTIFICATION/BENEFITS:

Administrative vehicles can be used for a number of uses including, administrative meetings, conferences, daily administrative uses (post office, bank, county administration, etc.). At least one vehicle will have 4-wheel drive so that District operations will not be impacted due to weather or road conditions. Hybrid vehicles will be considered, based on competitive life-time cost to the District.

PROPOSED BUDGET	2021	2022	2023	2024	2025	20	21-2025 Total
CAPITAL COST: Direct Costs	\$ 40,000	\$ 40,000	\$ -	\$ -	\$ -	\$	80,000
TOTAL CAPITAL COSTS	\$ 40,000	\$ 40,000	\$	\$	\$	\$	80,000
REVENUE:							
Service Rates (All Fund)	\$ 40,000	\$ 40,000	\$ -	\$ 	\$ -	\$	80,000
TOTAL REVENUE	\$ 40,000	\$ 40,000	\$	\$	\$	\$	80,000

Capital Costs Beyond 2025: Replacement of vehicles will be based upon accumulated mileage and condition.

#### **INTERNAL SERVICE FUND - 500**

CIP PROJECT NUMBER:

IS-12

PROJECT NAME:

SCADA System Analysis, Development, and Upgrades

PROJECT LOCATION:

District Facilities

STATUS:

Existing

PRIORITY: High

**ESTIMATED START DATE:** 

On-going

**ESTIMATED COMPLETION DATE:** On-going

PROJECT DESCRIPTION/SCOPE:

#### **Prior Years Budget Activities**

The District has been gradually building out its SCADA system and adding features, both hardware and software to enhance SCADA system capability and improve Cyber-Security. The continuing build-out of the fiber optic cable backbone communications system (IS-15) has enabled the deployment of the SCADA system and enhanced capability to monitor operations at the treatment plants and refinery substation.

#### 2021 Budget Projected Activities

During 2021, the District plans to further expand its fiber optic cable backbone communication system, which will facilitate further deployment of the SCADA system and its monitoring/control functionality. Cyber Security enhancements to the SCADA system will continue to be evaluated and implemented, as feasible.

#### **Project Budget Estimate**

Capital Cost Items Consultant Services Related to SCADA Computer Equipment SCADA Equipment

60,000 110,000

110,000

Budget Estimate Total: \$ 280,000

#### PROJECT JUSTIFICATION/BENEFITS:

Opportunities to improve reliability and enhance capabilities of the District's communications system will continually be investigated. This includes telemetry upgrades involving the District's communications tower and other sites. Additional deployment of fiber optic cable as part of the District's backbone communications system will be continually investigated and implemented where feasible. Staff will continue to prioritize the replacement schedule of key SCADA system components as well as provide the opportunity to upgrade specific items or install redundant equipment to improve system reliability. Cyber security will continually be evaluated and enhancements made as necessary to protect the District's utility systems from cyber threats; comply with federal standards and to assure greater system reliability and service to District customers.

PROPOSED BUDGET	2021		2022	2023	2024	2025	20	021-2025 Total
CAPITAL COST: Direct Costs	\$ 100,000	\$	50,000	\$ 50,000	\$ 40,000	\$ 40,000	\$	280,000
TOTAL CAPITAL COSTS	\$ 100,000	\$	50,000	\$ 50,000	\$ 40,000	\$ 40,000	\$	280,000
REVENUE:								
Service Rates (All Fund)	\$ 100,000	\$	50,000	\$ 50,000	\$ 40,000	\$ 40,000	\$	280,000
TOTAL REVENUE	\$ 100,000	\$	50,000	\$ 50,000	\$ 40,000	\$ 40,000	\$	280,000

Capital Costs Beyond 2025:

SCADA System improvements will continue on an ongoing basis, as necessary.

#### **INTERNAL SERVICE FUND - 500**

CIP PROJECT NUMBER:

IS-14

PROJECT NAME:

IT Equipment Replacements and Upgrades

STATUS:

On-Going

PROJECT LOCATION:

Main Office - 1705 Trigg Road

PRIORITY: Medium

**ESTIMATED START DATE:** 

On-going

**ESTIMATED COMPLETION DATE:** On-going

#### PROJECT DESCRIPTION/SCOPE:

#### **Prior Years Budget Activities**

Purchase new computer equipment as needed for replacement units as well as for new staff members. These units would typically include the desk or laptop unit, monitor, keyboard, mouse, docking station and MS Office software package. The replacement units would only consist of the laptop unit and software package as required for the operating system compatibility. Certain systems require additional capacity or processing capability for applications such as accounting or AutoCAD software.

#### 2021 Budget Projected Activities

As with prior years, the District will continue to replace computer equipment as needed and upgrade operating systems and software as necessary. Cyber security enhancements, both software and hardware will continue to be a high priority. As cyber security vulnerabilities are identified, this may impact what software and hardware purchases might be required and when.

#### **Project Budget Estimate**

Computer Equipment
Contingency & Unexpected Failures
Consultants

152,000

12,000 5,000

Budget Estimate Total: \$

169,000

#### PROJECT JUSTIFICATION/BENEFITS:

Servers, server related equipment, back-up storage systems, and multi-function copiers are essential IT equipment that require periodic replacement. IT equipment is continually updated by manufacturers, thereby rendered the District's then current units obsolete. As cyber security vulnerabilities are identified, this may impact rate of replacements and upgrades.

PROPOSED BUDGET	2021		2022	2023	2024	2025	20	021-2025 Total
CAPITAL COST: Direct Costs	\$ 47,000	\$	76,000 -	\$ 25,000 -	\$ 8,000	\$ 13,000	\$	169,000
TOTAL CAPITAL COSTS	\$ 47,000	\$	76,000	\$ 25,000	\$ 8,000	\$ 13,000	\$	169,000
REVENUE:					 	1 - 2		
Service Rates (All Fund)	\$ 47,000	\$	76,000	\$ 25,000	\$ 8,000	\$ 13,000	\$	169,000
TOTAL REVENUE	\$ 47,000	\$	76,000	\$ 25,000	\$ 8,000	\$ 13,000	\$	169,000

Capital Costs Beyond 2025:

IT equipment will continue to be replaced in scheduled cycles.

**INTERNAL SERVICE FUND - 500** 

CIP PROJECT NUMBER:

IS-15

PROJECT NAME:

Communications Backbone System Build-out and Upgrade

PROJECT LOCATION:

**District Facilities** 

STATUS:

On-going

PRIORITY: High

**ESTIMATED START DATE:** 

2016

**ESTIMATED COMPLETION DATE: 2024** 

PROJECT DESCRIPTION/SCOPE:

#### **Prior Years Budget Activities**

During 2017, the District successfully completed a major expansion of the fiber optic cable backbone communications system by installing aerial and underground fiber optic cable to link both Plant 1 and the Grandview potable plant to the high speed communications system. In 2018, the District identified three additional extensions to the fiber optic cable communication network. During 2018, the District completed a fiber optic cable extension from the Refinery substation to the Douglas Road vault. Engineering design work for the other two has been completed. In 2019, the District completed another extension of fiber optic cable from the Grandview area to a connection point with BPA's communications system.

#### 2021 Budget Projected Activities

During 2021, the District plans to further expand the fiber optic cable backbone communications system within the Cherry Point Industrial area. The improvements will facilitate higher speed communications and deployment of SCADA, benefitting both electric and water system operations. The expansion is in part driven by a need to establish a second real time communications link with the Bonneville Power Administration's (BPA) high voltage transmission system. The District will also evaluate and implement enhancements to the District's radio communications system.

#### **Project Budget Estimate**

Fiber Optic Cable Communications Backbone Build-out and Improvements

\$ 1,300,000

Budget Estimate Total: \$

1,300,000

#### PROJECT JUSTIFICATION/BENEFITS:

Opportunities to improve reliability and enhance capabilities of the District's communications system will continually be investigated. This includes telemetry upgrades involving the District's communications tower and other sites. Additional deployment of fiber optic cable as part of the District's backbone communications system will be continually investigated and implemented where feasible. A communications system that includes both fiber and radio communications provides redundancy and enhancing the capability of the District's SCADA system to monitor and in some cases control utility devices in the field. Security of the communications system will be a high priority and incorporated into the design.

PROPOSED BUDGET	2021		2022	2023	2024	2025	2	2021-2025 Total
CAPITAL COST: Direct Costs	\$ 400,000	\$	300,000	\$ 300,000	\$ 300,000		\$	1,300,000
TOTAL CAPITAL COSTS	\$ 400,000	\$	300,000	\$ 300,000	\$ 300,000	\$	\$	1,300,000
REVENUE:						. 7		
Service Rates (All Fund)	\$ 400,000	\$	300,000	\$ 300,000	\$ 300,000	\$ -	\$	1,300,000
TOTAL REVENUE	\$ 400,000	\$	300,000	\$ 300,000	\$ 300,000	\$	\$	1,300,000

Capital Costs Beyond 2025:

TBD - Communications System will be evaluated on a continuous annual basis.

#### **INTERNAL SERVICE FUND - 500**

CIP PROJECT NUMBER:

IS-17

PROJECT NAME:

Multi-Use Storage Building

PROJECT LOCATION:

Facility Campus - 1705 Trigg Road

STATUS:

New

PRIORITY: High

**ESTIMATED START DATE:** 

2021

**ESTIMATED COMPLETION DATE: 2021** 

#### PROJECT DESCRIPTION/SCOPE:

#### **Prior Years Budget Activities**

As part of the Water Treatment Plant 2 project, a new storage building was constructed. This building is utilized to store smaller equipment and supplies utilized by the electric and water crews. It also accommodates storage of such larger equipment as lawn mowers, portable pumps, generators, and the off-road Gator vehicle. Currently, there is not storage space for larger, heavier equipment utilized by both the electric and water utilities. Both utilities have been stockpiling equipment outdoors in order to assure availability, when needed. The District did not proceed with construction of a storage facility in 2019. Estimated design engineering costs were determined to be too high relative to the cost of construction.

#### 2021 Budget Projected Activities

During 2021, the District will evaluate options for proceeding with the design and construction of a new storage building on property within the facilities campus at 1705 Trigg Rd. To assure security of the items to be stored, a site behind the security gate for Water Treatment Plant 2 is the desired location. As part of the planning process, the District will evaluate the feasibility of a multi-use facility that might enable supplemental funds to cover construction costs. For example, the addition of rooftop solar pv panels as part of a community solar initiative.

#### **Project Budget Estimate:**

Building Design, Permitting, Bid, Construction

\$ 175,000

Budget Estimate Total: \$ 175,000

#### PROJECT JUSTIFICATION/BENEFITS:

District staff and contractors have experienced long lead times on purchases of major equipment and materials associated with the electric and water utility systems. Lead times have delayed start of projects and are problematic, when responding to emergency repairs. As a result, staff has been stockpiling certain key equipment and materials. The storage building would protect these inventories from weather and secure from potential theft or tampering.

PROPOSED BUDGET	2021		2022	2023	2024	2025	20	021-2025 Total
CAPITAL COST: Direct Costs	\$ 175,000	\$	_	\$ 	\$ - -	\$ - -	\$	175,000
TOTAL CAPITAL COSTS	\$ 175,000	\$		\$	\$	\$	\$	175,000
REVENUE:								
Service Rates (All Fund)	\$ 175,000	\$	-	\$ 	\$ -	\$ -	\$	175,000
TOTAL REVENUE	\$ 175,000	\$		\$	\$	\$	\$	175,000

Capital Costs Beyond 2025:

No costs anticipated.

#### INDUSTRIAL WATER UTILITY - 403 (Cherry Point Industrial, Wholesale / Municipal, Irrigation)

**CIP PROJECT NUMBER:** 

RW-14

PROJECT NAME:

Water Utility Vehicles

PROJECT LOCATION:

District Water Service Area

STATUS:

Existing

PRIORITY: Medium

**ESTIMATED START DATE:** 

On-going

**ESTIMATED COMPLETION DATE:** On-going

PROJECT DESCRIPTION/SCOPE:

#### **Prior Years Budget Activities**

In 2019, the District purchased one mid-sized Colorado pick-up through the Washington State bid purchase program. It replaced a mid-sized Ranger pick-up, which was then sold through public auction.

#### 2021 Budget Projected Activities

In 2021, the District does not plan on purchasing any new vehicle for water utility operations.

#### **Project Budget Estimate**

Replace Full Size 4-Wheel Drive Extended Cab Pick-up Signage, Accessories & Safety Equipment

\$ 45,000 10,000 **\$ 55,000** 

Year	Description	Planned Replacement	Es	stimated Cost
2011	Ford F250	2023	\$	55,000
2015	Ford F250	2025		55,000
2017	Ford F250	2027		55,000
2018	Chevrolet Colorado	2028		46,000
2019	Chevrolet Colorado	2029		46,000

#### PROJECT JUSTIFICATION/BENEFITS:

The District has a total of five vehicles assigned to water operations and two vehicles assigned to electric operations. The District has implemented a program to budget for and schedule regular replacement of the District vehicles. Actual replacement of individual vehicles will be completed based on age and condition of vehicles not based on the scheduled date. Unless circumstances require replacement, no vehicle will be replaced sooner than five years after purchase. When possible, the District will utilize the Washington State purchase program for acquiring vehicles.

PROPOSED BUDGET	20	21	2022	2	2023	2024	2025	2021-2025 Total
CAPITAL COST: Direct Costs	\$	- -	\$	-	\$ 55,000	\$ -	\$ 55,000	\$ 110,000
TOTAL CAPITAL COSTS	\$		\$	-	\$ 55,000	\$ -	\$ 55,000	\$ 110,000
REVENUE:								
Water System Rates	\$		\$	-	\$ 55,000	\$ -	\$ 55,000	\$ 110,000
TOTAL REVENUE	\$		\$		\$ 55,000	\$	\$ 55,000	\$ 110,000

Capital Costs Beyond 2025: Replacement of vehicles will be based upon accumulated mileage and condition.

#### INDUSTRIAL WATER UTILITY - 403 (Cherry Point Industrial, Wholesale / Municipal, Irrigation)

CIP PROJECT NUMBER:

RW-22

PROJECT NAME:

Install Main Line Valves on Water Distribution System

STATUS:

On-going

PROJECT LOCATION:

Distribution System

PRIORITY: Medium

**ESTIMATED START DATE:** 

2013

**ESTIMATED COMPLETION DATE:** On-going

PROJECT DESCRIPTION/SCOPE:

#### **Prior Years Budget Activities**

For 2019, staff determined that it was prudent to wait on the installation of any new isolation valves for the industrial water system distribution system until such time as the industrial water system CIP Plan Update was completed. During 2020, the CIP Update Plan was completed, as was an analysis to determine industrial water system CIP priorities, timelines, and cost estimates.

#### 2021 Budget Projected Activities

For 2021, the District will proceed with engineering for a new isolation valve on its main water transmission line prior to the Alcoa/Intalco meter located just downstream of the Petrogas T and valve. The installation of this valve will help make service more reliable for Petrogas and will allow for shut off of water flows to either Petrogas or Intalco, independent of each other. Construction will follow in 2022. The District's engineering consultant, as part of the RW-38 activities will initiate a hydraulic analysis of industrial water distribution system CIPs, including additional mainline isolation valves.

#### **Project Budget Estimate**

Isolation Valve Replacement, Relocation & Installation of New Flow Meter Engineering Analysis, Design & Construction Services

\$ 1,600,000

Budget Estimate Total: \$ 1,600,000

#### PROJECT JUSTIFICATION/BENEFITS:

Isolation valves allow repair, maintenance, and improvement work to occur on "isolated" sections of industrial water supply mains, including the intertie, while maintaining service to customers. Isolation valves will reduce risk of a catastrophic failure of a pipe section resulting in a very large amount of water flowing out of the damaged section prior to stopping flow. Also, depending on location of the valves, it eliminates the need to drain long sections of water distribution line prior to commencing work. The valves shorten or eliminate disruptions of water supply to the industrial water system customers. Mag meters are more accurate and easier to maintain than insertion meters and are the District's standard for main line installations.

PROPOSED BUDGET	2	021	2022	2023	2024		2025	2	021-2025 Total
CAPITAL COST: Direct Costs	\$ 5	50,000	\$ 350,000	\$ 400,000	\$ 400,000	\$	400,000	\$	1,600,000
TOTAL CAPITAL COSTS	\$ 5	50,000	\$350,000	\$ 400,000	\$ 400,000	\$	400,000	\$	1,600,000
REVENUE:						1			
Water System Rates	5	50,000	350,000	400,000	400,000		400,000	\$	1,600,000
TOTAL REVENUE	\$ 5	50,000	\$ 350,000	\$ 400,000	\$ 400,000	\$	400,000	\$	1,600,000

Capital Costs Beyond 2025:

To Be Determined

#### INDUSTRIAL WATER UTILITY - 403 (Cherry Point Industrial, Wholesale / Municipal, Irrigation)

CIP PROJECT NUMBER:

RW-27

PROJECT NAME:

Water Utility Major Non-Vehicle Equipment

STATUS:

On-going

PROJECT LOCATION:

**District Facilities** 

**PRIORITY: Medium** 

**ESTIMATED START DATE:** On-going

**ESTIMATED COMPLETION DATE:** On-going

PROJECT DESCRIPTION/SCOPE:

#### **Prior Years Budget Activities**

RW-27 covers capital investments in equipment other than on-road vehicles for use by water system operations staff.

#### 2021 Budget Projected Activities

In 2021, the District has no specific equipment purchases, but would like to budget for the possibility of needed equipment. Going forward, the District will continue to evaluate its needs relative to its water utility operations.

#### Project Budget Estimate

Equipment

\$ 10,000

Budget Estimate Total: \$ 10,000

#### PROJECT JUSTIFICATION/BENEFITS:

The District is continually looking for equipment to purchase which will make service to it's customers more accurate and efficient.

PROPOSED BUDGET	2021		2022	2023	2024	2025	21-2025 Total
CAPITAL COST: Direct Costs	\$ 10,000	\$	10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 50,000
TOTAL CAPITAL COSTS	\$ 10,000	\$	10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 50,000
REVENUE:							
Water System Rates	10,000		10,000	10,000	10,000	10,000	50,000
TOTAL REVENUE	\$ 10,000	\$	10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 50,000

Capital Costs Beyond 2025:

To Be Determined.

#### INDUSTRIAL WATER UTILITY - 403 (Cherry Point Industrial, Wholesale / Municipal, Irrigation)

CIP PROJECT NUMBER:

RW-28

PROJECT NAME:

Water Treatment Plant 1 Remodel/Upgrades

STATUS:

On-going

PROJECT LOCATION:

**District Facilities** 

PRIORITY: Medium

ESTIMATED START DATE: On-going

**ESTIMATED COMPLETION DATE:** On-going

PROJECT DESCRIPTION/SCOPE:

#### **Prior Years Budget Activities**

In 2019, the District's engineering consultant, RH2, completed an update to the District's Industrial Water System Comprehensive CIP Plan. The Plan, which was originated in 2010, identifies capital improvements for industrial water system facilities, including Water Treatment Plants 1&2 and the distribution piping running to Cherry Point. Going forward, the District will prioritize and proceed with certain capital improvements identified in the Plan. Upgrades to Water Treatment Plant No.1 is a high priority, given the age and condition of the Plant facilities. During 2020, the final paddle wheel floc was replaced with a new vertical blade floc. Also, the District initiated the design and permitting for a new compressor system to increase capacity for the air burst system for the intake facility screens.

#### 2021 Budget Projected Activities

In 2021, the District will proceed to construction of the compressor system to be located in the Plant 1 control building. Electrical improvements will also be undertaken to support the new compressor system. It is anticipated that engineering design for a rebuild of Water Treatment Plant 1 facilities, including a campus plan, will be initiated. This work including future constructed of facilities will be covered under a new CIP, RW-38.

#### **Project Budget Estimate**

Design, Engineer and Construction of repairs at Water Treatment Plant 1

\$ 700,000

Budget Estimate Total: \$ 700,000

#### PROJECT JUSTIFICATION/BENEFITS:

Improvements at Water Treatment Plant 1 are necessary to maintain reliability of plant operations and to assure a safe working environment for the District's employees. These CIPs help assure and improve service reliability for meeting the water demands of the District's industrial water customers.

PROPOSED BUDGET	2021		2022	2023	2024		2025	2021-2025 Total
CAPITAL COST: Direct Costs	\$ 700,000	\$	<u>-</u>	\$ -	\$ _	\$	-	\$ 700,000
TOTAL CAPITAL COSTS	\$ 700,000	\$		\$	\$	\$		\$ 700,000
REVENUE:								
Water System Rates	700,000					-		700,000
TOTAL REVENUE	\$ 700,000	\$		\$ -	\$	\$		\$ 700,000

Capital Costs Beyond 2025:

To Be Determined.

#### INDUSTRIAL WATER UTILITY - 403 (Cherry Point Industrial, Wholesale / Municipal, Irrigation)

CIP PROJECT NUMBER:

RW-33

PROJECT NAME:

Petrogas Meter Relocate & SCADA Installation

PROJECT LOCATION:

Distribution System (Douglas Road)

STATUS:

New

PRIORITY: Medium

**ESTIMATED START DATE:** 

2017

**ESTIMATED COMPLETION DATE: 2022** 

#### PROJECT DESCRIPTION/SCOPE:

#### **Past Years Budget Activities**

The industrial water line serving the Petrogas facility is a 14" line, owned by Petrogas, which connects to the District 24" water main in the vicinity of the Intalco industrial water supply point of delivery. The District's point of metering is located at the Petrogas end of the 14" line, inside the fence at the facility. There is no telemetry at the meter point and therefore water flows can't be monitored real time via the District's SCADA system. The project would involve the construction of a new vault to contain a new water meter, valve and telemetry. The vault would be located near the point at which the 14" Petrogas line is connected to the District's 24" line. Engineering analysis and design of the project was not initiated in 2019.

#### 2021 Budget Projected Activities

The District plans to complete engineering analysis and design for this proposed project in 2021. Prior to bidding the project and proceeding to construction, District staff will confer with the customers served off of this portion of the Douglas Rd 24" line. The project plan will require close coordination with the customers impacted and include phased construction that minimizes water service interruptions. After consultation with the customers, the District will make a decision whether it is feasible to construct the project in the 2021-22 timeframe.

Engineering Analysis, Design & Construction Services
Materials Procurement and Construction (Competitive Bid Project)

\$ 34,000

215,000

Budget Estimate Total: \$ 249,000

#### PROJECT JUSTIFICATION/BENEFITS:

This project when completed will assure reliable delivery of water to the connected customer. It will improve the accuracy of the recorded water delivery amounts. The ability to monitor water flows at this point of delivery will help assure the efficiency of water use via the ability to help detect potential leaks on the customer's owned pipeline downstream of the metering point. In accordance with the terms of the customer's industrial water contract, the customer is obligated to reimburse the District for the full cost of the project, as it involves only the customer's point of delivery.

PROPOSED BUDGET	2021		2022	2023	2024	2025	20	021-2025 Total
CAPITAL COST: Direct Costs	\$ 27,000	\$	222,000	\$ -	\$ -	\$ · <u>-</u>	\$	249,000
TOTAL CAPITAL COSTS	\$ 27,000	\$	222,000	\$ •	\$	\$	\$	249,000
REVENUE:			1					
Customer Reimbursement	\$ 27,000	\$	222,000	\$ -	\$ -	\$ -	\$	249,000
TOTAL REVENUE	\$ 27,000	\$	222,000	\$	\$	\$	\$	249,000

Capital Costs Beyond 2025:

None

#### INDUSTRIAL WATER UTILITY - 403 (Cherry Point Industrial, Wholesale / Municipal, Irrigation)

CIP PROJECT NUMBER:

RW-34

PROJECT NAME:

PSE-Whitehorn Meter Relocate

PROJECT LOCATION:

Distribution System

STATUS:

New

**PRIORITY:** Medium

**ESTIMATED START DATE:** 

2017

**ESTIMATED COMPLETION DATE: 2022** 

PROJECT DESCRIPTION/SCOPE:

#### **Past Years Budget Activities**

The industrial water line serving PSE's Whitehorn generating plant is a 10" line, owned by PSE, which connects to the District 24" water main in the vicinity of D Station. The District's point of metering is located at the end of the 10" line in a vault outside of the PSE facility. There is no telemetry at the meter point and therefore water flows can't be monitored via the District's SCADA system. The project would involve the construction of a new vault to contain a new water meter, valve and telemetry. During 2018, the District's water systems engineering consultant completed two feasibility studies with order of magnitude cost estimates. One design alternative locates the new vault inside the fence at D Station. The other locates the new vault alongside Aldergrove Road near D Station. During 2019, the District elected not to proceed with the project until after further evaluation. The estimated project cost was among the factors delaying the project.

#### 2021 Budget Projected Activities

In 2021, the District will proceed with final design of this project. Permitting and construction is anticipated to proceed in 2022 in coordination with PSE.

#### **Project Budget Estimate**

Engineering Analysis, Design & Construction Services Materials Procurement and Construction (Competitive Bid Project) \$ 33,000

247,000

**Budget Estimate Total:** 

280,000

#### PROJECT JUSTIFICATION/BENEFITS:

This project, when completed, will assure reliable delivery of water to the connected customer. It will improve the accuracy of the recorded water delivery amounts. The ability to monitor water flows at this point of delivery will help assure efficient water use via the ability to help detect potential leaks on the customer owned pipeline downstream of the metering point. In accordance with the terms of the customer's industrial water contract, the customer is obligated to reimburse the District for the full cost of the project, as it involves only the customer's point of delivery.

PROPOSED BUDGET	2021		2022	2023	2024	2025	20	021-2025 Total
CAPITAL COST: Direct Costs	\$ 33,000	\$	247,000	\$ -	\$ -	\$ 1	\$	280,000
TOTAL CAPITAL COSTS	\$ 33,000	\$	247,000	\$	\$	\$	\$	280,000
REVENUE:						W.	V 7	
Customer Reimbursement	\$ 33,000	\$	247,000	\$ 	\$ _	\$ -	\$	280,000
TOTAL REVENUE	\$ 33,000	\$	247,000	\$	\$	\$	\$	280,000

Capital Costs Beyond 2025:

None

#### INDUSTRIAL WATER UTILITY - 403 (Cherry Point Industrial, Wholesale / Municipal, Irrigation)

**CIP PROJECT NUMBER:** 

RW-35

PROJECT NAME:

Water Treatment Plant 1& 2-VFDs for Pump Motors

PROJECT LOCATION:

Intake System

STATUS:

Existing

**PRIORITY:** Medium

**ESTIMATED START DATE:** 

2017

**ESTIMATED COMPLETION DATE: 2021** 

PROJECT DESCRIPTION/SCOPE:

#### **Prior Years Budget Activities**

In 2017, the District initiated an effort to install new VFD drives on intake pump motors at Water Treatment Plants 1 and 2. The objective has been to increase operational flexibility and capability to adjust pumping capacity and water flows in response to variable customer water demands. The District has completed it's installation of Intake VFD's as planned. The District has expanded its efforts to include, where appropriate, VFDs for the large high head motor/pump assemblies at Plant 1. During 2020, engineering design work was initiated for a new VFD installation to be associated with high head pump 5.

#### 2021 Budget Projected Activities

In 2021, the District plans to install a new VFD for control of high head motor/pump assembly 5 at Water Treatment Plant 1.

#### **Project Budget Estimate:**

One VFD Drive and Installation for High Head Pump No.5 Water Treatment Plant No.1

450,000

Budget Estimate Total: \$

450,000

#### PROJECT JUSTIFICATION/BENEFITS:

The new VFDs facilitate greater operational flexibility, improve reliability, improve pump efficiency, and take up significantly less space.

PROPOSED BUDGET	2021		2022	2023	2024	2025	2	021-2025 Total
CAPITAL COST: Direct Costs	\$ 450,000	\$		\$ 	\$ 	\$ -	\$	450,000
TOTAL CAPITAL COSTS	\$ 450,000	\$		\$	\$	\$	\$	450,000
REVENUE:								
Water Service Rates	\$ 450,000	\$	-	\$ _	\$ -	\$ 	\$	450,000
TOTAL REVENUE	\$ 450,000	\$		\$	\$ -	\$ 4	\$	450,000

Capital Costs Beyond 2025:

To Be Determined.

#### INDUSTRIAL WATER UTILITY - 403 (Cherry Point Industrial, Wholesale / Municipal, Irrigation)

CIP PROJECT NUMBER:

RW-38

PROJECT NAME:

Water Treatment Plant 1 Rebuild

PROJECT LOCATION:

Water Treatment Plant 1

STATUS:

Existing

PRIORITY: Medium

**ESTIMATED START DATE:** 

2021

**ESTIMATED COMPLETION DATE: 2026** 

PROJECT DESCRIPTION/SCOPE:

#### **Prior Years Budget Activities**

Water Treatment Plant 1 was constructed in 1965 for the purpose of providing industrial water to the new Intalco Aluminum Smelter. For several years, the District has initiated improvement projects to maintain reliability of water service out of the Plant. These capital projects have been tracked under CIP RW-28. Plant 1 has reached the end of its useful life. A re-build of Plant 1 is planned and the capital project will be tracked under this RW-38.

#### 2021 Budget Projected Activities

The District plans to initiate preliminary engineering design of the rebuild of Plant 1 in 2021. Initial design work will include a campus layout of all the new facilities to assure appropriate siting of the facilities on the available property owned by the District. It is anticipated that permitting and the initial phase of construction will begin in 2022-2023. This first phase will include increasing the capacity of raw water piping running from the existing river intake facility under Ferndale Road to the treatment plant site.

#### **Project Budget Estimate:**

Engineering and construction costs

\$37,000,000

Budget Estimate Total: \$37,000,000

#### PROJECT JUSTIFICATION/BENEFITS:

Reliable and continuous operation of Water Treatment Plants 1 and 2 is essential to meeting the industrial water demands of the District's customers within the Cherry Point Heavy Industry area. Each plant must have the capability and reliability to provide continuous service to Cherry Point industries. Each plant must be available to back-up the other plant, when one of the plants is out of service on either a planned or un-planned basis.

PROPOSED BUDGET	2021		2022		2023	2024	2025	2021-2025 Total	
CAPITAL COST: Direct Costs	\$	730,000	\$	730,000	\$ 4,540,000	\$ 16,400,000	\$ 10,800,000	\$ 33,200,000	
TOTAL CAPITAL COSTS	\$	730,000	\$	730,000	\$ 4,540,000	\$ 16,400,000	\$ 10,800,000	\$ 33,200,000	
REVENUE:							-1		
Water Service Rates	\$	730,000	\$	730,000	\$ 4,540,000	\$ 16,400,000	\$ 10,800,000	\$ 33,200,000	
TOTAL REVENUE	\$	730,000	\$	730,000	\$ 4,540,000	\$ 16,400,000	\$ 10,800,000	\$ 33,200,000	

Capital Costs Beyond 2025:

\$3,800,000 planned for 2026

#### INDUSTRIAL WATER UTILITY - 403 (Cherry Point Industrial, Wholesale / Municipal, Irrigation)

CIP PROJECT NUMBER:

RW-40

PROJECT NAME:

Water Transmission Main Replacement

PROJECT LOCATION:

Distribution System

STATUS:

New

PRIORITY: High

**ESTIMATED START DATE:** 

2024

**ESTIMATED COMPLETION DATE: 2027** 

PROJECT DESCRIPTION/SCOPE:

#### **Prior Years Budget Activities**

The industrial water system comprehensive capital improvements plan originally completed in 2010 and updated in 2019, identified several capital improvements associated with water distribution mains emanating from both water treatment plants. In 2020, as part of a review of CIPs for inclusion in the 2020-25 budget horizon, it was determined that system hydraulic analyses should be conducted to determine which water distribution main projects identified would provide the most benefit and this would inform and help determine priorities.

#### 2021 Budget Projected Activities

In 2021, the District's engineering consultant will update the industrial water system model and conduct hydraulic analyses of the various distribution main CIPs. The results of the analyses will assist staff in prioritizing the future distribution projects. It is anticipated that no construction work will proceed until 2024.

#### **Project Budget Estimate:**

Engineering and construction costs - WTP1 to Johnston Rd Engineering and construction costs - Johnston Rd to Olson Rd \$ 7,000,000

\$ 5,600,000

Budget Estimate Total: \$12,600,000

#### PROJECT JUSTIFICATION/BENEFITS:

The 24" distribution mains leaving water treatment plant 1 and 2 were constructed in the mid sixties and early seventies. Given their age and capacity ratings, the District must plan for replacement and/or addition of new distribution main segments to assure continued reliability of water services to Cherry Point. Further, with the capacity upgrade previously at plant 2 and the planned capacity upgrade at plant 1, the existing distribution mains have insufficient capacity to transport the increased capacity capability at each treatment plant.

PROPOSED BUDGET	2021		2022		2023		2024		2025		2021-2025 Total	
CAPITAL COST: Direct Costs	\$ -		\$	-	\$	<del>-</del>	\$	900,000	\$	4,725,000	\$	5,625,000
TOTAL CAPITAL COSTS	\$ -		\$		\$		\$	900,000	\$	4,725,000	\$	5,625,000
REVENUE:												
Water Service Rates	\$ -	.	\$	-	\$	-	\$	900,000	\$	4,725,000	\$	5,625,000
TOTAL REVENUE	\$ -		\$		\$		\$	900,000	\$	4,725,000	\$	5,625,000

Capital Costs Beyond 2025:

\$6.975m in 2026 and 2027

### INDUSTRIAL WATER UTILITY - 403 (Cherry Point Industrial, Wholesale / Municipal, Irrigation)

CIP PROJECT NUMBER:

RW-41

PROJECT NAME:

Cathodic Protection

PROJECT LOCATION:

Water Distribution System

STATUS:

New

PRIORITY: Medium

ESTIMATED START DATE:

2025

**ESTIMATED COMPLETION DATE: 2030** 

PROJECT DESCRIPTION/SCOPE:

### **Prior Years Budget Activities**

The industrial water system comprehensive capital improvements plan originally completed in 2010 and updated in 2019, identified cathodic protection for the industrial water system's distribution mains as one of the applicable improvements. Since 2010, exposure of the buried mains associated with various projects revealed the mains to be relatively free of corrosion. No cathodic improvements have been implemented.

### 2021 Budget Projected Activities

In 2021, the District's engineering consultant will conduct hydraulic analyses of various water system distribution main capital improvement projects identified in the industrial water system comprehensive plan. These analyses will help determine which new mains and valves will be constructed in the future. As new piping is placed, cathodic protection will be added. In later years, cathodic protection of remaining older lines will be re-visited

### **Project Budget Estimate:**

Engineering and construction costs

50,000

**Budget Estimate Total:** 

50,000

### PROJECT JUSTIFICATION/BENEFITS:

The industrial water system mains with the exception of the intertie line are reinforced concrete cylinder pipe (RCCP). This type of pipe includes exterior spiral steel reinforcing cabling and metal bands at joints to provide structural integrity and accommodate high pressure water passage. Corrosion control through cathodic protection helps assure pipe integrity and reliability of water service.

PROPOSED BUDGET	2021	2	2022	2023	2	2024	2025	21-2025 Total
CAPITAL COST: Direct Costs	\$ -						\$ 50,000	\$ 50,000
TOTAL CAPITAL COSTS	\$ -	\$	-	\$	\$		\$ 50,000	\$ 50,000
REVENUE:								
Water Service Rates	\$ -	\$	- "	\$ -	\$	-	\$ 50,000	\$ 50,000
TOTAL REVENUE	\$	\$		\$	\$	40.5	\$ 50,000	\$ 50,000

Capital Costs Beyond 2025:

\$50,000 annually in 2026 thru 2030

### INDUSTRIAL WATER UTILITY - 403 (Cherry Point Industrial, Wholesale / Municipal, Irrigation)

CIP PROJECT NUMBER:

RW-43

PROJECT NAME:

Douglas Road Surge Protection

PROJECT LOCATION:

Distribution System - Douglas Road

STATUS:

New

**PRIORITY:** Medium

**ESTIMATED START DATE:** 

2023

**ESTIMATED COMPLETION DATE: 2023** 

PROJECT DESCRIPTION/SCOPE:

### **Prior Years Budget Activities**

During 2020, the issue of water pressure changes resulting from sudden short period increases, then decreases in water demand at points of delivery off of the Douglas Road line was highlighted as a continuing issue. Discussion regarding the addition of surge protection associated with the Cherry Point end of the Douglas Road distribution main was advanced.

### 2021 Budget Projected Activities

With the current curtailment of Alcoa's Intalco smelter operations, staff elected to see what impact this would have on the water surge issue previously identified. No surge protection CIP has been proposed for 2021. District staff will continue discussions with the District's engineering consultant regarding what type of surge protection may or may not be warranted in the future

### **Project Budget Estimate:**

Engineering and construction costs

\$ 500,000

Budget Estimate Total: \$

500,000

### PROJECT JUSTIFICATION/BENEFITS:

Pressure waves or water demand surges within water systems can damage water facilities, shorten life of piping, valves, etc. Surges also present an operational burden, as valves and pumps must be throttled and ramped up and down to accommodate these surges. These events result in in-efficient operation of the system and can increase energy use.

PROPOSED BUDGET	2021	2022	2023	2024	2025	2	021-2025 Total
CAPITAL COST: Direct Costs	\$ -	\$ -	\$ 500,000	\$ -	\$ -	\$	500,000
TOTAL CAPITAL COSTS	\$	\$	\$ 500,000	\$	\$	\$	500,000
REVENUE:							
Water Service Rates	\$ 	\$ 	\$ 500,000	\$ _	\$ _	\$	500,000
TOTAL REVENUE	\$	\$	\$ 500,000	\$	\$	\$	500,000

Capital Costs Beyond 2025:

To Be Determined.

### GRANDVIEW WATER UTILITY - 411 (Potable and Fire)

CIP PROJECT NUMBER:

GVP-3

PROJECT NAME:

Grandview Potable System Improvements

PROJECT LOCATION:

Northgate Potable Plant

STATUS:

New

PRIORITY: Medium

**ESTIMATED START DATE:** 

On-going

**ESTIMATED COMPLETION DATE:** On-going

### PROJECT DESCRIPTION/SCOPE:

### **Prior Years Budget Activities**

During 2017, the District completed a backbone communications system project (CIP IS-15), which included the extension of fiber optic communications cable to the Northgate potable plant. This fiber optic cable deployment has enabled this follow-on project. In 2018, the District retained a contractor to set-up the potable plant for a standby generator. In 2019, the standby generator set-up was completed and a portable generator purchased. Also, a PLC was purchased for use at the potable plant.

### 2021 Budget Projected Activities

In 2021, the District plans to proceed with the installation of equipment necessary to integrate the Northgate potable plant into the District's SCADA system network. This will enable staff to remotely monitor and control certain potable water system operations within the potable plant building. Also, the District in consultation with its water system engineering consultant will develop a comprehensive plan for future improvements to the Grandview potable water system. The District anticipates installing two additional flushing ports at locations on the potable water system that will improve flushing the system when necessary to prevent stagnant water from accumulating.

### Project Budget Estimate:

Water system Improvements identified by Capital Improvement plan

\$ 140,000

Budget Estimate Total: \$

140,000

### PROJECT JUSTIFICATION/BENEFITS:

Integrating the Grandview potable water system into the District's SCADA system will enable staff to remotely monitor potable plant conditions and better manage the system. Also, it will enable staff to quickly respond to un-planned events when they occur. Potable water system improvements will be undertaken as necessary to assure reliable acquisition, treatment, and delivery of potable water for use by customers of the Grandview water system.

PROPOSED BUDGET	2021		2022	2023	2024		2025	20	021-2025 Total
CAPITAL COST:		1				-			
Direct Costs	\$ 40,000	\$	25,000	\$ 25,000	\$ 25,000	\$	25,000	\$	140,000
TOTAL CAPITAL COSTS	\$ 40,000	\$	25,000	\$ 25,000	\$ 25,000	\$	25,000	\$	140,000
REVENUE:							-		
Water Service Rates	\$ 40,000	\$	25,000	\$ 25,000	\$ 25,000	\$	25,000	\$	140,000
TOTAL REVENUE	\$ 40,000	\$	25,000	\$ 25,000	\$ 25,000	\$	25,000	\$	140,000

Capital Costs Beyond 2025:

**ELECTRIC UTILITY - 481** 

CIP PROJECT NUMBER:

E-6

PROJECT NAME:

115 kV Transmission Line Improvements

STATUS:

Existing

PROJECT LOCATION:

Various Locations Along the 115 kV Transmission Line

PRIORITY: High

**ESTIMATED START DATE:** 

On-going

**ESTIMATED COMPLETION DATE:** On-going

### PROJECT DESCRIPTION/SCOPE:

### **Prior Years Budget Activities**

The District has established a transmission structure replacement schedule with the objective to systematically replace all structures installed prior to 2000. Each year a grouping of structures will be replaced with priority given to those structures that are in the poorest condition or that have another strategic reason for replacement. In addition, the 115 kV conductors will be evaluated and replaced in sections, as necessary, based on condition and feasibility. (i.e. section over I-5). As part of the replacement plan, the District annually field inspects all 115 kV transmission structures within its electric system. The number of structures or structural components may be increased or decreased depending upon the results of the annual inspections. Electric system regulatory requirements may require additional data collection and analysis in the future.

### 2021 Budget Projected Activities

The District will continue its inspections and replacement schedule in 2021. As a result of contractors' long lead times for ordering equipment required for electric transmission projects, which are competitively bid, the District is putting the bid out earlier in the year so the Contractor's have adequate time to acquire the materials prior to installation. Further, based on experience gained the previous two years, the District will again utilize drone aerial inspections of the transmission structures and conductors. After the planned 2021 construction project, the District will have replaced most of the structures determined to require replacement. With the completion of the 2021 work, the District will move into a maintenance and monitoring mode with regard to transmission structures. Going forward, the high voltage electrical conductors will be evaluated not only for condition, but also the capacity to carry anticipated power flows.

### **Project Budget Estimate**

Engineering, Material Acquisition & Construction Work

\$ 850,000

Budget Estimate Total: \$

850,000

### PROJECT JUSTIFICATION/BENEFITS:

The work planned and completed under CIP E-6 has been for the purpose of assuring reliable and safe electric power delivery over the District's electric system facilities for use by the District's customers and the District's water plants. The District will continue to monitor, maintain, and upgrade it transmission structures and high voltage electric conductors to assure reliability and adequate capacity to meet electric demands on its system. Also, the District will take such actions and implement projects, as necessary, to assure compliance with applicable regulatory requirements (i.e. WECC, NERC, and FERC).

PROPOSED BUDGET	2021	2022	2023	2024	2025	20	)21-2025 Total
CAPITAL COST: Direct Costs	\$ 500,000	\$ 200,000	\$ 50,000	\$ 50,000	\$ 50,000	\$	850,000
TOTAL CAPITAL COSTS	\$ 500,000	\$ 200,000	\$ 50,000	\$ 50,000	\$ 50,000	\$	850,000
REVENUE:							
Electric Service Rates	\$ 487,500	\$ 195,000	\$ 48,750	\$ 48,750	\$ 48,750	\$	828,750
Water System Rates	12,500	5,000	1,250	1,250	1,250		21,250
TOTAL REVENUE	\$ 500,000	\$ 200,000	\$ 50,000	\$ 50,000	\$ 50,000	\$	850,000

Capital Costs Beyond 2025:

30-40 year replacement cycles, based on depreciation and wear

### **ELECTRIC UTILITY - 481**

CIP PROJECT NUMBER:

E-15

PROJECT NAME:

Electric Utility Vehicles

PROJECT LOCATION:

District Electric Service Area

STATUS:

Existing

PRIORITY: Medium

ESTIMATED START DATE: On-going

**ESTIMATED COMPLETION DATE:** On-going

### PROJECT DESCRIPTION/SCOPE:

### **Prior Years Budget Activities**

In 2019, the District purchased through the Washington State purchasing process, a new full sized Dodge Ram pick-up for use by electric utility operations staff.

### 2021 Budget Projected Activities

In 2021, the District plans to purchase a used insulated bucket utility truck. The District will utilize reliable public auction sites to identify used vehicles that meet the District's criteria and then participate in scheduled competitive bids to acquire the vehicle.

### **Project Budget Estimate:**

Used insulated bucket truck Signage, Accessories & Safety Equipment \$ 70,000 10,000 000,08

Replace F-250 Extended Cab 4 -Wheel Electric Utility Pick-up with Comparable Pick-up Signage, Accessories & Safety Equipment

39,000 8,000

Budget Estimate Total: \$

47,000

	Year	Description	Planned	Estimated
	2016	Ford F250	Replacement 2026	<b>Cost</b> \$ 47,000
١	2019	Ford F250	2029	47,000

### PROJECT JUSTIFICATION/BENEFITS:

Currently, the District has no utility bucket truck. When one is required to access and maintain District electric facilities, the District must seek one from a rental company. Such vehicles are not readily available. This creates un-certainty with regard to scheduling work. In emergency situations, the District must rely on third parties to provide a bucket truck, if they have one available at the time of the emergency. Electric utility's staff use of the vehicle would be for such facilities as substations, aerial fiber optic cabling, light poles, and other elevated facilities. The bucket truck would not be utilized for work on the District's 115 kV transmission structures and lines. This work would continue to be provided by third party entities with high voltage qualified line crews.

PROPOSED BUDGET		2021	2022	2023	2024		2025	20	21-2025 Total
CAPITAL COST: Direct Costs	\$	80,000	\$ -	\$ -	\$ -	\$	-	\$	80,000
TOTAL CAPITAL COSTS	\$	80,000	\$	\$	\$	\$		\$	80,000
REVENUE:	. 1 7 7					-			
Electric Service Rates	\$	80,000	\$ _	\$ -	\$ -	\$	_	\$	80,000
TOTAL REVENUE	\$	80,000	\$	\$	\$	\$		\$	80,000

Capital Costs Beyond 2025: Replacement of vehicles will be based upon accumulated mileage and condition.

### **ELECTRIC UTILITY - 481**

CIP PROJECT NUMBER:

E-22

PROJECT NAME:

New Ferndale Pump Substation

PROJECT LOCATION:

5431 Ferndale Road

STATUS:

Existing

Priority: High

**ESTIMATED START DATE:** 

2017

**ESTIMATED COMPLETION DATE: 2021** 

PROJECT DESCRIPTION/SCOPE:

### **Prior Years Budget Activities**

The District purchased the Ferndale electric substation serving Water Treatment Plant No.1 in 2011. The substation, previously owned by Puget Sound Energy, was constructed when Plant No.1 was built in the 1960's. The substation has not been upgraded since construction and has the original single transformer. Testing of electrical gear in the substation during 2016 revealed that the secondary voltage (2,400 V) side of the substation was in very poor condition and should be replaced. Based on evaluation of the Water Treatment Plant 1 complex of facilities, District staff believe the substation to be the largest single factor impacting plant operations and reliability. During 2018, District staff, with support of its electrical engineering consultant, discussed several different conceptual designs for the substation. During the 3rd quarter of the year a design was selected, which incorporated among other features a fixed back-up power system. During the fourth quarter, the District's consultant was given approval to begin design work on the substation project. In 2019, the District's electrical engineer completed the design of the new substation and site permitting was initiated. During the 4th quarter, the District went out to bid for major substation equipment, which included electrical switchgear and transformers. In 2020, the District and it's engineering consultant have been working on permitting and the acquisition of additional equipment required for the substation.

### 2021 Budget Projected Activities

In 2021, the District anticipates that permitting for the new substation will have been completed and the construction project competitive bid will be let during the first quarter of the year. Construction activities should start the 2nd quarter of 2021 and completion of the project is forecast for the 4th quarter of 2021 or 1st quarter 2022.

### **Project Budget Estimate**

Ferndale Substation Upgrade/Replacement

Engineering Analysis, Design & Construction Services

3,000,000

Budget Estimate Total: \$ 3,000,000

### PROJECT JUSTIFICATION/BENEFITS:

The existing substation providing power for the District's Water Treatment Plant 1 has reached the end of its useful life and does not meet current industry standards. The construction of a new substation can be undertaken without taking Plant 1 off line until the switchover. The design of a new substation will include two transformers rather than the current one, for redundancy. Also, fixed standby generation can be included for reliability.

PROPOSED BUDGET	2021	2022	2023	2024	2025	2	2021-2025 Total
CAPITAL COST:							
Direct Costs	\$ 3,000,000	\$ -	\$ -	\$ -	\$ 	\$	3,000,000
	-						-
TOTAL CAPITAL COSTS	\$ 3,000,000	\$	\$ -	\$	\$ 1	\$	3,000,000
REVENUE:							
Industrial Water Rate Revenue	\$ 3,000,000	\$ -	\$ -	\$ -	\$ -	\$	3,000,000
TOTAL REVENUE	\$ 3,000,000	\$	\$	\$	\$	\$	3,000,000

TBD. Related to plans for improvements to Water Treatment Plant No.1. Capital Costs Beyond 2025:

### **ELECTRIC UTILITY - 481**

CIP PROJECT NUMBER:

E-25

PROJECT NAME:

Electric System Non-Vehicle Equipment

PROJECT LOCATION:

**District Facilities** 

STATUS:

New

**Priority:** Medium

**ESTIMATED START DATE:** 

On-going

**ESTIMATED COMPLETION DATE:** On-going

### PROJECT DESCRIPTION/SCOPE:

### **Prior Years Budget Activities**

On an annual basis, District staff will assess what major tools, equipment, and other testing devices might be necessary to support electric system operations. These items are used for analysis of the condition and operation of electrical devices associated with the District's high voltage substations, transmission line, medium voltage switchgear, and lower voltage equipment associated with the water system. In addition, equipment necessary to operate safely and to assure physical security of electric facilities will also be assessed. As regulatory and industrial standards change over time, District staff will regularly reassess what new tools, equipment or devices might be required to capture the necessary data to meet regulatory requirements, log operational parameters, and to demonstrate physical security measures.

### 2021 Budget Projected Activities

For 2021, the District will focus on electric system testing equipment that may be required to acquire data and calibrate equipment in order to maintain compliance with NERC electric reliability standards and requirements associated with the District's 115 kV electric system and its Bulk Electric System (BES) designated equipment. Also, testing, calibration, and data requirements will increase as a result of the real-time communications link to be established between the electric systems of the District and BPA.

### **Project Budget Estimate**

Equipment

\$ 10,000

Budget Estimate Total: \$

10,000

### PROJECT JUSTIFICATION/BENEFITS:

Equipment, devices, testing instruments purchased will help assure reliable operation of electric system components, detect potential hazardous conditions, and to help secure the District's electric facilities against physical threats. Also, such equipment will assist District staff in gathering data, testing and calibrating electrical devices to comply with relevant NERC electric system reliability standards, which are federally mandated.

PROPOSED BUDGET		2021	2022	2023	2024	2025	21-2025 Total
CAPITAL COST: Direct Costs	\$	10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 50,000
TOTAL CAPITAL COSTS	\$	10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 50,000
REVENUE:	. (				6		
Electric Rate Revenue	\$	10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 50,000
TOTAL REVENUE	\$	10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 50,000

**Capital Costs Beyond 2025:** 

### **ELECTRIC UTILITY - 481**

CIP PROJECT NUMBER:

E-26

PROJECT NAME:

Substation Security Improvements

PROJECT LOCATION:

**District Facilities** 

STATUS:

New

Priority: High

**ESTIMATED START DATE:** 

On-going

**ESTIMATED COMPLETION DATE:** On-going

PROJECT DESCRIPTION/SCOPE:

### **Prior Years Budget Activities**

Security of the District's three 115 kV substations is a high priority. The District has and will continue to implement improvements to secure the substation perimeters and to detect intruders should these perimeters be breached. During 2017, cameras were added at the Refinery substation. In 2018, Card Reader access (ingress/egress) was installed at the Refinery substation. No additional security improvements were implemented in 2019 or 2020.

### 2021 Budget Projected Activities

In 2021, further security enhancements will be evaluated for the Refinery substation in line with evolving NERC Bulk Electric System (BES) Reliability Standards. The District plans to implement such security measures as may be necessary to comply with any new requirements related to NERC standards covering physical or cyber security intrusions.

### **Project Budget Estimate**

Substation Security Improvements Design & Installation

30,000

Budget Estimate Total: \$

30.000

### PROJECT JUSTIFICATION/BENEFITS:

Keeping the substations secure from intruders, both physical and cyber, is essential to maintaining reliable electric service for our retail customer(s) and the District's two water treatment plants. Also, improvements must be implemented to maintain compliance with electric system regulatory standards as they evolve over time.

PROPOSED BUDGET	2021	2022	2023	2024	2025	21-2025 Total
CAPITAL COST: Direct Costs	\$ 30,000	\$ -	\$ × · · · · · · · · · · · · · · · · · · ·	\$ -	\$ 	\$ 30,000
TOTAL CAPITAL COSTS	\$ 30,000	\$	\$	\$	\$	\$ 30,000
REVENUE:			1 / 1		ļ!	
Electric Rate Revenue	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ 30,000
TOTAL REVENUE	\$ 30,000	\$	\$	\$	\$	\$ 30,000

Capital Costs Beyond 2025:

### **ELECTRIC UTILITY - 481**

CIP PROJECT NUMBER:

E-27

PROJECT NAME:

Refinery Substation Upgrade

PROJECT LOCATION:

**District Facilities** 

STATUS:

New

Priority: High

**ESTIMATED START DATE:** 

2019

**ESTIMATED COMPLETION DATE: 2022** 

### PROJECT DESCRIPTION/SCOPE:

### **Prior Years Budget Activities**

In 2019, the District, in consultation with its electrical engineering consultant, evaluated various options for upgrading the District's Refinery substation. This work was in response to a request from its electric system customer, Phillips 66. The upgrades would be for the purpose of assuring and improving electric service reliability and to add capacity, which would enable the Refinery substation to serve a substantial increase in electric load demand. In 2020, Phillips 66 and the District agreed to an option for upgrading capacity at the District's Refinery substation. Subsequently, the District requested that its electrical engineering consultant proceed with the engineering design for the upgrade option selected.

### 2021 Budget Projected Activities

In 2021, the District anticipates that its electrical engineering consultant will substantially complete the engineering design for the Refinery substation upgrade during the 1st quarter. Permitting of the project will be initiated and bid specifications for major substation equipment with long lead times will be prepared. Further, bids will be let for the equipment and the selected equipment will be ordered.

### Project Budget Estimate

Engineering and construction of substation improvements

Budget Estimate Total: \$ 6,000,000

### PROJECT JUSTIFICATION/BENEFITS:

The project, which involves improvements to the District's Refinery substation is for the purpose of assuring sufficient electrical capacity to meet the Phillips 66 Refinery's future electric demands and to assure continued electric service reliability and safety for the District's customer.

PROPOSED BUDGET	2021	2022	2023	2024	2025	2021-2025 Total
CAPITAL COST: Direct Costs	\$ 1,500,000	\$ 4,500,000	\$ -	\$ -	\$ -	\$ 6,000,000
		_	_	_		
TOTAL CAPITAL COSTS	\$ 1,500,000	\$ 4,500,000	\$ -	\$ -	\$ -	\$ 6,000,000
REVENUE:						
Electric Rate Revenue	1,500,000	4,500,000				6,000,000
TOTAL REVENUE	\$ 1,500,000	\$ 4,500,000	\$ -	\$ -	\$ -	\$ 6,000,000

Capital Costs Beyond 2025:

### INDUSTRIAL WATER UTILITY - 403 (Cherry Point Industrial, Wholesale / Municipal, Irrigation)

**EXTRAORDINARY PROJECT:** 

RW-M-2

PROJECT NAME:

Clean Sediment Settling Ponds

PROJECT LOCATION:

Plant Nos. 1 & 2

STATUS:

Existing

PRIORITY: High

**ESTIMATED START DATE:** 

On-going

**ESTIMATED COMPLETION DATE:** On-going

PROJECT DESCRIPTION/SCOPE:

### **Prior Years Budget Activities**

A large annual maintenance activity associated with the industrial water system is the removal of sediment from the settling ponds associated with Water Treatment Plants No.1 and 2. The ponds are cleaned on a rotating basis and each year several thousand yards of sediment are removed by the District's contractor and deposited at an off-site location. In 2019, the District's contractor removed accumulated sediment from the east settling pond at Water Treatment Plant No.2. The work was completed during the third quarter of the year. Due to the wet Summer and wet sediment, the 2020 the pond cleaning project was reduced to less than a thousand yards from the Plant 2 West pond.

### 2021 Budget Projected Activities

In 2021, the District plans to remove sediment from the location that the District determines most in need. The contractor will be selected via competitive bid during the second or third quarter of the year and the removal of sediment will be scheduled depending on the weather.

### **Project Budget Estimate**

Plant 1 & 2 Competitive Bid Contract for Excavation & Hauling of Materials from Ponds

\$ 155,000

Budget Estimate Total:

155,000

### PROJECT JUSTIFICATION/BENEFITS:

The Settling Ponds are used as the final discharge of the silt and sand that is removed from each of the clarification basins during a "wash-down". Historically, the District excavated the material and allowed it to stockpile on the berm adjacent to the basins. However, this method limited access to and around the ponds. Furthermore, the sediment cannot be deposited or spread on District property designated as "wetlands". Therefore, removal and deposition of the sediment is accomplished by the contractor at an off-site location. The material to be removed is analyzed to determine its composition and whether it is suitable for off-site disposal. Because large amounts of sediment settle in the ponds each year, this maintenance activity must occur on an annual basis.

PROPOSED BUDGET	2021	2022	2023	2024	2025	20	021-2025 Total
CAPITAL COST: Direct Costs	\$ 155,000	\$ 155,000	\$ 155,000	\$ 155,000	\$ 155,000	\$	775,000
TOTAL CAPITAL COSTS	\$ 155,000	\$ 155,000	\$ 155,000	\$ 155,000	\$ 155,000	\$	775,000
REVENUE:					'		
Water Service Rates	\$ 155,000	\$ 155,000	\$ 155,000	\$ 155,000	\$ 155,000	\$	775,000
TOTAL REVENUE	\$ 155,000	\$ 155,000	\$ 155,000	\$ 155,000	\$ 155,000	\$	775,000

Costs Beyond 2026:

Annual On-going maintenance.

### INDUSTRIAL WATER UTILITY - 403 (Cherry Point Industrial, Wholesale / Municipal, Irrigation)

**EXTRAORDINARY PROJECT:** 

RW-M-6

PROJECT NAME:

Douglas Rd Vault & Line Upgrades

PROJECT LOCATION:

Distribution System (Douglas Road)

STATUS:

New

PRIORITY: Medium

**ESTIMATED START DATE:** 

2016

**ESTIMATED COMPLETION DATE: 2021** 

### PROJECT DESCRIPTION/SCOPE:

### **Prior Years Budget Activities**

Electrical equipment in the Douglas Road vault is powered by an electric feeder off of the Intalco plant's internal electric distribution system. If Intalco experiences an outage and the feeder is de-energized, so is the equipment in the Douglas Road vault. A second issue is that the meter for recording industrial water delivered to Intalco's potable water treatment facility is located in Intalco's water plant. A third issue is that the District's SCADA system is currently linked to an Intalco-owned PLC in the water plant. The proposed project would address the issues described above. When completed, it would eliminate the District's dependency on Intalco facilities for power supply and SCADA monitoring of the Douglas Road vault location water flows and valve. Elements of the project include: (a) Relocate the flow meter for recording industrial water supplied to the potable plant outside of the Intalco fence to a site near where the service line to Intalco connects to the District's 24" main line. A shut-off valve would be installed also; (b) SCADA equipment and communications link would be tied to the new meter vault location and removed from Intalco's potable plant; (c) Install a back-up emergency gen-set at the Douglas Road vault to provide power, when the electric feeder to the vault is de-energized. A follow-on phase, which would be a separate project, would be to construct a new electric feeder to tie to the nearest PSE distribution system facilities. Due to a variety of factors, the project was not initiated in 2018. One factor causing a re-evaluation was the arrangements necessary for a power feed from PSE. In 2019, it was determined that a new power feed from PSE to Douglas Road vault was neither feasible or cost-effective. For back-up power services, District staff will evaluate the use of a UPS unit and/or emergency gen-set to be installed at the Douglas Road vault location.

### 2021 Budget Projected Activities

In 2021, based on prior evaluation, the District plans to proceed with the installation of either a UPS unit and/or back-up gen-set at the Douglas Road vault. In addition, a flow meter will be installed at the point at which the water line running to Alcoa's potable plant connects to the Douglas Road 24" line. This will replace the existing meter, which is located within Alcoa's potable plant. New fiber optic cabling will be installed in existing conduit running from the meter site to the Douglas Road vault for connection to the District's fiber optic backbone communication system. This will enable remote monitoring of the meter data via the SCADA system. In addition, a new PLC may be installed within the Douglas Road vault.

### **Project Budget Estimate**

Engineering Services - Design & Construction Equipment and Materials

26,000 126,000

Budget Estimate Total: \$ 152,000

### PROJECT JUSTIFICATION/BENEFITS:

Improves operational access to metering. Improves security by: 1) Removal of devices located in customer's facility that are connected to the PUD's SCADA system, and 2) Access to Douglas vault will be made more secure. Improves operations by eliminating water flow meter from location on customer's property and adding a meter that can be more readily accessed and monitored. Operational reliability is improved by providing back-up power supply for Douglas road vault.

PROPOSED BUDGET	2021	2022	2023	2024	2025	2	021-2025 Total
CAPITAL COST: Direct Costs	\$ 152,000	\$ , <del>-</del>	\$ 1	\$ 1	\$ ·	\$	152,000
TOTAL CAPITAL COSTS	\$ 152,000	\$	\$	\$	\$	\$	152,000
REVENUE:							
Water Service Rates	\$ 152,000	\$ -	\$ -	\$ -	\$ -	\$	152,000
TOTAL REVENUE	\$ 152,000	\$	\$	\$	\$	\$	152,000

Costs Beyond 2026:

None other than continued monitoring & maintenance as required.

### INDUSTRIAL WATER UTILITY - 403 (Cherry Point Industrial, Wholesale / Municipal, Irrigation)

**EXTRAORDINARY PROJECT:** 

RW-M-7

PROJECT NAME:

D Station Improvements

PROJECT LOCATION:

Distribution System (Western End -Aldergrove Road)

STATUS:

Ongoing

PRIORITY: High

**ESTIMATED START DATE:** 

2014

**ESTIMATED COMPLETION DATE: 2022** 

PROJECT DESCRIPTION/SCOPE:

### **Prior Years Budget Activities**

In 2016, an engineering feasibility study, which identified alternatives for improving D station operations, was completed and presented to the District's customer served from D Station, the BP Refinery. Based on discussions with BP staff during 2017, the District selected the least-cost alternative for improving D Station. Discussions continued in 2018 and 2019, but the project was not implemented.

### 2021 Budget Projected Activities

The District plans to proceed with final engineering design and permitting of the project in 2021. The District's portion of the project will involve replacing the main valve controlling water flow from the District's 24" supply main to the customer's distribution system; replacing the existing D Station meter with a new mag meter; installing bypass piping for meter maintenance; and improved telemetry at metering points. The District's plans to proceed to construction of the improvements 2nd or 3rd quarter, depending on BP's operational constraints and after consultation with BP.

### **Project Budget Estimate**

Engineering Services: Design, Bid, and Construction Services Materials Procurement & Construction (Competitive Bid Project) \$ 72,000

328,000

Budget Estimate Total: \$

400,000

### PROJECT JUSTIFICATION/BENEFITS:

The valve and piping improvements will improve reliability of service to the customer and increase capacity so that increased flows can be accommodated within design parameters. The new valve will be compatible with the duty cycles required when throttling the valve on a regular basis via the SCADA system. Also, the new mag meter will more accurately record flows and require less maintenance. D Station is currently a single customer industrial water supply point of delivery.

PROPOSED BUDGET	2021	2022	2023	2024	2025	20	021-2025 Total
CAPITAL COST: Direct Costs	\$ 150,000	\$ 250,000	\$ _	\$ -	\$ -	\$	400,000
TOTAL CAPITAL COSTS	\$ 150,000	\$ 250,000	\$ •	\$ -	\$ - 1	\$	400,000
REVENUE:							
Water Service Rates	\$ 150,000	\$ 250,000	\$ -	\$ -	\$ -	\$	400,000
TOTAL REVENUE	\$ 150,000	\$ 250,000	\$ -	\$	\$ 	\$	400,000

Costs Beyond 2026:

To Be Determined

### INDUSTRIAL WATER UTILITY - 403 (Cherry Point Industrial, Wholesale / Municipal, Irrigation)

**EXTRAORDINARY PROJECT:** RW-M-10

PROJECT NAME:

High Head Pump Rebuild & Motor Rewind

STATUS:

Annual

PROJECT LOCATION:

**District Facilities** 

PRIORITY: High

**ESTIMATED START DATE:** 

On-going

**ESTIMATED COMPLETION DATE:** On-going

PROJECT DESCRIPTION/SCOPE:

### **Prior Years Budget Activities**

As part of the District's evolving major equipment maintenance schedule for the industrial water system facilities, the District has targeted the re-build of at least one intake or high head pump and the rewind of one pump motor drive at either Water Treatment Plant No.1 or No. 2.

### 2021 Budget Projected Activities

In 2021, the District plans to rebuild a high head pump and rewind the associated motor at Water Treatment Plant No.1. This will be the last of the high head pump/motor assembly capital projects for the immediate future, unless an un-anticipated event occurs. The District will evaluate intake facility pumps for re-build in 2022.

### **Project Budget Estimate**

Pump Rebuild & Motor Rewind Work, Including Removal & Re-Installation (1 Pump & Motor)

\$ 250,000

Budget Estimate Total: \$

250,000

### PROJECT JUSTIFICATION/BENEFITS:

Regular scheduled major overhauls of intake and high head pumps and motors improves & maintains plant reliability.

PROPOSED BUDGET	2021	2022	2023	2024	2025	2	021-2025 Total
CAPITAL COST: Direct Costs	\$ 250,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$	750,000
TOTAL CAPITAL COSTS	\$ 250,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$	750,000
REVENUE:							
Water Service Rates	\$ 250,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$	750,000
TOTAL REVENUE	\$ 250,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$	750,000

Costs Beyond 2026:

To Be Determined.

### **GRANDVIEW WATER UTILITY - 411 (Potable and Fire)**

**EXTRAORDINARY PROJECT: GVF-M-2** 

PROJECT NAME:

Grandview Fire System Decommissioning

STATUS:

New

PROJECT LOCATION:

**District Facilities** 

PRIORITY: High

**ESTIMATED START DATE:** 

2022

**ESTIMATED COMPLETION DATE: 2023** 

### PROJECT DESCRIPTION/SCOPE:

**Prior Years Budget Activities** 

In 2019, the District completed the Vista Road industrial water line project, which connected the 24" industrial water main at Aldergrove and Vista Roads with the fire water supply distribution system for the Grandview water utility. Industrial water provided via this new line will be a new source of fire water supply. The existing diesel engine driven pump and intake pumping facilities contained in a building next to the Grandview pond will no longer be required. The pond will no longer be a source of fire water supply.

### 2021 Budget Projected Activities

In 2021, the District will plan for the de-commissioning of the diesel engine and pumping facilities at the Grandview pond. One option under consideration is the removal of the diesel engine at the pond and using it to replace the existing diesel engine drive at the fire well located within the Northgate portion of the Grandview water system. The pond diesel engine is many years newer than the well diesel engine and in much better condition. At least for an interim period, the designated fire well will continue to be available as a back-up source for fire water supply into the Grandview fire water distribution system. Other de-commissioning considerations are whether to demolish the building at the pond and to determine whether the pond diesel can and/or should be installed in the existing fire well building not owned by the District. No de-commissioning work will proceed until such time as a comprehensive plan for potable and fire water distribution facilities has been prepared.

### **Project Budget Estimate**

Work to decommission Grandview Fire

\$ 100,000

**Budget Estimate Total: \$** 

100,000

### PROJECT JUSTIFICATION/BENEFITS:

Must de-commission the diesel engine drive intake pumping facility at the Grandview pond, as the pond is no longer a viable source of water for the Grandview fire water supply system. The new source of water will be provided by the newly constructed Vista Road industrial water main. Diesel engine and associated equipment may be utilized by the District at a different location or surplused.

PROPOSED BUDGET	2	2021	2022	2023	2024	2025	20	021-2025 Total
CAPITAL COST: Direct Costs	\$	-	\$ 25,000	\$ 75,000			\$	100,000
TOTAL CAPITAL COSTS	\$		\$ 25,000	\$ 75,000	\$	\$	\$	100,000
REVENUE:								
Water Service Rates	\$	-	\$ 25,000	\$ 75,000	\$ 	\$ 	\$	100,000
TOTAL REVENUE	\$		\$ 25,000	\$ 75,000	\$	\$	\$	100,000

Costs Beyond 2026:

None.

### GRANDVIEW WATER UTILITY - 411 (Potable and Fire)

**EXTRAORDINARY PROJECT: GVF-M-3** 

PROJECT NAME:

Grandview Non-potable water connection

STATUS:

New

PROJECT LOCATION:

**District Facilities** 

PRIORITY: High

**ESTIMATED START DATE:** 

2021

**ESTIMATED COMPLETION DATE: 2021** 

PROJECT DESCRIPTION/SCOPE:

### **Prior Years Budget Activities**

In 2019, the District completed the Vista Road industrial water line project, which connected the 24" industrial water main at Aldergrove and Vista Roads with the non-potable water supply distribution system for the Grandview water utility. Industrial water provided via this new line will be a new, more reliable source of non-potable water supply for Grandview and reduce the use of water from the potable system and reduce the need to increase potable storage and potable well pumping capacity.

### 2021 Budget Projected Activities

This work will consist of investigating the customers system, design and construction of the non-potable water connection inside and out of the building.

### Project Budget Estimate

Engineering Construction

\$ 15,000

65,000

Budget Estimate Total: \$

80,000

### PROJECT JUSTIFICATION/BENEFITS:

Due to the limited supply and storage of the GV system potable water the District has determined that it would be best to work with select GV customers that use potable water for non-potable reasons and connect them to the fire water line.

PROPOSED BUDGET	2021	2022	2023	2024	2025	20	21-2025 Total
CAPITAL COST: Direct Costs	\$ 80,000	\$ <u>-</u>	\$ -	\$ 	\$ 	\$	80,000
TOTAL CAPITAL COSTS	\$ 80,000	\$ -	\$	\$	\$	\$	80,000
REVENUE:							
Water Service Rates	\$ 80,000	\$ -	\$ -	\$ 	\$ · <del>-</del> · · ·	\$	80,000
TOTAL REVENUE	\$ 80,000	\$	\$ i i	\$ - 1 T	\$ -	\$	80,000

Costs Beyond 2026:

None.

# PUBLIC UTILITY DISTRICT No. 1 of Whatcom County Industrial Water Utility 2020 Rates and Revenue

Unit Costs	2020 Rates	% Increase	2021 Rates	
Industrial Water				
Monthly Fixed Capital Charge	\$ 9,696.87	%00.0	\$ 9,696.87	9,696.87 per QIC unit
Monthly Fixed Operating Charge	\$ 13,001.17	%00'9	\$ 13,781.24	13,781.24 per QIO unit
Monthly Fixed Fire Charge	\$ 1,183.98	-5.00%	\$ 1,124.78	,124.78 per account
Monthly Fixed Potable Charge	\$ 75.00	%00.0	\$ 75.00	75.00 per account
Consumption Charge per mg	\$ 404.04	1.47%	\$ 409.97	409.97 per MG
Irrigation (separate increase)				
Annual Fixed Charge	\$ 547.30	2.00%	\$ 574.67	574.67 per meter
Consumption Charge per mg	\$ 1,236.17	2.00%	\$ 1,297.98 per MG	per MG
Temporary Water Connection				
Fixed Charge			\$ 300.00	
Consumption Charge per 1,000/g			\$ 3.00	
OVERALL REVENUE CHANGE			2.31%	

					Monthly Fixed Charges	ed Charges						
(	OIC	Olo	Est Usage	Fixed	Fixed	i i	Monthly	Annual	Annual	Annual	Previous	2021 %
Customer	(MGD)	(MGD)	(MG)	Capital	Operating	rixed rire	Fixed	Fixed \$	Consumption	Total \$	Year	Increase
GPT - Gateway Pacific Terminal	5.33	00.00	00.00	\$ 51,684	· \$	ı ↔	\$ 51,684	\$ 620,212	₩	\$ 620,212	\$ 620,212	0.00%
BP Products NA	18.27	12.60	2,480.00	177,162	173,644	1	350,805	4,209,665	1,016,722	5,226,387	5,093,738	2.60%
Phillips66	00.9	4.00	1,214.00	58,181	55,125	1	113,306	1,359,674	497,702	1,857,376	1,812,735	2.46%
Alcoa Intalco	2.80	0.18	11.00	27,151	2,481	1	29,632	355,582	4,510	360,092	358,342	0.49%
CHEMCO	0.02	0.01	0.02	194	138	1	332	3,981	20	4,001	3,908	2.40%
Petrogas	0.05	0.03	8.30	485	413	1	868	10,779	3,403	14,182	13,852	2.38%
PSE Whitehorn	0.29	0.04	0.08	2,812	551	ı	3,363	40,360	33	40,393	40,018	0.94%
PSE Ferndale Generating Station	2.70	2.00	319.40	26,182	27,562	ı	53,744	644,928	130,944	775,872	755,257	2.73%
Praxair	0.14	0.07	10.40	1,396	1,040	1	2,436	29,232	4,264	33,496	32,779	2.19%
BNSF	0.00	0.00			-1	1,125	1,125	13,497	,	13,497	14,208	-2.00%
Cornerstone Community Church	00'0	0.00	00.00	,	1	909	206	6,074	1	6,074	6,393	-2.00%
Free Rain Farms	0.02	0.01		194	138	1	332	3,981	369	4,350	4,251	2.33%
Grandview	0.01	0.01		26	138	1	235	2,817	1,230	4,047	3,936	2.83%
Irrigation Totals			47.59	t	i	1	1	16,091	61,775	77,865	74,157	2.00%
Total			4,094.72					\$7,316,875	\$ 1,720,970	\$9,037,845	\$ 8,833,786	2.31%

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# **Industrial Water Utiltiy** 2021 Other Rates and Revenue

	ite as set by ommission			ate Last Year	
Excess Usage Fee	\$ 679.01	per af	\$	689.81 per af	
Excess Demand Fee	\$ 165,374.88	per mgd	\$ 15	56,014.06 per mg	d
Minimum Charge for Customer Assistance	\$ 100.00		\$	100.00	
Minimum Reconnection Fee	\$ 500.00		\$	500.00	
Direct Charges: Praxair potable	\$ 75.00		\$	75.00	

### **GRANDVIEW UTILITY**

2021 Service Rates & Revenue

Account	Meter#	Company	Potable Meter Equivalent (ME) Used	Pot	nthly Fixed able Meter Charge	28.0	Monthly Fixed Fire Charge	Aı	nnual Fixed Charges	Estimated Potable Usage (ccf)	Estimated Non-Potable Usage (ccf)	Annual Volume Revenue	To	otal Annual Revenue
				ed Fi	re Charge ble Charge	\$ \$	150.00 12.15	Per	Per ME r connection Per ccf Per ccf					
			v oraline rvon	-1 Uta	bie Charge	Φ	0.00		Ter cer					
02-0001	1	Kona Usa	1.00	ď	60.00	\$	150.00	\$	2,520.00	78	0	\$ 950.42	\$	3,470.42
02-0001	1 2	Crystal Creek Logistics	1.00	\$ \$	60.00	\$	150.00	\$	2,520.00	67	0	\$ 812.33	\$	3,332.33
02-0002	3	Crystal Creek Logistics Crystal Creek Logistics	1.00	\$	60.00	\$	150.00	\$	2,520.00	67	0	\$ 812.33	\$	3,332.33
02-0003	4	Crystal Creek Logistics Crystal Creek Logistics	1.00	\$	60.00	\$	150.00	\$	2,520.00	145	0	\$ 1,762.75	\$	4,282.75
02-0004	5	MJ Marine Exhaust	1.00	\$	60.00	\$	150.00	\$	2,520.00	7	0	\$ 86.11	\$	2,606.11
02-0005	6	Perry Pallet	1.00	\$	60.00	\$	150.00	\$	2,520.00	247	0	\$ 3,005.61	\$	5,525.61
02-0007	7	Homefire Prest Logs	1.00	\$	60.00	\$	150.00	\$	2,520.00	46	0	\$ 558.88	\$	3,078.88
02-0007	8	Montigo Del Ray	1.67	\$	100.20	\$	150.00	\$	3,002.40	91	0	\$ 1,111.26	\$	4,113.66
02-0009	9	Silvastar Forest Products	1.00	\$	60.00	\$	150.00	\$	2,520.00	13	0	\$ 159.22	\$	2,679.22
02-0009	9.5	Silvastar Forest Products	1.00	\$	60.00	\$	150.00	\$	2,520.00	130	0	\$ 1,582.41	\$	4,102.41
02-0003	13	Western Refinery Svc	1.00	\$	60.00	\$	150.00	\$	2,520.00	519	401	\$ 9,520.33	\$	12,040.33
02-0013	13.5	Western Refinery Svc	1.00	\$	60.00	\$	150.00	\$	2,520.00	576	0	\$ 7,002.25	\$	9,522.25
02-0015	15.5	Management Services NW	1.00	\$	60.00	\$	150.00	\$	2,520.00	140	0	\$ 1,705.89	\$	4,225.89
02-0013	17	Nuova Distribution USA	1.00	\$	60.00	\$	150.00	\$	2,520.00	42	0	\$ 510.14	\$	3,030.14
02-0017	18	Co-Pac Properties	1.00	\$	60.00	\$	150.00	\$	2,520.00	33	0	\$ 396.42	\$	2,916.42
02-0010	22	Crystal Creek Logistics	1.00	\$	60.00	\$	150.00	\$	2,520.00	1	0	\$ 8.12	\$	2,528.12
02-0023	23	LGC US Asset Holdings, LLC	1.00	\$	60.00	\$	150.00	\$	2,520.00	57	0	\$ 698.60	\$	3,218.60
02-0029	29	Seattle Manufacturing	1.00	\$	60.00	\$	150.00	\$	2,520.00	150	0	\$ 1,819.61	\$	4,339.61
02-0025	30	Greenberry Industrial	1.00	\$	60.00	\$	150.00	\$	2,520.00	148	0	\$ 1,803.36	\$	4,323.36
02-0033	33	Healthy Pet	3.33	\$	199.80	\$	150.00	\$	4,197.60	859	3,342	\$ 37,178.10	\$	41,375.70
02-0035	35	Victory Millwork	1.00	\$	60.00	\$	150.00	\$	2,520.00	20	0	\$ 243.70	\$	2,763.70
02-0036	36	Exodus Holdings	1.00	\$	60.00	\$	150.00	\$	2,520.00	91	0	\$ 1,104.76	\$	3,624.76
02-0038	38	I-5 Industrial Center	1.00	\$	60.00	\$	150.00	\$	2,520.00	49	0	\$ 601.12	\$	3,121.12
02-0039	39	Allweather Wood/Trueguard	1.00	\$	60.00	\$	150.00	\$	2,520.00	9	0	\$ 113.73	\$	2,633.73
02-0040	40	Sahota, Dave	1.00	\$	60.00	\$	150.00	\$	2,520.00	102	0	\$ 1,234.74	\$	3,754.74
02-0041	41	Grandview Business Center	3.33	\$	199.80	\$	150.00	\$	4,197.60	2,674	0	\$ 32,493.06	\$	36,690.66
02-0042	42	Propack, Inc.	1.00	\$	60.00	\$	150.00	\$	2,520.00	13	0	\$ 162.47	\$	2,682.47
02-0044	44	Whisper Lake Developments	1.00	\$	60.00	\$	150.00	\$	2,520.00	57	0	\$ 698.60	\$	3,218.60
02-0045	45	Jensen Lee Properties	1.00	\$	60.00	\$	150.00	\$	2,520.00	28	0	\$ 341.18	\$	2,861.18
02-0046	46	Cascade Nets	1.00	\$	60.00	\$	150.00	\$	2,520.00	17	0	\$ 211.20	\$	2,731.20
02-0048	48	Oxy Corp	1.00	\$	60.00	\$	150.00	\$	2,520.00	40	0	\$ 487.40	\$	3,007.40
02-0050	50	IMCO - Office	1.00	\$	60.00	\$	150.00	\$	2,520.00	849	0	\$ 10,316.55	\$	12,836.55
02-0051	51	IMCO - Shop	1.00	\$	60.00	\$	150.00	\$	2,520.00	82	0	\$ 991.04	\$	3,511.04
02-0051	52	Matia Contractors	1.00	\$	60.00	\$	150.00	\$	2,520.00	70	0	\$ 844.82	\$	3,364.82
02-0053	53	GV Lot 2 LLC	5.33	\$	319.80	\$	150.00	\$	5,637.60	1,290	0	\$ 15,677.90	\$	21,315.50
02-0054	54	GV Lot 2 LLC	2.30	\$	138.00	\$	150.00	\$	3,456.00	194	0	\$ 2,355.75	\$	5,811.75
02-0055	55	Border Safe Storage Solutions	1.00	\$	60.00	\$	150.00	\$	2,520.00	59	0	\$ 714.85	\$	3,234.85
02-0056	56	Infra Pacific LLC	0.00	\$	-	\$	645.00	\$	7,740.00	0	0	\$ -	\$	7,740.00
02-0058	58	Parberry	1.00	\$	60.00	\$	150.00	\$	2,520.00	241	112	\$ 3,822.77	\$	6,342.77
02-0059	59	Method Homes	1.00	\$	60.00	\$	150.00	\$	2,520.00	13	0	\$ 162.47	\$	2,682.47
			49.96	\$	2,997.60	s	6,495.00	s	113,911.20	9,318	3,856	\$ 144,062.23	s	257,973.43

 $ANY\ CUSTOMER\ SERVICE\ CALL-OUTS, INCLUDING\ DISCONNECTION\ AND\ RECONNECTION, MAY\ BE\ CHARGED\ A\ FEE\ OF\ \$75$ 

# Electric Utility 2021 District Service Rates

RESULTS	PASS-THRU	ELECTRIC	WATER	TOTAL
Revenue Requirement	\$ 9,695,953	\$ 2,124,000	\$ 79,956	\$ 11,899,909
General Service Charge/month		\$ 177,000	\$ 6,663	\$ 183,663
Previous General Service/mo		\$ 171,500	\$ 6,925	\$ 178,425
% Revenue Change		3%	-4%	3%

District Operating Expenses	
Labor & Benefits	\$ 785,540
Purchased Power	9,108,442
O&M Expenses	70,776
Admin Expenses	403,527
Taxes	 705,293
Total District Operating Expenses	\$ 11,073,578
Debt Service	
2012 LTGO Bond Debt Service (P&I)	\$ 61,903
2021 LTGO Bond Debt Service (P&I) - Refinance 2010	154,179
2021 LTGO Bond Debt Service (P&I) - New money	320,352
Total District Debt Service	\$ 536,434
Capital Transfer	200,000
Less Miscellaneous Revenue	(46,889)
Partial Year Cash Adjustment	7,137
Increase (Decrease) of Operating Reserves	129,649
Revenue Requirement	\$ 11,899,909

## Industrial Water Utility

### **Funding Strategies**

Revenue Requirement - Fund 403		2020		2021		2022		2023		2024		2025
Revenues @ Existing Rates												
Rate Revenues Under Existing Rates	\$	9,063,364	\$	8,781,532	\$	8,739,737	\$	8,739,737	\$	8,739,737	\$	8,739,737
Non-Rate Revenues		479,372	_	712,381		629,138	_	633,520	_	603,991	_	627,130
Total Revenues	\$	9,542,737	\$	9,493,913	\$	9,368,876	\$	9,373,258	\$	9,343,728	\$	9,366,868
Expenses												
Cash Operating Expenses	\$	4,694,290	\$	6,131,214	\$	5,883,545	\$	5,697,923	\$	5,973,522	\$	5,983,808
Existing Debt Service		2,417,486		2,118,456		2,124,076		2,123,567		2,122,585		1,761,721
New Debt Service		44,332		(208,808)		44,332		194,313		1,394,161		2,354,040
Rate Funded Capital		1,274,300		1,188,738	_	1,259,808		1,439,292	_	1,942,176	_	2,356,045
Total Expenses	\$	8,430,408	\$	9,229,599	\$	9,311,761	\$	9,455,095	\$	11,432,444	\$	12,455,613
Net Surplus (Deficiency)	\$	1,112,329	\$	264,314	\$	57,115	\$	(81,837)	\$	(2,088,716)	\$	(3,088,746)
Additions to Meet Coverage	_	-		-			_		_		_	
Total Surplus (Deficiency)	\$	1,112,329	\$	264,314	\$	57,115	\$	(81,837)	\$	(2,088,716)	\$	(3,088,746)
Annual Rate Increase		0.00%		2.00%		5.00%		8.50%		11.00%		11.00%
Cumulative Rate Increase		0.00%		2.00%		7.10%		16.20%		28.99%		43.17%
Rate Revenues After Rate Increase	\$	9,063,364	\$	8,942,527	\$	9,323,115	\$	10,089,579	\$	11,179,932	\$	12,409,725
Incremental Rate Revenues	\$		\$	160,995	\$	583,377	\$	1,349,842	\$	2,440,195	\$	3,669,987
Additional Taxes from Rate Increase	\$	_	\$	8,096	\$	29,338	\$	67,884	\$	122,717	\$	184,564
Net Cash Flow After Rate Increase		1,112,329		417,212		611,154		1,200,121		228,761		396,678
Coverage After Rate Increase: Revenue Bonds Only		n/a		n/a		n/a		n/a		n/a		n/a
Coverage After Rate Increase: All Debt		2.02		1.90		1.89		2.16		1.62		1.69

Fund Balances - Fund 403		2020		2021		2022		2023		2024		2025
OPERATING FUND												
Beginning Balance	\$	817,751	\$	1,930,080	\$	900,992	\$	937,281	\$	874,864	\$	920,168
plus: Net Cash Flow after Rate Increase		1,112,329		417,212		611,154		1,200,121		228,761		396,678
plus: Transfers In		-		-		-		-		-		-
less: Transfers Out	_		_	(1,446,300)		(574,865)		(1,262,538)	_	(183,457)	_	(384,435
Ending Balance	\$	1,930,080	\$	900,992	\$	937,281	\$	874,864	\$	920,168	\$	932,411
Minimum Target Balance	\$	807,988	\$	900,992	\$	937,281	\$	874,864	\$	920,168	\$	932,411
CAPITAL FUND												
Beginning Balance	\$	6,103,905	\$	5,909,074	\$	2,948,854	\$	2,599,667	\$	906,717	\$	1,681,741
plus: Rate Funded Capital		1,274,300		1,188,738		1,259,808		1,439,292		1,942,176		2,356,045
plus: Transfers In		-		1,446,300		574,865		1,262,538		183,457		384,435
less: Transfers Out		-				-		-		/		_
plus: Capital Grants / Contributions / Other Expenses		15,721		61,446		492,359		_		-		_
plus: GFC Revenue Towards Capital		-		-		-				_		-
plus: Net Debt Proceeds		_		_		-		2,500,000		20,000,000		16,000,000
plus: Interest Earnings		115,974		112,272		56,028		49,394		17,228		81,287
less: Capital Expenditures		(1,476,662)		(5,689,239)		(2,652,510)	_	(6,864,437)	_	(21,288,100)		(19,631,623
Ending Balance	\$	6,033,238	\$	3,028,591	\$	2,679,404	\$	986,454	\$	1,761,478	\$	871,884
Minimum Target Balance	\$	835,314		898,503		928,453	\$	904,551		1,097,578		778,564
OPERATING RESERVE												
Beginning Balance	\$	_	\$	_	\$		\$	_	\$	_	\$	_
plus: Transfer from Operating Fund	,	_	,	_	•	_	•	_	•	_	•	
less: Transfers to Operating Fund		-		-		-		-		-		-
Minimum Target Balance	\$		\$		\$		\$		\$		\$	
Minimum Target Balance	\$	· · -	\$		\$	- 1	\$		\$	-	\$	
CAPITAL RESERVE												
Beginning Balance	\$	-	\$	-	\$	-	\$	_	\$	_	\$	_
plus: Transfer from Capital Fund		_		_								_
less: Transfer to Capital Fund		-		-				_		-		-
Minimum Target Balance	\$		\$		\$		\$		\$		\$	
Minimum Target Balance	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
EMERGENCY RESERVE												
Beginning Balance	\$	231,000	\$	231,000	\$	231,000	\$	231,000	\$	231,000	\$	231,000
plus: Transfers In		-		-		-		-		-		-
less: Transfers Out	_			_				_	_	_		-
Ending Balance	\$	231,000	\$	231,000	\$	231,000	\$	231,000	\$	231,000	\$	231,000
Minimum Target Balance	\$	-	\$		\$	-	\$	-	\$	-	\$	-
DEBT RESERVE FUNDS												
Beginning Balance	\$	2,849,655	\$	2,849,655	\$	2,596,515	\$	2,596,515	\$	2,596,515	\$	2,596,515
plus: Reserve Funding from New Debt	*	-		-		1		-	,	-	,	-
less: Use of Reserves for Debt Service		_		(253,140)		_		-		-		-
Ending Balance	\$	2,849,655	\$	2,596,515	\$	2,596,515	\$	2,596,515	\$	2,596,515	\$	2,596,515
Minimum Target Balance	\$	_,0,000	\$	_,,,	\$	_,,	\$		\$	_,,	\$	_,,

# **Grandview Utility Funding Strategies**

Revenue Requirement - Fund 411	2020		2021	2022		2023	2024	2025
Revenues @ Existing Rates								
Rate Revenues Under Existing Rates	\$ 252,933	\$	252,933	\$ 252,933	\$	252,933	\$ 252,933	\$ 252,933
Non-Rate Revenues	 7,577		8,565	 7,023	_	6,943	 5,947	 6,287
Total Revenues	\$ 260,510	\$	261,497	\$ 259,955	\$	259,876	\$ 258,880	\$ 259,220
Expenses								
Cash Operating Expenses	\$ 145,132	\$	221,469	\$ 170,196	\$	224,502	\$ 154,019	\$ 158,756
Existing Debt Service short	-		-	-		-	_	17,346
New Debt Service	-		-	_ '		_	_	-
Rate Funded Capital	 75,000	_	80,000	 80,000		80,000	 80,000	 80,000
Total Expenses	\$ 220,132	\$	301,469	\$ 250,196	\$	304,502	\$ 234,019	\$ 256,101
Net Surplus (Deficiency)	\$ 40,378	\$	(39,972)	\$ 9,760	\$	(44,627)	\$ 24,861	\$ 3,118
Additions to Meet Coverage	 			 	_		 	
Total Surplus (Deficiency)	\$ 40,378	\$	(39,972)	\$ 9,760	\$	(44,627)	\$ 24,861	\$ 3,118
Annual Rate Increase	0.00%		2.00%	1.00%		1.50%	0.00%	0.00%
Cumulative Rate Increase	0.00%		2.00%	3.02%		4.57%	4.57%	4.57%
Rate Revenues After Rate Increase	\$ 252,933	\$	257,570	\$ 260,356	\$	264,154	\$ 264,480	\$ 264,480
Incremental Rate Revenues	\$ 	\$	4,637	\$ 7,424	\$	11,221	\$ 11,547	\$ 11,547
Additional Taxes from Rate Increase	\$ - ·	\$	233	\$ 373	\$	564	\$ 581	\$ 581
Net Cash Flow After Rate Increase	40,378		(35,568)	16,810		(33,970)	35,827	14,085
Coverage After Rate Increase: Revenue Bonds Only	n/a		n/a	n/a		n/a	n/a	n/a
Coverage After Rate Increase: All Debt	0.71		0.30	0.62		0.32	0.76	0.75

Fund Balances - Fund 411	2020	2021		2022		2023		2024	2025
OPERATING FUND									
Beginning Balance	\$ 54,891	\$ 95,269	\$	59,701	\$	76,511	\$	42,542	\$ 78,369
plus: Net Cash Flow after Rate Increase	40,378	(35,568)		16,810		(33,970)		35,827	14,085
plus: Transfers In	_	-		-		-			-
less: Transfers Out	 	 -				_			 -
Ending Balance	\$ 95,269	\$ 59,701	\$	76,511	\$	42,542	\$	78,369	\$ 92,453
Minimum Target Balance	\$ 28,857	\$ 28,255	\$	32,977	\$	41,905	\$	30,318	\$ 31,097
CAPITAL FUND									
Beginning Balance	\$ 323,907	\$ 335,502	\$	289,920	\$	268,913	\$	250,459	\$ 232,530
plus: Rate Funded Capital	75,000	80,000		80,000		80,000		80,000	80,000
less: 403-411 loan, fire connection	(65,000)	(65,000)		(65,000)		(65,000)		(65,000)	(65,000)
plus: GFC Revenue Towards Capital		-		-		_		_	
plus: Net Debt Proceeds	-	-		-		_		-	_
plus: Interest Earnings	6,154	6,375		5,508		5,109		4,759	4,418
less: Capital Expenditures	(4,559)	 (66,956)		(41,515)		(38,563)	_	(37,688)	(28,119)
Ending Balance	\$ 335,502	\$ 289,920	\$	268,913	\$	250,459	\$	232,530	\$ 223,829
Minimum Target Balance	\$ 48,749	\$ 50,578	\$	51,575	\$	53,279	\$	53,844	\$ 54,266
EMERGENCY RESERVE									
Beginning Balance	\$ 20,000	\$ 20,000	\$	20,000	\$	20,000	\$	20,000	\$ 20,000
plus: Transfers In	_			-		_		-	_
less: Transfers Out	 	 -		_	_	_		-	
Ending Balance	\$ 20,000	\$ 20,000	\$	20,000	\$	20,000	\$	20,000	\$ 20,000
Minimum Target Balance	\$ -	\$ -	\$	-	\$		\$	-	\$ -
DEBT RESERVE FUNDS	 	 							 
Beginning Balance	\$ -	\$ -	\$	-	\$	_	\$	-	\$ 
less: Use of Reserves for Debt Service	 _	 -	_	-		-	_	-	 
Ending Balance	\$ -	\$	\$		\$		\$		\$ -
Minimum Target Balance	\$ -	\$ -	\$	-	\$	-	\$	-	\$ -

# Electric Utility Funding Strategies

Revenue Requirement - Fund 481	2020		2021		2022		2023		2024		2025
Revenues @ Existing Rates											
Rate Revenues Under Existing Rates	\$ 11,583,884	\$	11,814,265	\$	12,659,493	\$	12,975,045	\$	13,921,701	\$	14,275,119
Non-Rate Revenues	70,545		46,889		117,376		38,750		52,596		67,102
Total Revenues	\$ 11,654,429	\$	11,861,154	\$	12,776,869	\$	13,013,795	\$	13,974,297	\$	14,342,220
Expenses											
Cash Operating Expenses	\$ 10,800,137	\$	11,070,537	\$	11,908,371	\$	12,249,403	\$	13,186,735	\$	13,567,600
Existing Debt Service	252,552		216,082		215,962		217,131		216,495		154,179
New Debt Service	-		320,352		320,352		320,352		320,352		320,352
Rate Funded Capital	 520,000		200,000	_	820,000	_	415,000	_	850,000		850,000
Total Expenses	\$ 11,572,689	\$	11,806,971	\$	13,264,685	\$	13,201,885	\$	14,573,582	\$	14,892,131
Net Surplus (Deficiency)	\$ 81,740	\$	54,183	\$	(487,815)	\$	(188,091)	\$	(599,285)	\$	(549,911)
Additions to Meet Coverage	 	_		_		_		_	-	_	-
Total Surplus (Deficiency)	\$ 81,740	\$	54,183	\$	(487,815)	\$	(188,091)	\$	(599,285)	\$	(549,911)
Annual Rate Increase	0.00%		4.00%		23.00%		0.00%		0.00%		0.00%
Cumulative Rate Increase	0.00%		4.00%		27.92%		27.92%		27.92%		27.92%
Rate Revenues After Rate Increase	\$ 11,583,884	\$	11,892,772	\$	13,207,472	\$	13,523,024	\$	14,469,679	\$	14,823,097
Incremental Rate Revenues	\$ 	\$	78,507	\$	547,979	\$	547,979	\$	547,979	\$	547,979
Additional Taxes from Rate Increase	\$ 	\$	3,041	\$	21,225	\$	21,225	\$	21,225	\$	21,225
Net Cash Flow After Rate Increase	81,740		129,649		38,938		338,663		(72,532)		(23,157)
Coverage After Rate Increase: Revenue Bonds Only	n/a		n/a		n/a		n/a		n/a		n/a
Coverage After Rate Increase: All Debt	3.51		1.66		2.76		2.42		2.48		2.84

Fund Balances - Fund 481		2020		2021		2022		2023		2024		2025
OPERATING FUND												
Beginning Balance	\$	382,812	\$	464,552	\$	594,201	\$	633,140	\$	971,802	\$	899,270
plus: Net Cash Flow after Rate Increase		81,740		129,649		38,938		338,663		(72,532)		(23, 157
plus: Transfers In		-								-		-
less: Transfers Out	_							-	_	-	_	-
Ending Balance	\$	464,552	\$	594,201	\$	633,140	\$	971,802	\$	899,270	\$	876,113
Minimum Target Balance	\$	460,747	\$	569,536	\$	576,432	\$	583,649	\$	591,201	\$	599,105
CAPITAL FUND												
Beginning Balance	\$	1,741,143	\$	1,291,531	\$	4,551,371	\$	374,189	\$	764,300	\$	1,600,271
plus: Rate Funded Capital		520,000		200,000		820,000		415,000		850,000		850,000
plus: Transfers In		189,163		144,737		144,737		144,737		144,737		144,737
less: Transfers Out		-		-				· _ ·				)
plus: Capital Grants / Contributions / Other Expenses				_						- 1		-
plus: GFC Revenue Towards Capital		-		-		, et		· · ·		_		_
plus: Net Debt Proceeds		-		5,500,000		-				-		-
plus: Interest Earnings		33,082		24,539		86,476		7,110		14,522		48,134
less: Capital Expenditures		(1,191,857)	_	(2,609,436)	_	(5,228,395)	_	(176,736)	_	(173,287)		(85,613
Ending Balance	\$	1,291,531	\$	4,551,371	\$	374,189	\$	764,300	\$	1,600,271	\$	2,557,529
Minimum Target Balance	\$	271,680	\$	292,944	\$	369,449	\$	371,970	\$	374,376	\$	375,532
PPERATING RESERVE												
Beginning Balance	\$	· · · · <u>-</u>	\$	<u>-</u> ::	\$		\$		\$		\$	_
plus: Transfer from Operating Fund		-		_		-				-		-
less: Transfers to Operating Fund	_		_		_					-		-
Minimum Target Balance	\$		\$		\$		\$		\$		\$	
Minimum Target Balance	\$	-	\$	-	\$		\$		\$	-	\$	-
 Capital reserve												
Beginning Balance	\$	· ; <u>-</u> :	\$		\$		\$	-	\$	- "	\$	-
plus: Transfer from Capital Fund		_		_						_		-
less: Transfer to Capital Fund					_	-						-
Minimum Target Balance	\$		\$		\$		\$		\$		\$	
Minimum Target Balance	\$	-	\$	-	\$	-	\$	-	\$	- 1	\$	-
EMERGENCY RESERVE												
Beginning Balance	\$	99,000	\$	99,000	\$	99,000	\$	99,000	\$	99,000	\$	99,000
plus: Transfers In		-		_		-		_				-
less: Transfers Out						-		. <del>.</del>				-
Ending Balance	\$	99,000	\$	99,000	\$	99,000	\$	99,000	\$	99,000	\$	99,000
Minimum Target Balance	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
DEBT RESERVE FUNDS												
Beginning Balance	\$	612,767	\$	612,767	\$	933,119	\$	933,119	\$	933,119	\$	933,119
plus: Reserve Funding from New Debt				320,352				-		_		-
less: Use of Reserves for Debt Service		-										-
Ending Balance	\$	612,767	\$	933,119	\$	933,119	\$	933,119	\$	933,119	\$	933,119
Minimum Target Balance	\$	_	\$	_	\$		\$		\$	,	\$	,

# PUBLIC UTILITY DISTRICT No.1 of Whatcom County Combined Utility Funds

Cash Flow Forecast for 2021 Budget

		2020		2021		2022		2023		2024		2025
OPERATING FUND												
Beginning Balance	\$	1,255,454	\$	2,489,901	\$	1,554,895	\$	1,646,932	\$	1,889,208	\$	1,897,807
plus: Net Cash Flow after Rate Increase		1,234,447		511,294	·	666,902		1,504,814	Ċ	192,056	·	387,605
less: Transfer of Surplus to Capital Fund				(1,446,300)		(574,865)		(1,262,538)		(183,457)		(384,435
Ending Balance	\$	2,489,901	\$	1,554,895	\$	1,646,932	\$	1,889,208	\$	1,897,807	\$	1,900,977
CAPITAL FUND												
Beginning Balance	\$	8,168,955	\$	7,536,107	\$	7,790,145	\$	3,242,770	\$	1,921,476	\$	3,514,543
plus: Rate Funded Capital		1,869,300		1,468,738		2,159,808		1,934,292		2,872,176		3,286,045
plus: Transfer from Operating Fund		- ::		1,446,300		574,865		1,262,538		183,457		384,435
plus: Capital Grants / Contributions / Other Expenses		15,721		61,446		492,359						_
plus: GFC Revenue Towards Capital		-		_		-		· .				
plus: EDI Loan Proceeds				. ·		i		-				- i
plus: Interest Earnings		155,210		143,186		148,013		61,613		36,508		133,839
Total Funding Sources	\$	10,209,186	\$	16,155,777	\$	11,165,190	\$	9,001,213	\$	25,013,618	\$	23,318,862
less: Capital Expenditures		(2,673,079)		(8,365,632)		(7,922,420)		(7,079,737)		(21,499,075)	·	(19,745,356)
Ending Capital Fund Balance	\$	7,536,107	\$		\$	3,242,770	\$		\$	3,514,543	\$	3,573,506
EMERGENCY RESERVE		-		-		-		-				
Beginning Balance	\$	350,000	\$	350,000	\$	350,000	\$	350,000	\$	350,000	\$	350,000
plus: Transfer from Operating Fund		-				-		-		_		_
plus: Transfer from Capital Fund		-		-		-		_		-		_
less: Transfer to Operating Fund		-		-		-				-		-
less: Transfer to Capital Fund			_		_	-		-	_			
Ending Balance	\$	350,000	\$	350,000	\$	350,000	\$	350,000	\$	350,000	\$	350,000
DEBT RESERVE FUNDS									7			
Beginning Balance	\$	3,462,423	\$	3,462,423	\$	3,529,634	\$	3,529,634	\$	3,529,634	\$	3,529,634
plus: Reserve Funding from New Debt		-		320,352		-						
less: Use of Reserves for Debt Service				(253,140)		-	_			<u> </u>		-
Ending Balance	\$	3,462,423	\$	3,529,634	\$	3,529,634	\$	3,529,634	\$	3,529,634	\$	3,529,634
LUD ASSESSMENTS FUND												
Beginning Balance	\$	246,473	\$	206,046	\$	163,113	\$	117,625	\$	69,529	\$	18,775
plus: Assessments Received		129,708		124,155		118,553		112,900		107,194		101,436
less: Use of Reserves for Debt Service	-1	(170,135)	_	(167,088)	_	(164,042)	_	(160,995)	_	(157,949)		(154,902)
Ending Balance	\$	206,046	\$	163,113	\$	117,625	¢	69,529	¢	18,775	•	(34,692)

# PUBLIC UTILITY DISTRICT of Whatcom County Historical and ProForma Debt Service Coverage From 2021 Financial Forecasts

		0000	******	*****			
		0707	2021	2022	2023	2024	2025
Revenue							
Water Utility Sales and Revenue	↔	9,316,297 \$	9,277,962 \$	9,583,471 \$	10,353,733 \$	11,444,412 \$	3 12,674,205
Electric Utility Sales and Revenue		11,583,884	11,892,772	13,207,472	13,523,024	14,469,679	14,823,097
Other Revenue		557,495	696,689	753,537	679,213	662,534	700,519
Total Revenues	↔	21,457,676 \$	21,860,704 \$	23,544,481 \$	24,555,970 \$	26,576,625 \$	3 28,197,82
Expenses (1)							
Operations and Maintenance	\$	11,453,348 \$	12,511,615 \$	13,197,703 \$	13,387,782 \$	14,339,305 \$	14,653,733
Taxes (includes taxes passed through to customer)		1,163,012	1,208,223	1,212,964			
Administration		3,021,960	3,714,753	3,602,381	3,621,863	3,812,731	3,894,077
Non-operating Expenses		ı		1	ī	1	
Total Expenses	€9	15,638,320 \$	17,434,591 \$	18,013,048 \$	18,261,501 \$	19,458,800 \$	19,916,533
Income (Loss)	€9	5,819,356 \$	4,426,113 \$	5,531,432 \$	6,294,469 \$	7,117,826 \$	8,281,287
Balance Available for Debt Service	\$	5,819,356 \$	4,426,113 \$	5,531,432 \$	6,294,469 \$	7,117,826 \$	8,281,287
Parity Debt Service							
2016 LTGO Bonds		170,135	167,088	164,042	160,995	157,949	154,902
Less Assessment Income		(129,708)	(124,155)	(118,553)	(112,900)	(107,194)	(101,436)
Total Parity Debt Service	<del>\$</del>	40,427 \$	42,933 \$	45,489 \$	48,095 \$	50,755 \$	53,466
LTGO Debt Service							
2010 LTGO Bonds - Water & Electric - Series A& B	↔	1,797,050 \$	<b>\$</b>			<b>⇔</b>	
2012 LTGO Bonds		423,388	418,488	422,538	424,998	425,580	
2013 LTGO Bonds		449,600	451,350	452,800	451,000	448,800	451,200
New Debt		1	1,785,052	1,785,052	1,935,033	3,134,881	4,094,759
Total Existing LTGO Debt Service	8	2,670,038 \$	2,654,889 \$	2,660,389 \$	2,811,030 \$	4,009,261 \$	4,545,959
Other Debt Service							
EDI Loan	φ,	44,332 \$	44,332 \$	44,332 \$	44,332 \$	44,332 \$	44,332
Total Other Debt Service	↔	44,332 \$	44,332 \$	44,332 \$	44,332 \$	44,332 \$	44,332
Balance Available for Other Purposes	↔	3,064,560 \$	1,683,958 \$	2,781,222 \$	3,391,011 \$	3,013,478 \$	3,637,529
Debt Service Coverage inc. other Water Utility Debt		2.11	1.61	2.01	2.17	1.73	1.78

<sup>(1)</sup> Excludes Depreciation, Amortization, and Interest Expense