

PUD No. 1 of Whatcom County

2022 Operating Budget BUDGET AT A GLANCE

	INDUSTRIAL WATER UTILITY 403 (Cherry Point Ind., Irrig.)	GRANDVIEW UTILITY 411 (Potable, Non-potable Water & Fire Protection)	ELECTRIC UTILITY 481	TOTAL COMBINED BUDGET
BUDGETED OPERATING REVENUE				
TOTAL DISTRICT SERVICE REVENUE (Includes Irrigation)	\$ 9,478,451	\$ 280,351	\$ 2,238,954	\$ 11,997,757
TOTAL ELECTRIC "PASS-THRU" REVENUE	-	-	9,753,904	9,753,904
TOTAL BUSINESS SERVICES REVENUE	283,000	-	-	283,000
TOTAL INTEREST AND OTHER REVENUE	51,929	610	15,485	68,025
TOTAL BUDGETED OPERATING REVENUE	\$ 9,813,381	\$ 280,962	\$ 12,008,343	\$ 22,102,685
BUDGETED OPERATING COSTS				
LABOR AND BENEFITS				
TOTAL LABOR & BENEFITS - OPERATIONS & MAINTENANCE	\$ 1,129,185	\$ 87,647	\$ 311,673	\$ 1,528,505
TOTAL LABOR & BENEFITS - ADMINISTRATION	1,587,042	16,299	771,319	2,374,660
TOTAL LABOR AND BENEFITS	\$ 2,716,228	\$ 103,945	\$ 1,082,992	\$ 3,903,165
TOTAL LABOR	1,836,423	68,055	722,689	2,627,168
TOTAL BENEFITS	879,805	35,890	360,303	1,275,997
VARIABLE O&M EXPENSE				
TOTAL PURCHASED WATER	\$ -	\$ 4,741	\$ -	\$ 4,741
TOTAL PURCHASED POWER	554,905	7,115	9,179,961	9,741,981
TOTAL TAXES ON "PASS-THRU" POWER COSTS	-	-	566,811	566,811
TOTAL WATER PURIFICATION	248,292	1,148	-	249,440
TOTAL VARIABLE O&M EXPENSE	\$ 803,197	\$ 13,004	\$ 9,746,773	\$ 10,562,973
FIXED O&M EXPENSE				
TOTAL O&M SERVICES	\$ 105,822	\$ 29,087	\$ 101,086	\$ 235,996
TOTAL MATERIAL AND SUPPLIES	93,214	19,106	43,429	155,748
TOTAL EXTRAORDINARY MAINTENANCE	815,000	25,000	50,000	890,000
TOTAL FIXED O&M EXPENSE	\$ 1,014,036	\$ 73,193	\$ 194,515	\$ 1,281,744
ADMINISTRATION, PLANNING & BUSINESS DEVELOPMENT (P&BD)				
TOTAL OUTSIDE SERVICES - ROUTINE	\$ 477,145	\$ 17,778	\$ 222,822	\$ 717,745
TOTAL OUTSIDE SERVICES - PLANNING & DEV	393,577	2,884	23,539	420,000
TOTAL INSURANCE	105,703	8,537	30,947	145,187
TOTAL OFFICE EXPENSE	225,166	9,968	97,506	332,640
TOTAL SUBSCRIPTIONS & MEMBERSHIPS	41,499	1,576	26,346	69,421
TOTAL FEES, PERMITS, & ASSESSMENTS	13,401	774	711	14,885
TOTAL ADVERTISEMENTS & NOTICES	28,464	1,125	10,262	39,851
TOTAL MILEAGE & VEHICLES EXPENSE	9,168	72	1,188	10,429
TOTAL EDUCATION & CONFERENCES	26,081	834	14,028	40,942
TOTAL PAYMENT TO ELECTRIC	78,954	-	-	78,954
TOTAL MISCELLANEOUS AND ELECTIONS	117,853	4,658	42,489	165,000
SUBTOTAL ADMIN AND P&BD BEFORE TAXES	\$ 1,517,011	\$ 48,207	\$ 469,838	\$ 2,035,055
TOTAL OTHER TAXES	485,030	15,200	147,602	647,832
TOTAL ADMIN, PLANNING & BUSINESS DEV	\$ 2,002,041	\$ 63,406	\$ 617,440	\$ 2,682,887
SUBTOTAL OPERATING BUDGET	\$ 6,535,501	\$ 253,548	\$ 11,641,720	\$ 18,430,769
BUSINESS SERVICES				
TOTAL BUSINESS SERVICES - DIRECT COSTS	\$ 283,000	\$ -	\$ -	\$ 283,000
TOTAL BUSINESS SERVICES	\$ 283,000	\$ -	\$ -	\$ 283,000
CAPITAL COSTS				
TOTAL TRANSFERS FOR CAPITAL PROJECTS	\$ 1,250,000	\$ -	\$ 220,000	\$ 1,470,000
TOTAL DEBT SERVICE - OPERATING FUNDS	1,965,705	-	530,365	2,496,070
TOTAL CAPITAL COSTS	\$ 3,215,705	\$ -	\$ 750,365	\$ 3,966,070
SUBTOTAL BUDGET BEFORE RESERVES	\$ 10,034,206	\$ 253,548	\$ 12,392,085	\$ 22,679,838
TOTAL CHANGE IN OPERATING RESERVES	\$ (220,825)	\$ 27,414	\$ (383,742)	\$ (577,153)
TOTAL BUDGETED OPERATING COSTS	\$ 9,813,381	\$ 280,962	\$ 12,008,343	\$ 22,102,685

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PUD No. 1 of Whatcom County 2022 Operating Budget INTERNAL SERVICE FUND - 500 Allocation of Costs to Other Funds		/-----Allocation to Other Funds-----/			
	INTERNAL SERVICE FUND	INDUSTRIAL WATER UTILITY - 403	GRANDVIEW UTILITY - 411	ELECTRIC UTILITY - 481	TOTAL ALLOCATION
LABOR & BENEFITS - ADMINISTRATION					
TOTAL LABOR & BENEFITS - ADMINISTRATION	\$ 2,374,660	\$ 1,587,042	\$ 16,299	\$ 771,319	\$ 2,374,660
Allocation Factors ->	100.0%	70.6%	3.1%	26.3%	100%
ADMINISTRATION AND PLANNING & BUSINESS DEVELOPMENT (P&BD)					
TOTAL CONTRACT SVC COSTS - DISTRICT	\$ 240,080	\$ 169,381	\$ 7,470	\$ 63,228	\$ 240,080
TOTAL CONTRACT SVC COSTS - P&BD	90,000	65,536	-	24,464	90,000
TOTAL INSURANCE	77,491	54,672	2,411	20,408	77,491
TOTAL OFFICE EXPENSE	302,326	214,310	8,016	80,000	302,326
TOTAL SUBSCRIPTIONS & MEMBERSHIPS	55,832	39,461	1,641	14,730	55,832
TOTAL FEES, PERMITS, & ASSESSMENTS	2,462	1,737	77	648	2,462
TOTAL ADVERTISEMENTS / NOTICES	39,851	29,019	-	10,832	39,851
TOTAL MILEAGE & MEETINGS	2,560	1,864	-	696	2,560
TOTAL EDUCATION & CONFERENCE	26,010	18,940	-	7,070	26,010
TOTAL MISCELLANEOUS	165,000	120,149	-	44,851	165,000
SUBTOTAL ADMIN AND P&BD BEFORE TAXES	\$ 1,001,613	\$ 715,070	\$ 19,615	\$ 266,928	\$ 1,001,613
TAXES	560	395	17	148	560
TOTAL ADMINISTRATION AND P&BD (Net of Labor)	\$ 1,002,174	\$ 715,465	\$ 19,632	\$ 267,076	\$ 1,002,174
CAPITAL COSTS					
TOTAL RATE FUNDED CAPITAL TRANSFER	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL TRANSFER TO RURAL ELEC DEV FUND	-	-	-	-	-
TOTAL CAPITAL COSTS	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL INTERNAL SERVICE FUND - 500	\$ 3,376,834	\$ 2,302,508	\$ 35,931	\$ 1,038,395	\$ 3,376,834

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PUD No.1 of Whatcom County 2022 Operating Budget ALL FUNDS SUMMARY Internal Service Fund Transfers Highlighted	INTERNAL SERVICES FUND - 500	INDUSTRIAL WATER UTILITY - 403 (Cherry Point, Ind., Irrigation.)			GRANDVIEW UTILITY - 411			ELECTRIC UTILITY - 481			TOTAL COMBINED BUDGET
	Allocated to Other Funds	Direct	Allocated from IS	Net	Direct	Allocated from IS	Net	Direct	Allocated from IS	Net	
BUDGETED OPERATING REVENUE											
TOTAL DISTRICT SERVICE REVENUE (Includes Irrigation)				\$ 9,478,451			\$ 280,351			\$ 2,238,954	\$ 11,997,757
TOTAL ELECTRIC "PASS-THRU" REVENUE										9,753,904	9,753,904
TOTAL BUSINESS SERVICE REVENUE				283,000						-	283,000
TOTAL INTEREST AND OTHER REVENUE				51,929			610			15,485	68,025
TOTAL BUDGETED OPERATING REVENUE	\$ -	\$ -		\$ 9,813,381	\$ -		\$ 280,962	\$ -		\$ 12,008,343	\$ 22,102,685
BUDGETED OPERATING COSTS											
LABOR AND BENEFITS											
TOTAL LABOR & BENEFITS - OPERATIONS & MAINTENANCE		\$ 1,129,185		\$ 1,129,185	\$ 87,647		\$ 87,647	\$ 311,673		\$ 311,673	\$ 1,528,505
TOTAL LABOR & BENEFITS - ADMINISTRATION	(2,374,660)	-	1,587,042	1,587,042	-	16,299	16,299	-	771,319	771,319	2,374,660
TOTAL LABOR AND BENEFITS	\$ (2,374,660)	\$ 1,129,185	\$ 1,587,042	\$ 2,716,228	\$ 87,647	\$ 16,299	\$ 103,945	\$ 311,673	\$ 771,319	\$ 1,082,992	\$ 3,903,165
TOTAL LABOR		1,836,423		1,836,423	68,055		68,055	722,689		722,689	2,627,168
TOTAL BENEFITS		879,805		879,805	35,890		35,890	360,303		360,303	1,275,997
VARIABLE O&M EXPENSE											
TOTAL PURCHASED WATER		\$ -		\$ -	\$ 4,741		\$ 4,741	\$ -		\$ -	\$ 4,741
TOTAL PURCHASED POWER		554,905		554,905	7,115		7,115	9,179,961		9,179,961	9,741,981
TOTAL TAXES PROCESS/DELIVERY COST		-		-	-		-	566,811		566,811	566,811
TOTAL WATER PURIFICATION		248,292		248,292	1,148		1,148	-		-	249,440
TOTAL VARIABLE O&M EXPENSE	\$ -	\$ 803,197	\$ -	\$ 803,197	\$ 13,004	\$ -	\$ 13,004	\$ 9,746,773	\$ -	\$ 9,746,773	\$ 10,562,973
FIXED O&M EXPENSE (Net of Labor and Benefits)											
TOTAL O&M SERVICES		\$ 105,822		\$ 105,822	\$ 29,087		\$ 29,087	\$ 101,086		\$ 101,086	\$ 235,996
TOTAL MATERIAL AND SUPPLIES		93,214		93,214	19,106		19,106	43,429		43,429	155,748
TOTAL EXTRAORDINARY MAINTENANCE		815,000		815,000	25,000		25,000	50,000		50,000	890,000
TOTAL FIXED O&M EXPENSE	\$ -	\$ 1,014,036	\$ -	\$ 1,014,036	\$ 73,193	\$ -	\$ 73,193	\$ 194,515	\$ -	\$ 194,515	\$ 1,281,744
ADMINISTRATION, PLANNING & BUSINESS DEVELOPMENT (P&BD)											
TOTAL OUTSIDE SERVICES - ROUTINE	\$ (240,080)	\$ 307,764	\$ 169,381	\$ 477,145	\$ 10,308	\$ 7,470	\$ 17,778	\$ 159,594	\$ 63,228	\$ 222,822	\$ 717,745
TOTAL OUTSIDE SERVICES - PLANNING	(90,000)	328,041	65,536	393,577	2,884	-	2,884	(925)	24,464	23,539	420,000
TOTAL INSURANCE	(77,491)	51,031	54,672	105,703	6,126	2,411	8,537	10,539	20,408	30,947	145,187
TOTAL OFFICE EXPENSE	(302,326)	10,855	214,310	225,166	1,952	8,016	9,968	17,506	80,000	97,506	332,640
TOTAL SUBSCRIPTIONS & MEMBERSHIPS	(55,832)	2,038	39,461	41,499	(64)	1,641	1,576	11,615	14,730	26,346	69,421
TOTAL FEES, PERMITS, & ASSESSMENTS	(2,462)	11,664	1,737	13,401	697	77	774	63	648	711	14,885
TOTAL ADVERTISEMENTS & NOTICES	(39,851)	(555)	29,019	28,464	1,125	-	1,125	(570)	10,832	10,262	39,851
TOTAL MILEAGE & VEHICLES EXPENSE	(2,560)	7,304	1,864	9,168	72	-	72	492	696	1,188	10,429
TOTAL EDUCATION & CONFERENCES	(26,010)	7,141	18,940	26,081	834	-	834	6,958	7,070	14,028	40,942
TOTAL PAYMENT TO ELECTRIC	-	78,954		78,954	-		-	-		-	78,954
TOTAL MISCELLANEOUS AND ELECTIONS	(165,000)	(2,296)	120,149	117,853	4,658	-	4,658	(2,362)	44,851	42,489	165,000
SUBTOTAL ADMIN AND P&BD BEFORE TAXES	\$ (1,001,613)	\$ 801,941	\$ 715,070	\$ 1,517,011	\$ 28,592	\$ 19,615	\$ 48,207	\$ 202,909	\$ 266,928	\$ 469,838	\$ 2,035,055
TOTAL OTHER TAXES	(560)	484,634	395	485,030	15,182	17	15,200	147,455	148	147,602	647,832
TOTAL ADMINISTRATION AND P&BD	\$ (1,002,174)	\$ 1,286,575	\$ 715,465	\$ 2,002,041	\$ 43,774	\$ 19,632	\$ 63,406	\$ 350,364	\$ 267,076	\$ 617,440	\$ 2,682,887
Administration and P & BD Including Labor & Benefits				\$3,589,083			\$79,705			\$1,388,759	\$5,057,547
SUBTOTAL OPERATIONS	\$ (3,376,834)	\$ 4,232,993	\$ 2,302,508	\$ 6,535,501	\$ 217,617	\$ 35,931	\$ 253,548	\$ 10,603,324	\$ 1,038,395	\$ 11,641,720	\$ 18,430,769
BUSINESS SERVICES											
TOTAL BUSINESS SERVICES - DIRECT COSTS	-	283,000		283,000	-		-	-		-	\$ 283,000
TOTAL BUSINESS SERVICES	\$ -	\$ 283,000	\$ -	\$ 283,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 283,000
CAPITAL COSTS											
TOTAL TRANSFERS FOR CAPITAL PROJECTS	\$ -	\$ 1,250,000		1,250,000	\$ -	\$ -	\$ 220,000	\$ 220,000		\$ 220,000	\$ 1,470,000
TOTAL DEBT SERVICE - OPERATING FUNDS	-	1,965,705		1,965,705	-	-	530,365	530,365		530,365	2,496,070
TOTAL CAPITAL COSTS	\$ -	\$ 3,215,705	\$ -	\$ 3,215,705	\$ -	\$ -	\$ -	\$ 750,365	\$ -	\$ 750,365	\$ 3,966,070
TOTAL BUDGET BEFORE RESERVES	\$ (3,376,834)	\$ 7,731,698	\$ 2,302,508	\$ 10,034,206	\$ 217,617	\$ 35,931	\$ 253,548	\$ 11,353,690	\$ 1,038,395	\$ 12,392,085	\$ 22,679,838
TOTAL CHANGE IN OPERATING RESERVES	\$ -	\$ (220,825)	\$ -	\$ (220,825)	\$ 27,414	\$ -	\$ 27,414	\$ (383,742)	\$ -	\$ (383,742)	\$ (577,153)
TOTAL BUDGETED OPERATING COSTS	\$ (3,376,834)	\$ 7,510,873	\$ 2,302,508	\$ 9,813,381	\$ 245,031	\$ 35,931	\$ 280,962	\$ 10,969,948	\$ 1,038,395	\$ 12,008,343	\$ 22,102,685

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PUD No. 1 of Whatcom County

2022 Operating Budget

Revenue Budget

OPERATING REVENUE - SUMMARY	403 - Industrial Water Utility	411 - Grandview Utility	481 - Electric Utility	TOTAL
Service Revenue	\$ 9,478,451	\$ 280,351	\$ 11,992,858	\$ 21,751,660
Business Services Revenue	283,000	-	-	283,000
Interest and Other Revenue	51,929	610	15,485	68,025
TOTAL OPERATING REVENUE	\$ 9,813,381	\$ 280,962	\$ 12,008,343	\$ 22,102,685

Service Revenue	403 - Industrial Water Utility	411 - Grandview Utility	481 - Electric Utility	TOTAL
WATER SALES				
INDUSTRIAL				
Operations	\$ 3,416,801	\$ 40,767		\$ 3,457,568
Fire Protection	19,571	74,508		94,079
Fixed Capital	4,312,318			4,312,318
Variable	1,645,559	165,076		1,810,635
TOTAL INDUSTRIAL	9,394,248	280,351	-	9,674,599
TEMPORARY WATER SALES				
Operations	2,636			2,636
TOTAL TEMPORARY WATER SALES	2,636	-	-	2,636
IRRIGATION				
Fixed	16,895			16,895
Variable	64,672			64,672
TOTAL IRRIGATION	81,567	-	-	81,567
SUBTOTAL WATER SALES	9,478,451	280,351	-	9,758,802
ELECTRIC SALES				
DIRECT SALES				
Power			8,200,396	8,200,396
Transmission			986,697	986,697
Taxes			566,811	566,811
DISTRICT SERVICES			2,238,954	2,238,954
SUBTOTAL ELECTRIC SALES	-	-	11,992,858	11,992,858
Total Service Revenue	\$ 9,478,451	\$ 280,351	\$ 11,992,858	\$ 21,751,660

Business Services Revenue	403 - Industrial Water Utility	411 - Grandview Utility	481 - Electric Utility	TOTAL
1) Education and Outreach	100,000	-	-	100,000
2) Regional Water Supply Plan	143,000	-	-	143,000
3) Water Group A work	40,000	-	-	40,000
				-
Total Business Services Revenue	\$ 283,000	\$ -	\$ -	\$ 283,000

Revenues received for business services - see page 9 under Business Services.

Interest and Other Revenue	403 - Industrial Water Utility	411 - Grandview Utility	481 - Electric Utility	TOTAL
Interest Revenue	\$ 46,119	\$ 610	\$ 15,485	\$ 62,215
Other Revenue	5,810	-	-	5,810
Total Interest and Other Revenue	\$ 51,929	\$ 610	\$ 15,485	\$ 68,025

Other revenues include cell tower rent, reimbursement from customers for customer specific projects, partial reimbursement from the Port for Telecom PM and land rental.



PUD No. 1 of Whatcom County
2022 Operating Budget

Labor and Benefits Budget

LABOR & BENEFITS - SUMMARY	403 - Industrial Water Utility	411 - Grandview	481 - Electric	TOTAL
Labor & Benefits -Operations & Maintenance	\$ 1,129,185	\$ 87,647	\$ 311,673	\$ 1,528,505
Labor & Benefits - Administration	1,587,042	16,299	771,319	2,374,660
TOTAL LABOR & BENEFITS	\$ 2,716,228	\$ 103,945	\$ 1,082,992	\$ 3,903,165

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	\$ -	\$ 4,741	\$ -	\$ 4,741
Purchased Power & Transmission	554,905	7,115	9,179,961	9,741,981
Water Purification	248,292	1,148	-	249,440
"Pass-Thru" Utility Taxes (Electric)	-	-	566,811	566,811
TOTAL VARIABLE O&M EXPENSE	\$ 803,197	\$ 13,004	\$ 9,746,773	\$ 10,562,973

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	\$ 554,905	\$ 7,115	\$ 8,193,264	\$ 8,755,284
Transmission			986,697	986,697
Total Power & Transmission Expense	\$ 554,905	\$ 7,115	\$ 9,179,961	\$ 9,741,981

Power is purchased from the BPA for resale to Phillips 66 and to supply the pumping requirements of Water Treatment Plant #1 and Water Treatment 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	\$ 148,233	\$ 1,148		\$ 149,380
Plant #2 Chemicals	100,059			100,059
Total Water Purification	\$ 248,292	\$ 1,148	\$ -	\$ 249,440

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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2022 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	\$ 105,822	\$ 29,087	\$ 101,086	\$ 235,996
Material & Supplies	93,214	19,106	43,429	155,748
Extraordinary Maintenance	815,000	25,000	50,000	890,000
TOTAL FIXED O&M EXPENSE	\$ 1,014,036	\$ 73,193	\$ 194,515	\$ 1,281,744

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	\$ 67,055	\$ 2,571	\$ 23,454	\$ 93,080
Computer Services	21,428	847	7,725	30,000
Engineering	290,713	11,412	72,875	375,000
Legal Services	64,284	1,553	44,163	110,000
System Monitoring	2,143	1,085	773	4,000
Outside Consulting - Other	28,857	311	8,833	38,000
Power Regulations	2,665	-	65,000	67,665
TOTAL OUTSIDE SERVICES	\$ 477,145	\$ 17,778	\$ 222,822	\$ 717,745

Accounting / Financial Services

For maintenance and support of the District's accounting/financial software system, audit costs, and arbitrage consulting services. The audit is performed on a two year cycle, with the next audit scheduled for 2023. For 2022, 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 2022 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. In 2022 an additional amount for work with Becky Peterson was included.

Power Regulations

Costs of power & transmission regulations. Includes WECC, Spill surcharge, BPA Transmission Planner (TP) and Operator (TOP) services and Consultant services related to transmission data requests. In 2022 \$65,000 for work with Northwest Requirements Utilities (NRU) was included in addition to membership fees and cover power analysis services provided by NRU staff.



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2022 Operating Budget

PLANNING AND BUSINESS DEVELOPMENT	403 - Industrial Water Utility	411 - Grandview	481 - Electric Utility	TOTAL
1) Community Education / Communications	\$ 35,321	\$ 1,602	\$ 13,077	\$ 50,000
2) Water Contracts	5,000			5,000
3) Habitat Restoration	20,000			20,000
4) Water Supply Management	30,000			30,000
5) Water System Services	40,000			40,000
6) Adjudication	235,000			235,000
7) Strategic Plan Update	28,256	1,282	10,462	40,000
Total Planning & Business Development	\$ 393,577	\$ 2,884	\$ 23,539	\$ 420,000

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, Biologist, and other consultant expenses related to supporting, protecting and utilization of the District's water rights.

7) Strategic Plan Update - Update the District's strategic plan.



INSURANCE - SUMMARY	403 - Industrial Water Utility	411 - Grandview	481 - Electric Utility	TOTAL
Insurance - Property	\$ 51,340	\$ 6,394	\$ 11,357	\$ 69,091
Insurance - Liability	53,755	2,439	19,902	76,096
TOTAL INSURANCE	\$ 105,095	\$ 8,833	\$ 31,260	\$ 145,187

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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2022 Operating Budget

OFFICE EXPENSE - SUMMARY	403 - Industrial Water Utility	411 - Grandview	481 - Electric Utility	TOTAL
Office Supplies	\$ 10,473	\$ 314	\$ 7,526	\$ 18,313
Postage and Freight	1,431	54	570	2,055
Printing and Copies	-	-	13,321	13,321
Office Equip - Maint & Maint Contracts	2,155	85	777	3,017
Office Grounds Maintenance	15,345	607	5,532	21,484
Office Building Maintenance	16,577	655	5,976	23,208
Office - Computer Expenses	142,852	5,646	51,501	200,000
Office Expense - Other	6	0	2	8
Utilities - Communications	29,110	2,513	9,848	41,471
Utilities - Waste and Recycle	5,512	94	2,452	8,058
Utilities - Water	1,705	-	-	1,705
TOTAL OFFICE EXPENSE	\$ 225,166	\$ 9,968	\$ 97,506	\$ 332,640

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



PUD No. 1 of Whatcom County

2022 Operating Budget

SUBSCRIPTIONS & DUES - SUMMARY	403 - Industrial Water Utility	411 - Grandview	481 - Electric Utility	TOTAL
Subscriptions	\$ 3,841	\$ 88	\$ 3,808	\$ 7,737
Dues - Memberships	37,658	1,488	22,538	61,684
TOTAL SUBSCRIPTION & DUES	\$ 41,499	\$ 1,576	\$ 26,346	\$ 69,421

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, WPUWA, WFOA, WAPRO, NRU and Bellingham Whatcom Chamber of Commerce.



FEES, PERMITS, LOCATES - SUMMARY	403 - Industrial Water Utility	411 - Grandview	481 - Electric Utility	TOTAL
Miscellaneous Fees & Permits	\$ 13,113	\$ 774	\$ 711	\$ 14,597
Locates	288	-	-	288
TOTAL FEES, PERMITS, LOCATES	\$ 13,401	\$ 774	\$ 711	\$ 14,885

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	\$ 28,464	\$ 1,125	\$ 10,262	\$ 39,851
TOTAL ADVERTISEMENTS & NOTICES	\$ 28,464	\$ 1,125	\$ 10,262	\$ 39,851

Advertisements & Notices

Job advertisements, public notices, etc.



MILEAGE & MEETINGS - SUMMARY	403 - Industrial Water Utility	411 - Grandview	481 - Electric Utility	TOTAL
Mileage Reimbursement	\$ 1,000	\$ 28	\$ 530	\$ 1,558
Admin Vehicle Expense	8,168	44	658	8,870
TOTAL MILEAGE & MEETINGS	\$ 9,168	\$ 72	\$ 1,188	\$ 10,429

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



PUD No. 1 of Whatcom County

2022 Operating Budget

EDUCATION AND CONFERENCES - SUMMARY	403 - Industrial Water Utility	411 - Grandview	481 - Electric Utility	TOTAL
Mileage Reimbursement	\$ 2,145	\$ 69	\$ 1,154	\$ 3,367
Travel (Airfare, Parking)	1,098	35	590	1,723
Lodging and Meals	7,658	245	4,119	12,022
Registration	12,295	393	6,613	19,301
Meeting Supplies	1,323	42	712	2,077
Business Lunch	274	9	147	430
Education Materials	1,288	41	693	2,022
TOTAL EDUCATION AND CONFERENCES	\$ 26,081	\$ 834	\$ 14,028	\$ 40,942

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

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	\$ 78,954			\$ 78,954
TOTAL ELECTRIC GENERAL SERVICE CHARGE	\$ 78,954	\$ -	\$ -	\$ 78,954

Electric General Service Charge

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



ELECTIONS & MISCELLANEOUS - SUMMARY	403 - Industrial Water Utility	411 - Grandview	481 - Electric Utility	TOTAL
Miscellaneous Fee & Elections	\$ 117,853	\$ 4,658	\$ 42,489	\$ 165,000
TOTAL ELECTIONS & MISCELLANEOUS	\$ 117,853	\$ 4,658	\$ 42,489	\$ 165,000

Miscellaneous Fee & Elections

Miscellaneous fees not categorized elsewhere, including election costs for the primary and general elections every other year. Charges for the primary election are usually paid the same year, while the charge for the General Election may be paid the beginning of the following year. The 2022 cost would reflect the 2022 election.



PUD No. 1 of Whatcom County
2022 Operating Budget

TAXES - SUMMARY	403 - Industrial Water Utility	411 - Grandview	481 - Electric Utility	TOTAL
Utility Tax on District Services	\$ 485,030	\$ 15,200	\$ 99,689	\$ 599,918
Privilege Taxes on District Services			47,914	47,914
TOTAL TAXES	\$ 485,030	\$ 15,200	\$ 147,602	\$ 647,832

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 AND PLANNING & BUS DEV	\$ 2,001,432	\$ 63,702	\$ 617,753	\$ 2,682,887
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Business Services

BUSINESS SERVICES SUMMARY	403 - Industrial Water Utility	411 - Grandview	481 - Electric Utility	TOTAL
DIRECT EXPENSES				
1) Education and Outreach	100,000			100,000
2) Regional Water Supply Plan	143,000			143,000
3) Water Group A work	40,000			40,000
REIMBURSEMENTS				
1) Education and Outreach	(100,000)			(100,000)
2) Regional Water Supply Plan	(143,000)			(143,000)
3) Water Group A work	(40,000)			(40,000)
TOTAL BUSINESS SERVICES	\$ -	\$ -	\$ -	\$ -

DESCRIPTION:

- 1) Education and Outreach - Puget Sound Partnership Grant for education on water resources.
- 2) Regional Water Supply Plan - RWSP grant second phase.
- 3) Water Group A work - DOH grant to work with Group A water systems to install pressure transducers.



PUD No. 1 of Whatcom County
2022 Operating Budget

Debt Service

DEBT SERVICE SUMMARY	403 - Industrial Water Utility	411 - Grandview	481 - Electric Utility	TOTAL
2012 LTGO Series A	216,715			216,715
2012 LTGO Series B	144,040		61,783	205,823
2013 LTGO Bonds	452,800			452,800
2016 LTGO Bonds		164,042		164,042
2021 LTGO Bonds	1,107,818		468,582	1,576,400
EDI Loan	44,332			44,332
TOTAL DEBT SERVICE	\$ 1,965,705	\$ 164,042	\$ 530,365	\$ 2,660,111

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.



PUD No. 1 of Whatcom County 2022 Operating Budget By Function						
	OPERATIONS & MAINTENANCE	ADMIN, P&BD	BUSINESS SERVICES	RATE FUNDED CAPITAL COSTS & RESERVE CHANGES		
INDUSTRIAL WATER UTILITY - 403 (Cherry Point Industrial, Irrigation)	Total O&M Costs	Total Admin Costs	Net Bus Ser Costs	Direct Costs	Alloc. from Other Functions	TOTAL BUDGET
LABOR AND BENEFITS (Net of Capitalized Labor)						
TOTAL LABOR AND BENEFITS	\$ 1,129,185	\$ 1,587,042	\$ -	\$ -	\$ -	\$ 2,716,228
TOTAL LABOR	738,063	1,098,361	-	-	-	1,836,423
TOTAL BENEFITS	391,123	488,682	-	-	-	879,805
VARIABLE O&M EXPENSE						
TOTAL PURCHASED POWER	\$ 554,905	\$ -	\$ -	\$ -	\$ -	\$ 554,905
TOTAL WATER PURIFICATION	248,292	-	-	-	-	248,292
TOTAL VARIABLE O&M EPENSE	\$ 803,197	\$ -	\$ -	\$ -	\$ -	\$ 803,197
FIXED O&M EXPENSE						
TOTAL O&M SERVICES	\$ 105,822	\$ -	\$ -	\$ -	\$ -	\$ 105,822
TOTAL MATERIAL/SUPPLY	93,214	-	-	-	-	93,214
TOTAL EXTRAORDINARY MAINTENANCE	815,000	-	-	-	-	815,000
TOTAL FIXED O&M EXPENSE	\$ 1,014,036	\$ -	\$ -	\$ -	\$ -	\$ 1,014,036
ADMINISTRATION AND PLANNING & BUSINESS DEVELOPMENT (P&BD)						
TOTAL CONTRACT SVC COSTS - DISTRICT	\$ -	\$ 477,145	\$ -	\$ -	\$ -	\$ 477,145
TOTAL CONTRACT SVC COSTS - P&BD	-	393,577	-	-	-	393,577
TOTAL INSURANCE	-	105,703	-	-	-	105,703
TOTAL OFFICE EXPENSE	-	225,166	-	-	-	225,166
TOTAL SUBSCRIPTIONS & MEMBERSHIPS	-	41,499	-	-	-	41,499
TOTAL FEES, PERMITS & ASSESSMENTS	-	13,401	-	-	-	13,401
TOTAL ADVERTISEMENTS & NOTICES	-	28,464	-	-	-	28,464
TOTAL MILEAGE & MEETINGS	-	9,168	-	-	-	9,168
TOTAL EDUCATION & CONFERENCES	-	26,081	-	-	-	26,081
TOTAL PAYMENT TO ELECTRIC	-	78,954	-	-	-	78,954
TOTAL MISCELLANEOUS & OTHER	-	117,853	-	-	-	117,853
TOTAL TELECOM DEBT SERVICE (Noanet & Series B DS)	-	-	-	-	-	-
SUBTOTAL ADMIN AND P&BD BEFORE TAXES	\$ -	\$ 1,517,011	\$ -	\$ -	\$ -	\$ 1,517,011
TOTAL TAXES NET OF RURAL ELECTRIC CREDIT	-	485,030	-	-	-	485,030
TOTAL ADMIN, PLANNING & BUSINESS DEV	\$ -	\$ 2,002,041	\$ -	\$ -	\$ -	\$ 2,002,041
BUSINESS SERVICES						
TOTAL BUSINESS SERVICE DIRECT COSTS	\$ -	\$ -	\$ 283,000	\$ -	\$ -	\$ 283,000
TOTAL BUSINESS SERVICES	\$ -	\$ -	\$ 283,000	\$ -	\$ -	\$ 283,000
TOTAL BUDGET FOR OPERTIONS	\$ 2,946,418	\$ 3,589,083	\$ 283,000	\$ -	\$ -	\$ 6,818,501
CAPITAL COSTS						
TOTAL RATE FUNDED CAPITAL TRANSFER - 403	\$ -	\$ -	\$ -	\$ 1,250,000	\$ -	\$ 1,250,000
TOTAL TRANSFER FROM GRANDVIEW FUND FOR CAPITAL	-	-	-	-	-	-
TOTAL DEBT SERVICE - 403	-	-	-	1,965,705	-	1,965,705
TOTAL CAPITAL COSTS	\$ -	\$ -	\$ -	\$ 3,215,705	\$ -	\$ 3,215,705
TOTAL BUDGET BEFORE RESERVES	\$ 2,946,418	\$ 3,589,083	\$ 283,000	\$ 3,215,705	\$ -	\$ 10,034,206
CHANGES IN OPERATING RESERVES						
ADDITIONS TO MAINTAIN MINIMUM RESERVES						
TOTAL CHANGE IN RESERVES TO SMOOTH RATES	\$ -	\$ -	\$ -	\$ (220,825)	\$ -	\$ (220,825)
TOTAL CHANGES IN OPERATING RESERVES	\$ -	\$ -	\$ -	\$ (220,825)	\$ -	\$ (220,825)
TOTAL OPERATING BUDGET - 403	\$ 2,946,418	\$ 3,589,083	\$ 283,000	\$ 2,994,880	\$ -	\$ 9,813,381

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PUD No. 1 of Whatcom County 2022 Operating Budget By Function						
	OPERATIONS & MAINTENANCE	ADMIN, P&BD	BUSINESS SERVICES	RATE FUNDED CAPITAL COSTS & RESERVE CHANGES		
GRANDVIEW WATER UTILITY - 411 (Potable and Fire)	Total O&M Costs	Total Admin Costs	Net Bus Ser Costs	Direct Costs	Alloc. from Other Functions	TOTAL BUDGET
LABOR AND BENEFITS (Net of Capitalized Labor)						
TOTAL LABOR AND BENEFITS	\$ 87,647	\$ 16,299	\$ -	\$ -	\$ -	\$ 103,945
TOTAL LABOR	56,735	11,320	-	-	-	68,055
TOTAL BENEFITS	30,911	4,979				35,890
VARIABLE O&M EXPENSE						
TOTAL PURCHASED WATER	\$ 4,741	\$ -	\$ -	\$ -	\$ -	\$ 4,741
TOTAL PURCHASED POWER	7,115	-	-	-	-	7,115
TOTAL WATER PURIFICATION	1,148	-	-	-	-	1,148
TOTAL VARIABLE O&M EPENSE	\$ 13,004	\$ -	\$ -	\$ -	\$ -	\$ 13,004
FIXED O&M EXPENSE						
TOTAL O&M SERVICES	\$ 29,087	\$ -	\$ -	\$ -	\$ -	\$ 29,087
TOTAL MATERIAL/SUPPLY	19,106	-	-	-	-	19,106
TOTAL EXTRAORDINARY MAINTENANCE	25,000	-	-	-	-	25,000
TOTAL FIXED O&M EXPENSE	\$ 73,193	\$ -	\$ -	\$ -	\$ -	\$ 73,193
ADMINISTRATION AND PLANNING & BUSINESS DEVELOPMENT (P&BD)						
TOTAL CONTRACT SVC COSTS - DISTRICT	\$ -	\$ 17,778	\$ -	\$ -	\$ -	\$ 17,778
TOTAL CONTRACT SVC COSTS - P&BD	-	2,884	-	-	-	2,884
TOTAL INSURANCE	-	8,537	-	-	-	8,537
TOTAL OFFICE EXPENSE	-	9,968	-	-	-	9,968
TOTAL SUBSCRIPTIONS & MEMBERSHIPS	-	1,576	-	-	-	1,576
TOTAL FEES, PERMITS & ASSESSMENTS	-	774	-	-	-	774
TOTAL ADVERTISEMENTS & NOTICES	-	1,125	-	-	-	1,125
TOTAL MILEAGE & MEETINGS	-	72	-	-	-	72
TOTAL EDUCATION & CONFERENCES	-	834	-	-	-	834
TOTAL MISCELLANEOUS & OTHER	-	4,658	-	-	-	4,658
TOTAL TELECOM DEBT SERVICE (Noanet & Series B DS)	-	-	-	-	-	-
SUBTOTAL ADMIN AND P&BD BEFORE TAXES	\$ -	\$ 48,207	\$ -	\$ -	\$ -	\$ 48,207
TOTAL TAXES	-	15,200	-	-	-	15,200
TOTAL ADMIN, PLANNING & BUSINESS DEV	\$ -	\$ 63,406	\$ -	\$ -	\$ -	\$ 63,406
BUSINESS SERVICES						
TOTAL BUSINESS SERVICE DIRECT COSTS	-	-	-	-	-	-
TOTAL BUSINESS SERVICE REIMBURSEMENT	-	-	-	-	-	-
NET BUSINESS SERVICES	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL BUDGET FOR OPERATIONS	\$ 173,843	\$ 79,705	\$ -	\$ -	\$ -	\$ 253,548
CAPITAL COSTS						
TOTAL RATE FUNDED CAPITAL TRANSFER - 403	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL TRANSFER TO INDUSTRIAL WATER FOR CAPITAL	-	-	-	-	-	-
TOTAL DEBT SERVICE SHORT - 411	-	-	-	-	-	-
TOTAL CAPITAL COSTS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL BUDGET BEFORE RESERVES	\$ 173,843	\$ 79,705	\$ -	\$ -	\$ -	\$ 253,548
CHANGES IN OPERATING RESERVES						
ADDITIONS TO MAINTAIN MINIMUM RESERVES						
TOTAL CHANGE IN RESERVES TO SMOOTH RATES	\$ -	\$ -	\$ -	\$ 27,414	\$ -	\$ 27,414
TOTAL CHANGES IN OPERATING RESERVES	\$ -	\$ -	\$ -	\$ 27,414	\$ -	\$ 27,414
TOTAL OPERATING BUDGET - 411	\$ 173,843	\$ 79,705	\$ -	\$ 27,414	\$ -	\$ 280,962

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PUD No. 1 of Whatcom County 2022 Operating Budget By Function						
	OPERATIONS & MAINTENANCE	ADMIN, P&BD	BUSINESS SERVICES	RATE FUNDED CAPITAL COSTS & RESERVE CHANGES		
ELECTRIC UTILITY - 481	Total O&M Costs	Total Admin Costs	Net Bus Ser Costs	Direct Costs	Alloc. from Other Functions	TOTAL BUDGET
LABOR AND BENEFITS (Net of Capitalized Labor)						
TOTAL LABOR AND BENEFITS	\$ 311,673	\$ 771,319	\$ -	\$ -	\$ -	\$ 1,082,992
TOTAL LABOR	204,429	518,260	-	-	-	722,689
TOTAL BENEFITS	107,244	253,059				360,303
VARIABLE O&M EXPENSE						
TOTAL PURCHASED POWER	\$ 9,746,773	\$ -	\$ -	\$ -	\$ -	\$ 9,746,773
TOTAL WATER PURIFICATION	-	-	-	-	-	-
TOTAL VARIABLE O&M EXPENSE	\$ 9,746,773	\$ -	\$ -	\$ -	\$ -	\$ 9,746,773
FIXED O&M EXPENSE						
TOTAL O&M SERVICES	\$ 101,086	\$ -	\$ -	\$ -	\$ -	\$ 101,086
TOTAL MATERIAL/SUPPLY	43,429	-	-	-	-	43,429
TOTAL EXTRAORDINARY MAINTENANCE	50,000	-	-	-	-	50,000
TOTAL FIXED O&M EXPENSE	\$ 194,515	\$ -	\$ -	\$ -	\$ -	\$ 194,515
ADMINISTRATION AND PLANNING & BUSINESS DEVELOPMENT (P&BD)						
TOTAL CONTRACT SVC COSTS - DISTRICT	\$ -	\$ 222,822	\$ -	\$ -	\$ -	\$ 222,822
TOTAL CONTRACT SVC COSTS - P&BD	-	23,539	-	-	-	23,539
TOTAL INSURANCE	-	30,947	-	-	-	30,947
TOTAL OFFICE EXPENSE	-	97,506	-	-	-	97,506
TOTAL SUBSCRIPTIONS & MEMBERSHIPS	-	26,346	-	-	-	26,346
TOTAL FEES, PERMITS & ASSESSMENTS	-	711	-	-	-	711
TOTAL ADVERTISEMENTS & NOTICES	-	10,262	-	-	-	10,262
TOTAL MILEAGE & MEETINGS	-	1,188	-	-	-	1,188
TOTAL EDUCATION & CONFERENCES	-	14,028	-	-	-	14,028
TOTAL MISCELLANEOUS & OTHER	-	42,489	-	-	-	42,489
TOTAL TELECOM DEBT SERVICE (Noanet & Series B DS)	-	-	-	-	-	-
SUBTOTAL ADMIN AND P&BD BEFORE TAXES	\$ -	\$ 469,838	\$ -	\$ -	\$ -	\$ 469,838
TOTAL TAXES NET OF RURAL ELECTRIC CREDIT	-	147,602	-	-	-	147,602
TOTAL ADMIN, PLANNING & BUSINESS DEV	\$ -	\$ 617,440	\$ -	\$ -	\$ -	\$ 617,440
BUSINESS SERVICES						
TOTAL BUSINESS SERVICE DIRECT COSTS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL BUSINESS SERVICE REIMBURSEMENT	-	-	-	-	-	-
NET BUSINESS SERVICES	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL BUDGET FOR OPERATIONS	\$ 10,252,960	\$ 1,388,759	\$ -	\$ -	\$ -	\$ 11,641,720
CAPITAL COSTS						
TOTAL RATE FUNDED CAPITAL TRANSFER - 403	\$ -	\$ -	\$ -	\$ 220,000	\$ -	\$ 220,000
TOTAL TRANSFER TO ELECTRIC FUND FOR CAPITAL	-	-	-	-	-	-
TOTAL DEBT SERVICE	-	-	-	530,365	-	530,365
TOTAL CAPITAL COSTS	\$ -	\$ -	\$ -	\$ 750,365	\$ -	\$ 750,365
TOTAL BUDGET BEFORE RESERVES	\$ 10,252,960	\$ 1,388,759	\$ -	\$ 750,365	\$ -	\$ 12,392,085
CHANGES IN OPERATING RESERVES						
TOTAL ADDITIONS TO MAINTAIN MINIMUM RESERVES	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL CHANGE IN RESERVES TO SMOOTH RATES	-	-	-	(383,742)	-	(383,742)
TOTAL CHANGES IN OPERATING RESERVES	\$ -	\$ -	\$ -	\$ (383,742)	\$ -	\$ (383,742)
TOTAL OPERATING BUDGET - 481	\$ 10,252,960	\$ 1,388,759	\$ -	\$ 366,623	\$ -	\$ 12,008,343

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PUBLIC UTILITY DISTRICT #1 of Whatcom County

Estimates for Alcoa Escrow Fund (490)

	2021	2022	2023	2024	2025	2026	2027	2028	2021-2028 TOTAL
Beginning Balance	\$420,068	\$220,268	\$22,471	\$22,696	\$22,923	\$23,152	\$23,383	\$23,617	\$420,068
<i>Plus: Interest Revenue (net of fees)</i>	4,201	2,203	225	227	229	232	234	236	7,786
Less: Study for infrastructure projects including but not limited to wind, solar, natural gas, and hydrogen in Whatcom county. \$200,000 project with a \$100,000 grant from EDI.		(100,000)							(100,000)
Less: Mike Owens connection	(204,000)								(204,000)
Less: Broadband Vision for those underserved in Whatcom county		(100,000)							(100,000)
Less: Clean & Renewable Energy Study "COB"		(50,000)							(50,000)
Plus: CERB Grant		50,000							50,000
Ending Balance	\$220,268	\$22,471	\$22,696	\$22,923	\$23,152	\$23,383	\$23,617	\$23,853	\$23,853

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PUD No. 1 of Whatcom County

EMPLOYEE COST SUMMARY

2022				2021				2020	
EMPLOYEES w/o Commissioners	Budget Count	Change	Forecast Count	Change	Forecast Count	Change	Actual Count		
Administration and Finance	16	4	12			1	11		
O&M Management	2	0	2			0	2		
Water Operations	6	0	6			0	6		
Electric Operations	3	1	2			0	2		
TOTAL EMPLOYEES*	27	5	22			1	21		
LABOR & BENEFIT COSTS	Budget	\$ Change	Percent	Forecast	\$ Change	Percent	Actual		
Employee	\$ 3,923,166	\$ 964,281	32.6%	\$ 2,958,885	\$ 48,957	1.7%	\$ 2,909,928		
Commissioner	215,031	(13,646)	-6.0%	228,677	23,729	11.6%	204,948		
TOTAL LABOR & BENEFITS	\$ 4,138,197	\$ 950,635	29.8%	\$ 3,187,562	\$ 72,687	2.3%	\$ 3,114,876		
Operations	\$ 3,903,165	\$ 865,186		\$ 3,037,979	\$ 36,485		\$ 3,001,495		
Capital	\$ 235,032	\$ 85,449		\$ 149,583	\$ 36,202		\$ 113,381		

* Employee count is as of December 31st

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PUD No. 1 of Whatcom County 2022 LABOR & BENEFIT COST ALLOCATION	LABOR HOURS	Percent of Labor Hours			LABOR COSTS	PENSION	SOC SEC & MEDICARE	WORKMANS COMP	PFML	HEALTH BENEFITS	CLOTHING ALLOWANCE	TOTAL BENEFITS	TOTAL LABOR AND BENEFITS
		Operations & Capital	Without Grandview	Tax & Cap Alloc (Excl. Alcoa Escrow)									
INDUSTRIAL WATER UTILITY - 403 (Cherry Point Ind., Wholesale Irrigation)	37,652.18	67%	72.8%	70.6%	1,835,423.07	180,272.83	130,966.73	13,717.64	4,696.70	548,206.28	1,944.34	879,804.52	2,716,227.59
TOTAL OPERATIONS	10,067.69				357,600.98	58,268.63	27,363.45	5,661.77	1,053.83	91,922.20	1,228.61	185,399.49	543,000.47
TOTAL MAINTENANCE	9,370.79				360,461.58	51,696.72	30,599.65	5,920.25	1,105.36	115,685.65	714.73	205,723.35	586,184.93
TOTAL PLANNING & BUSINESS DEV	-				-	-	-	-	-	-	-	-	-
TOTAL BUSINESS SERVICES	-				-	-	-	-	-	-	-	-	-
TOTAL ADMINISTRATION	18,213.70				1,098,360.51	70,307.48	73,003.64	2,135.62	2,536.50	340,698.43	-	488,681.68	1,587,042.18
GENERAL MANAGER	3,067.62				331,146.50	13,370.16	10,320.70	152.87	446.98	28,797.68	-	33,092.38	364,238.68
GENERAL ADMINISTRATION	10,665.22				484,121.95	40,799.67	39,781.86	1,592.23	1,331.88	158,263.60	-	241,776.24	725,898.18
CONTRACTS AND RESOURCE MANAGMT	2,080.00				91,911.02	7,896.26	7,142.91	174.92	292.87	38,034.44	-	54,101.49	146,012.51
FINANCE AND CUSTOMERS	2,228.15				93,579.33	8,141.40	7,181.64	208.61	257.56	44,599.44	-	61,380.11	154,559.44
COMMISSIONERS	171.82				97,601.71	-	7,466.63	-	247.13	70,617.81	-	78,331.47	175,033.18
GRANDVIEW - POTABLE WATER - 411	1,318.25	2.4%		2.5%	52,612.01	8,395.02	4,029.27	708.17	154.93	14,212.96	148.44	27,648.80	80,260.82
TOTAL OPERATIONS	945.33				33,382.90	6,451.90	2,563.79	530.85	100.74	8,627.32	136.35	18,400.95	51,783.85
TOTAL MAINTENANCE	251.71				10,772.05	1,251.90	880.87	166.36	30.92	3,443.82	12.10	5,785.96	16,558.01
TOTAL PLANNING & BUSINESS DEV	-				-	-	-	-	-	-	-	-	-
TOTAL BUSINESS SERVICES	-				-	-	-	-	-	-	-	-	-
TOTAL ADMINISTRATION	121.21				8,457.06	691.22	594.61	10.96	23.28	2,141.82	-	3,461.90	11,918.96
GENERAL MANAGER	63.90				6,144.20	490.00	402.29	6.04	16.91	1,104.45	-	2,019.69	8,163.89
GENERAL ADMINISTRATION	16.33				1,177.48	102.44	97.91	1.11	3.24	321.00	-	525.70	1,703.18
CONTRACTS AND RESOURCE MANAGMT	-				-	-	-	-	-	-	-	-	-
FINANCE AND CUSTOMERS	40.98				1,135.38	88.78	94.41	3.82	3.12	716.37	-	916.51	2,051.88
COMMISSIONERS	-				-	-	-	-	-	-	-	-	-
GRANDVIEW - FIRE PROTECTION - 411	342.32	0.6%		0.5%	15,443.16	1,520.78	1,253.47	198.73	43.65	5,217.62	7.22	8,241.45	23,684.62
TOTAL OPERATIONS	30.16				1,065.14	205.66	81.48	16.94	3.21	275.27	4.35	587.11	1,652.25
TOTAL MAINTENANCE	252.24				11,515.31	1,076.37	959.57	176.28	32.55	3,889.68	2.86	6,137.33	17,652.64
TOTAL PLANNING & BUSINESS DEV	-				-	-	-	-	-	-	-	-	-
TOTAL BUSINESS SERVICES	-				-	-	-	-	-	-	-	-	-
TOTAL ADMINISTRATION	59.91				2,862.71	238.55	212.42	5.50	7.88	1,052.67	-	1,517.02	4,379.73
GENERAL MANAGER	15.08				1,446.54	115.60	94.91	1.42	3.99	260.56	-	478.49	1,826.03
GENERAL ADMINISTRATION	3.65				271.79	24.17	23.10	0.26	0.76	75.73	-	124.02	401.82
CONTRACTS AND RESOURCE MANAGMT	-				-	-	-	-	-	-	-	-	-
FINANCE AND CUSTOMERS	40.98				1,135.38	98.78	94.41	3.82	3.12	716.37	-	916.51	2,051.88
COMMISSIONERS	-				-	-	-	-	-	-	-	-	-
SUBTOTAL - COSTS FOR WATER FUNDS	39,312.74	70%	73%	73.7%	1,904,478.25	190,188.63	136,249.48	14,624.54	4,895.27	567,636.86	2,100.00	915,694.77	2,820,173.02
ELECTRIC - 481	14,055.18	25%	27.2%	26.3%	722,689.49	56,450.33	55,250.44	4,433.84	1,866.71	242,301.31	-	360,302.63	1,082,992.12
TOTAL OPERATIONS	1,066.65				53,040.74	4,614.54	4,178.23	757.96	122.66	17,063.71	-	26,737.01	79,777.75
TOTAL MAINTENANCE	3,253.21				151,386.62	13,170.81	12,682.26	2,311.73	426.08	51,916.73	-	80,506.61	231,895.23
TOTAL PLANNING & BUSINESS DEV	-				-	-	-	-	-	-	-	-	-
TOTAL BUSINESS SERVICES	-				-	-	-	-	-	-	-	-	-
TOTAL ADMINISTRATION	9,735.32				518,260.13	36,664.98	36,389.95	1,364.14	1,318.07	173,321.88	-	263,059.02	771,319.15
GENERAL MANAGER	840.18				88,829.41	4,166.50	3,293.51	48.94	141.27	9,137.54	-	16,807.78	105,037.17
GENERAL ADMINISTRATION	7,008.07				331,060.37	27,807.31	27,060.17	1,142.20	910.83	111,351.84	-	168,272.95	499,333.32
CONTRACTS AND RESOURCE MANAGMT	-				-	-	-	-	-	-	-	-	-
FINANCE AND CUSTOMERS	1,846.89				76,680.07	6,671.17	6,376.37	173.00	211.05	37,138.92	-	56,570.50	127,250.56
COMMISSIONERS	36.18				21,690.29	-	1,659.31	-	54.92	15,693.58	-	17,407.81	39,083.10
SUBTOTAL - COSTS FOR ELECTRIC FUNDS	14,055.18	25%	27%	26.3%	722,689.49	56,450.33	55,250.44	4,433.84	1,866.71	242,301.31	-	360,302.63	1,082,992.12
SUBTOTAL - COSTS FOR OPERATING FUNDS	53,367.93	95%	100.0%	100.0%	2,627,167.73	246,638.96	191,499.91	19,058.38	6,761.99	809,938.17	2,100.00	1,275,997.41	3,903,165.14
CONSTRUCTION WORK-IN-PROGRESS	2,666.53	5%			156,245.55	13,593.36	12,992.68	1,480.98	430.03	50,289.40	-	78,786.45	235,032.00
TOTAL OPERATIONS & MAINTENANCE	-				-	-	-	-	-	-	-	-	-
TOTAL ADMINISTRATION	2,666.53				156,245.55	13,593.36	12,992.68	1,480.98	430.03	50,289.40	-	78,786.45	235,032.00
GENERAL MANAGER	-				-	-	-	-	-	-	-	-	-
GENERAL ADMINISTRATION	2,666.53				156,245.55	13,593.36	12,992.68	1,480.98	430.03	50,289.40	-	78,786.45	235,032.00
CONTRACTS AND RESOURCE MANAGMT	-				-	-	-	-	-	-	-	-	-
FINANCE AND CUSTOMERS	-				-	-	-	-	-	-	-	-	-

PUD No. 1 of Whatcom County 2022 LABOR & BENEFIT COST ALLOCATION												
LABOR HOURS	Percent of Labor Hours			LABOR COSTS	PENSION	SOC SEC & MEDICARE	WORKMANS COMP	PFML	HEALTH BENEFITS	CLOTHING ALLOWANCE	TOTAL BENEFITS	TOTAL LABOR AND BENEFITS
	Operations & Capital	Without Alcoa Grandview	Tax & Cap Alloc (Excl. Alcoa Escrow)									
COMMISSIONERS	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL LABOR & BENEFIT COSTS	56,034.45	100%	100%	2,783,413.29	260,232.32	204,492.59	20,539.36	7,192.02	860,227.56	2,100.00	1,354,783.86	4,138,197.14

COMBINED OPERATIONS & MAINT	25,237.79	45%	0%	45%	999,227.33	136,736.73	79,299.29	15,542.15	2,876.26	292,723.37	2,100.00	529,277.80	1,328,505.13
COMBINED PLANNING & BUSINESS DEV	-	0%	0%	0%	-	-	-	-	-	-	-	-	-
COMBINED BUSINESS SERVICES	-	0%	0%	0%	-	-	-	-	-	-	-	-	-
COMBINED ADMINISTRATION	30,796.67	55%	55%	55%	1,784,165.96	123,495.59	125,193.30	4,997.21	4,315.76	567,504.19	-	825,506.05	2,809,692.02
GENERAL MANAGER	3,986.67	7%	7%	7%	427,569.65	18,162.26	14,121.40	209.27	609.15	39,294.23	-	72,396.31	499,955.97
GENERAL ADMINISTRATION	20,360.00	36%	36%	36%	972,893.14	82,326.95	79,956.32	4,223.78	2,676.75	320,301.57	-	489,485.36	1,462,388.50
CONTRACTS AND RESOURCE MANAGNT	2,080.00	4%	4%	4%	91,811.02	7,996.26	7,642.81	174.92	252.97	38,034.44	-	54,101.49	146,012.51
FINANCE AND CUSTOMERS	4,160.00	7%	7%	7%	172,530.15	15,010.12	14,346.83	389.25	474.85	83,562.56	-	113,783.62	286,313.77
COMMISSIONERS	210.00	0%	0%	0%	119,292.00	-	9,125.84	-	302.05	86,311.39	-	95,739.28	215,031.28
TOTAL	56,034.45	100%	100%	100%	2,783,413.29	260,232.32	204,492.59	20,539.36	7,192.02	860,227.56	2,100.00	1,354,783.86	4,138,197.14

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12/6/2021

PUD No. 1 of Whatcom County
2022 Capital Improvement Budget (CIP)

CIP Number	Project Name	2021 Projected	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2022-2026 Budget
INTERNAL SERVICES								
IS-1	Office Remodel	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000
IS-3	Office Plant 2 Remodel	44,821	-	-	-	-	-	-
IS-5	Administrative Staff Vehicles	-	40,000	-	-	-	-	40,000
IS-9	Lawnmower / Tractor Replacement	-	20,000	-	-	-	-	20,000
IS-12	SCADA System Analysis, Equipment Eval & Upgrade	98,045	50,000	50,000	40,000	40,000	40,000	220,000
IS-14	Office Equipment and Computer HW & SW Replace	45,155	68,000	25,000	13,000	27,000	5,000	138,000
IS-15	Communications Backbone System Build-out and Upgrade	32,952	600,000	300,000	300,000	300,000	-	1,500,000
	Sub-Total (IS) Internal Services CIP Projects	\$ 220,974	\$ 778,000	\$ 425,000	\$ 353,000	\$ 367,000	\$ 45,000	\$ 1,968,000
INDUSTRIAL WATER								
RWL	PROJECT MANAGEMENT	\$ -	\$ 155,613	\$ 324,066	\$ 959,835	\$ 624,681	\$ 269,780	\$ 2,333,974
RW-14	Water Utility Vehicles	-	-	55,000	-	55,000	-	110,000
RW-22	Install Main Line Valves on Distribution System	693	100,000	350,000	450,000	-	-	900,000
RW-27	Water Utility Major Non Vehicle Equipment	-	10,000	10,000	10,000	10,000	10,000	50,000
RW-28	Plant 1 Projects	724,203	25,000	25,000	25,000	25,000	25,000	125,000
RW-33	Petrogas Meter/Valve Relocate	-	222,000	-	-	-	-	222,000
RW-34	PSE-Whitehorn Meter/Valve Relocate	337	280,000	-	-	-	-	280,000
RW-35	Plant 1 & 2 VFD Replacement & Additions	3,714	450,000	-	-	-	-	450,000
RW-38	Plant 1 Rebuild	274,092	730,000	4,540,000	16,400,000	10,800,000	3,800,000	36,270,000
RW-40	Water Transmission Line Replacement	-	-	-	-	-	900,000	900,000
RW-41	Cathodic Protection	-	-	-	-	-	50,000	50,000
RW-43	Douglas Rd Surge Protection	-	-	500,000	-	-	-	500,000
RW-44	Retrofit Valve Station	-	-	-	-	-	-	400,000
MISC	Contingency for Un-Planned Raw Water Projects	489	-	-	-	-	-	-
	Sub-Total (RW) Industrial Raw Water CIP Projects	\$ 1,003,527	\$ 2,372,613	\$ 5,804,066	\$ 17,844,835	\$ 11,514,681	\$ 5,054,780	\$ 42,590,974
GRANDVIEW								
GVL	PROJECT MANAGEMENT	\$ -	\$ 2,885	\$ 2,211	\$ 2,074	\$ 2,101	\$ 86	\$ 9,357
GVP-3	Grandview Potable System Improvements	25,686	25,000	25,000	25,000	25,000	-	100,000
	Sub-Total (GV) Grandview Water CIP Projects	\$ 25,686	\$ 27,885	\$ 27,211	\$ 27,074	\$ 27,101	\$ 86	\$ 109,357
ELECTRIC								
EL	PROJECT MANAGEMENT	\$ -	\$ 76,534	\$ 9,162	\$ 8,179	\$ 8,371	\$ 6,606	\$ 108,853
E-6	115 KV Transmission Structure/Conductor Upgrades	392,453	50,000	50,000	50,000	50,000	50,000	250,000
E-15	Electric Utility Vehicles	711	127,000	-	-	-	47,000	174,000
E-22	Upgrade/Replace Ferndale Substation	5,838,248	800,000	-	-	-	-	800,000
E-25	Non-Vehicle Equipment	9,788	10,000	10,000	10,000	10,000	10,000	50,000
E-26	Substation Security	343	90,000	-	-	-	-	90,000
E-27	Refinery Substation Upgrade	2,230,189	100,000	-	-	-	-	100,000
	Sub-Total (E) Electrical CIP Projects	\$ 8,471,732	\$ 1,253,534	\$ 69,162	\$ 68,179	\$ 68,371	\$ 113,606	\$ 1,572,853
EXTRAORDINARY MAINTENANCE								
RW-M-2	Clean Sediment Settling Ponds	\$ 107,065	\$ 310,000	\$ 155,000	\$ 155,000	\$ 155,000	\$ 155,000	\$ 930,000
RW-M-6	Douglas Rd Vault Power & SCADA Upgrades	10,500	130,000	-	-	-	-	130,000
RW-M-7	D Station Reliability Upgrades	59,088	250,000	-	-	-	-	250,000
RW-M-10	High Head Pump Re-build (Annual Maint Project)	180,238	125,000	125,000	125,000	125,000	125,000	625,000
RW-M-11	Plant 1 Maintenance	3,730	-	-	-	-	-	-
GVP-M-2	Grandview Fire System Decommissioning	-	25,000	75,000	-	-	-	100,000
GVP-M-3	Grandview Non-potable connection	69,401	-	-	-	-	-	-
E-M-2	Refinery Substation Testing during turnaround	-	50,000	-	-	-	-	50,000
	Sub-Total (M) Maintenance Projects	\$ 430,022	\$ 890,000	\$ 355,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 2,085,000
	Grand Total	\$ 10,151,940	\$ 5,322,032	\$ 6,680,440	\$ 18,573,088	\$ 12,257,152	\$ 5,493,472	\$ 48,326,184

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PUD No. 1 of Whatcom County
2022 Capital Improvement Budget (CIP)

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.

	Total Capital Project Costs b/f PM	IS Capital Costs b/f PM	% of IS Reallocated to RW	% of IS Reallocated to Electric	% of IS Reallocated to Grandview	Industrial Water Capital Costs b/f PM	GV Capital Costs b/f PM	Electric Capital Costs b/f PM
2022	\$ 4,197,000	\$ 778,000	72.2%	24.4%	3.4%	\$ 2,778,799	\$ 51,523	\$ 1,366,678
2023	\$ 5,990,000	\$ 425,000	72.2%	24.4%	3.4%	\$ 5,786,895	\$ 39,489	\$ 163,616
2024	\$ 17,323,000	\$ 353,000	72.2%	24.4%	3.4%	\$ 17,139,904	\$ 37,034	\$ 146,062
2025	\$ 11,342,000	\$ 367,000	72.2%	24.4%	3.4%	\$ 11,155,013	\$ 37,512	\$ 149,475
2026	\$ 4,937,000	\$ 45,000	72.2%	24.4%	3.4%	\$ 4,817,495	\$ 1,534	\$ 117,971
2022-2026	\$ 43,789,000	\$ 1,968,000	72.2%	24.4%	3.4%	\$ 41,678,105	\$ 167,092	\$ 1,943,802

5.6%	Total PM Labor Costs	IS PM Labor Costs	% of IS Reallocated to RW	% of IS Reallocated to Electric	% of IS Reallocated to Grandview	Industrial Water PM Labor Costs	GV PM Labor Costs	Electric PM Labor Costs
2022	\$ 235,032	\$ 43,568	72.2%	24.4%	3.4%	\$ 155,613	\$ 2,885	\$ 76,534
2023	\$ 335,440	\$ 23,800	72.2%	24.4%	3.4%	\$ 324,066	\$ 2,211	\$ 9,162
2024	\$ 970,088	\$ 19,768	72.2%	24.4%	3.4%	\$ 959,835	\$ 2,074	\$ 8,179
2025	\$ 635,152	\$ 20,552	72.2%	24.4%	3.4%	\$ 624,681	\$ 2,101	\$ 8,371
2026	\$ 276,472	\$ 2,520	72.2%	24.4%	3.4%	\$ 269,780	\$ 86	\$ 6,606
2022-2026	\$ 2,452,184	\$ 110,208	72.2%	24.4%	3.4%	\$ 2,333,974	\$ 9,357	\$ 108,853
2022-2026 GT	\$ 46,241,184							

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	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
District Labor Costs	\$ 235,032	\$ 335,440	\$ 970,088	\$ 635,152	\$ 276,472	\$ 2,452,184
TOTAL CAPITAL COSTS	\$ 235,032	\$ 335,440	\$ 970,088	\$ 635,152	\$ 276,472	\$ 2,452,184
REVENUE:						
Industrial Water Service rates	\$ 155,613	\$ 324,066	\$ 959,835	\$ 624,681	\$ 269,780	\$ 2,333,974
Grandview Service rates	2,885	2,211	2,074	2,101	86	9,357
Electric Service rates	76,534	9,162	8,179	8,371	6,606	108,853
TOTAL REVENUE	\$ 235,032	\$ 335,440	\$ 970,088	\$ 635,152	\$ 276,472	\$ 2,452,184

PUD No. 1 of Whatcom County
2022 Capital Improvement Budget (CIP)

INTERNAL SERVICE FUND - 500

CIP PROJECT NUMBER: IS-1

PROJECT NAME: Office Remodel

PROJECT LOCATION: 1705 Trigg Road

STATUS: New **Priority:** Medium

ESTIMATED START DATE: 2023 **ESTIMATED COMPLETION DATE:** TBD

PROJECT DESCRIPTION/SCOPE:

Prior Years Budget Activities

This capital project is new for 2022.

Current Budget Projected Activities

Project involves a study to determine the need and options for the expansion of office space at the District's existing administrative offices to accommodate staffing additions. Also, expansion of the Commission meeting room to accommodate more public attendance at Commission meetings will be part of the expansion project. A study on construction alternatives will occur in 2023.

Project Budget Estimate

Architecture / Engineering	\$ 50,000
Construction	
	\$ 50,000

PROJECT JUSTIFICATION/BENEFITS:

The office expansion is needed for new staff members. The Commission room expansion will allow more in-person public attendance at Commission meetings and provide space to assure proper distancing among occupants should current health protocols remain in effect.

PROPOSED BUDGET	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000
TOTAL CAPITAL COSTS	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000
REVENUE:						
Service Rates (All Fund)	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000
TOTAL REVENUE	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000

Capital Costs Beyond 2026: TBD

PUD No. 1 of Whatcom County
2022 Capital Improvement Budget (CIP)

INTERNAL SERVICE FUND - 500

CIP PROJECT NUMBER: IS-5

PROJECT NAME: Administrative Staff Vehicles

PROJECT LOCATION: 1705 Trigg Road

STATUS: On-going **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 purchase hybrid or all electric powered vehicles in the future as it continues to replace and upgrade its vehicle fleet.

Current Budget Projected Activities

In 2021, the District did not replace the 2011 Toyota Prius. The District will proceed with the replacement of the Prius or the 2012 Chevy Colorado during 2022.

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 Replacement	Estimated Cost
2011	Toyota Prius	2022?	\$ 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 and all-electric vehicles will be considered, based on competitive life-time cost to the District.

PROPOSED BUDGET	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ 40,000
TOTAL CAPITAL COSTS	\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ 40,000
REVENUE:						
Service Rates (All Fund)	\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ 40,000
TOTAL REVENUE	\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ 40,000

Capital Costs Beyond 2026: Replacement of vehicles will be based upon accumulated mileage and condition.

PUD No. 1 of Whatcom County
2022 Capital Improvement Budget (CIP)

INTERNAL SERVICE FUND - 500

CIP PROJECT NUMBER: IS-9

PROJECT NAME: Lawnmower / Tractor Replacement

PROJECT LOCATION: 1705 Trigg Road

STATUS: On-going **Priority:** Medium

ESTIMATED START DATE: On-going **ESTIMATED COMPLETION DATE:** On-going

PROJECT DESCRIPTION/SCOPE:

Prior Years Budget Activities

During 2021, the District surplused the oldest mower, which was no longer utilized because of maintenance issues.

Current Budget Projected Activities

During 2022, the District plans the replacement of another mower ("Bad Boy") because of escalating maintenance issues. The mower to be replaced will be surplused.

Project Budget Estimate

Replacement of lawnmower/tractor \$ 20,000

PROJECT JUSTIFICATION/BENEFITS:

Mowers are required to maintain District's lawns at the administrative offices and water plants and other locations where the District has facilities. Staff monitors the condition of the mowers and plans for replacement when maintenance costs escalate. Utilizing District staff for lawn maintenance avoids contract labor costs.

PROPOSED BUDGET	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 20,000		\$ -	\$ -	\$ -	\$ 20,000
TOTAL CAPITAL COSTS	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ 20,000
REVENUE:						
Service Rates (All Fund)	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ 20,000
TOTAL REVENUE	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ 20,000

Capital Costs Beyond 2026: Replacement of vehicles will be based upon accumulated mileage and condition.

PUD No. 1 of Whatcom County

2022 Capital Improvement Budget (CIP)

INTERNAL SERVICE FUND - 500

CIP PROJECT NUMBER: IS-12

PROJECT NAME: SCADA System Analysis, Development, and Upgrades

PROJECT LOCATION: District Facilities

STATUS: On-going 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.

Current Budget Projected Activities

During 2022, 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 and equipment related to SCADA \$ 220,000

Budget Estimate Total: \$ 220,000

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	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 50,000	\$ 50,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 220,000
TOTAL CAPITAL COSTS	\$ 50,000	\$ 50,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 220,000
REVENUE:						
Service Rates (All Fund)	\$ 50,000	\$ 50,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 220,000
TOTAL REVENUE	\$ 50,000	\$ 50,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 220,000

Capital Costs Beyond 2026: SCADA System improvements will continue on an ongoing basis, as necessary.

PUD No. 1 of Whatcom County 2022 Capital Improvement Budget (CIP)

INTERNAL SERVICE FUND - 500

CIP PROJECT NUMBER: IS-14

PROJECT NAME: Office Equipment and Computer HW & SW Replace

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.

Current 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	\$ 109,000
Contingency & Unexpected Failures	24,000
Consultants	5,000
Budget Estimate Total:	\$ 138,000

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	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 68,000	\$ 25,000	\$ 13,000	\$ 27,000	\$ 5,000	\$ 138,000
		-	-	-	-	
TOTAL CAPITAL COSTS	\$ 68,000	\$ 25,000	\$ 13,000	\$ 27,000	\$ 5,000	\$ 138,000
REVENUE:						
Service Rates (All Fund)	\$ 68,000	\$ 25,000	\$ 13,000	\$ 27,000	\$ 5,000	\$ 138,000
TOTAL REVENUE	\$ 68,000	\$ 25,000	\$ 13,000	\$ 27,000	\$ 5,000	\$ 138,000

Capital Costs Beyond 2026: IT equipment will continue to be replaced in scheduled cycles.

PUD No. 1 of Whatcom County

2022 Capital Improvement Budget (CIP)

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:** 2025

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.

Current Budget Projected Activities

During 2022, 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 \$ 1,500,000

Budget Estimate Total: \$ 1,500,000

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. The District will consider utilizing our fiber system to connect other customers if the security of the District would not be compromised.

PROPOSED BUDGET	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 600,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ -	\$ 1,500,000
TOTAL CAPITAL COSTS	\$ 600,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ -	\$ 1,500,000
REVENUE:						
Service Rates (All Fund)	\$ 600,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ -	\$ 1,500,000
TOTAL REVENUE	\$ 600,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ -	\$ 1,500,000

Capital Costs Beyond 2026: TBD - Communications System will be evaluated on a continuous annual basis.

PUD No. 1 of Whatcom County 2022 Capital Improvement Budget (CIP)

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: On-going 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.

Current Budget Projected Activities

In 2022, 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	\$ 45,000
Signage, Accessories & Safety Equipment	10,000
	\$ 55,000

Year	Description	Planned Replacement	Estimated 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	2022	2023	2024	2025	2026	2022-2026 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 2026: Replacement of vehicles will be based upon accumulated mileage and condition.

PUD No. 1 of Whatcom County

2022 Capital Improvement Budget (CIP)

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.

Current Budget Projected Activities

For 2022, the District will proceed with engineering for new isolation valves on its main water transmission line. The installation of these valves will help make service more reliable and will allow for the District shut off of water flows to specific locations in case of leaks or for maintenance reasons. Construction will follow in 2023. 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 Installation

Engineering Analysis, Design & Construction Services \$ 900,000

Budget Estimate Total: \$ 900,000

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.

PROPOSED BUDGET	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 100,000	\$ 350,000	\$ 450,000	\$ -	\$ -	\$ 900,000
TOTAL CAPITAL COSTS	\$ 100,000	\$ 350,000	\$ 450,000	\$ -	\$ -	\$ 900,000
REVENUE:						
Water System Rates	100,000	350,000	450,000	-	-	\$ 900,000
TOTAL REVENUE	\$ 100,000	\$ 350,000	\$ 450,000	\$ -	\$ -	\$ 900,000

Capital Costs Beyond 2026: To Be Determined

PUD No. 1 of Whatcom County

2022 Capital Improvement Budget (CIP)

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.

Current Budget Projected Activities

In 2022, 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
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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	2022	2023	2024	2025	2026	2022-2026 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 2026: To Be Determined.

PUD No. 1 of Whatcom County
2022 Capital Improvement Budget (CIP)

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

CIP PROJECT NUMBER: RW-28

PROJECT NAME: Water Treatment Plant 1 Projects

STATUS: On-going

PRIORITY: Medium

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. In 2021, the District installed compressor system 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 construction of facilities will be covered under a new CIP, RW-38.

Current Budget Projected Activities

In 2022, the District is working on the design for the Water Treatment Plant 1 Upgrade Phase 1. This CIP is for any major work that may arise to keep the plant running efficiently until the Plant 1 remodel is complete.

Project Budget Estimate

Design, Engineer and Construction of on-going repairs at Water Treatment Plant 1	\$ 25,000
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Budget Estimate Total: \$ 25,000

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	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 125,000
TOTAL CAPITAL COSTS	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 125,000
REVENUE:						
Water System Rates	25,000	25,000	25,000	25,000	25,000	125,000
TOTAL REVENUE	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 125,000

Capital Costs Beyond 2026: To Be Determined.

PUD No. 1 of Whatcom County

2022 Capital Improvement Budget (CIP)

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.

Current Budget Projected Activities

The District plans to complete engineering analysis and design for this proposed project in 2022. 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.

Engineering Analysis, Design & Construction Services	\$	34,000
Materials Procurement and Construction (Competitive Bid Project)		188,000
Budget Estimate Total:	\$	222,000

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	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 222,000	\$ -	\$ -	\$ -	\$ -	\$ 222,000
TOTAL CAPITAL COSTS	\$ 222,000	\$ -	\$ -	\$ -	\$ -	\$ 222,000
REVENUE:						
Customer Reimbursement	\$ 222,000	\$ -	\$ -	\$ -	\$ -	\$ 222,000
TOTAL REVENUE	\$ 222,000	\$ -	\$ -	\$ -	\$ -	\$ 222,000

Capital Costs Beyond 2026: None

PUD No. 1 of Whatcom County
2022 Capital Improvement Budget (CIP)

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: On-going **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.

Current Budget Projected Activities

In 2022, 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	\$	33,000
Materials Procurement and Construction (Competitive Bid Project)		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	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 280,000	\$ -	\$ -	\$ -	\$ -	\$ 280,000
TOTAL CAPITAL COSTS	\$ 280,000	\$ -	\$ -	\$ -	\$ -	\$ 280,000
REVENUE:						
Customer Reimbursement	\$ 280,000	\$ -	\$ -	\$ -	\$ -	\$ 280,000
TOTAL REVENUE	\$ 280,000	\$ -	\$ -	\$ -	\$ -	\$ 280,000

Capital Costs Beyond 2026: None

PUD No. 1 of Whatcom County 2022 Capital Improvement Budget (CIP)

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:** 2022

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.

Current Budget Projected Activities

In 2022, 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	2022	2023	2024	2025	2026	2022-2026 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	\$ -	\$ -	\$ -	\$ -	\$ 450,000

Capital Costs Beyond 2026: To Be Determined.

PUD No. 1 of Whatcom County 2022 Capital Improvement Budget (CIP)

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: High

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 and later P66 was added as a customer. 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 rebuild of Plant 1 is planned and the capital project will be tracked under this RW-38.

Current Budget Projected Activities

In 2022, the District is working on the design for the Water Treatment Plant 1 Upgrade Phase 1. This phase is designing and constructing the upgrades to the intake piping prior to the Ferndale levee improvements. The District's consultants MurraySmith will design the intake project and a campus plan for the entire site. They will also provide 100% plans for the intake project and provide permitting assistance for the entire plant 1 upgrade project. Phase 2 will be the complete design for the Plant portion of the project, which will happen as phase 1 is nearing completion.

Project Budget Estimate:

Engineering and construction costs \$ 36,270,000

Budget Estimate Total: \$ 36,270,000

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	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 730,000	\$ 4,540,000	\$ 16,400,000	\$ 10,800,000	\$ 3,800,000	\$ 36,270,000
TOTAL CAPITAL COSTS	\$ 730,000	\$ 4,540,000	\$ 16,400,000	\$ 10,800,000	\$ 3,800,000	\$ 36,270,000
REVENUE:						
Water Service Rates	\$ 730,000	\$ 4,540,000	\$ 16,400,000	\$ 10,800,000	\$ 3,800,000	\$ 36,270,000
TOTAL REVENUE	\$ 730,000	\$ 4,540,000	\$ 16,400,000	\$ 10,800,000	\$ 3,800,000	\$ 36,270,000

Capital Costs Beyond 2026: TBD

PUD No. 1 of Whatcom County

2022 Capital Improvement Budget (CIP)

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:** Medium

ESTIMATED START DATE: 2024 **ESTIMATED COMPLETION DATE:** 2029

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.

Current Budget Projected Activities

In 2022, 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	\$ 7,000,000
Engineering and construction costs - Johnston Rd to Olson Rd	\$ 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	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ -	\$ -	\$ -	\$ -	\$ 900,000	\$ 900,000
TOTAL CAPITAL COSTS	\$ -	\$ -	\$ -	\$ -	\$ 900,000	\$ 900,000
REVENUE:						
Water Service Rates	\$ -	\$ -	\$ -	\$ -	\$ 900,000	\$ 900,000
TOTAL REVENUE	\$ -	\$ -	\$ -	\$ -	\$ 900,000	\$ 900,000

Capital Costs Beyond 2026: \$11.7m in 2027 - 2029

PUD No. 1 of Whatcom County 2022 Capital Improvement Budget (CIP)

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.

Current Budget Projected Activities

In 2022, 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	2022	2023	2024	2025	2026	2022-2026 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	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ 50,000

Capital Costs Beyond 2026: \$50,000 annually in 2026 thru 2030

PUD No. 1 of Whatcom County 2022 Capital Improvement Budget (CIP)

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.

Current 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 2022. 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	2022	2023	2024	2025	2026	2022-2026 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 2026: To Be Determined.

PUD No. 1 of Whatcom County
2022 Capital Improvement Budget (CIP)

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

CIP PROJECT NUMBER: RW-44

PROJECT NAME: Retrofit Valve Station

PROJECT LOCATION: Distribution System - Douglas Road

STATUS: New PRIORITY: Medium

ESTIMATED START DATE: 2022 ESTIMATED COMPLETION DATE: 2022

PROJECT DESCRIPTION/SCOPE:

Prior Years Budget Activities

No activity on this project in 2021.

Current Budget Projected Activities

In 2022, the District plans a retrofit of the valve station at the corner of Unick and Lake Terrell Roads. The purpose of the project is to enable modulation of the water pressures for the water line serving the District's refinery customer. This will be considered an energy efficiency project as it will reduce electric energy consumed by the water plant high head pumps. As such, the project will qualify for reimbursement funding under BPA's EEI program.

Project Budget Estimate:

Engineering and construction costs	\$ 400,000
Budget Estimate Total:	\$ 400,000

PROJECT JUSTIFICATION/BENEFITS:

The project, as stated above, enables more efficient use of the District's water plant high head pumps. This will reduce energy consumed by the industrial water system's distribution facilities. Also, a large portion of the funding for the project will be through BPA's EEI program.

PROPOSED BUDGET	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ 400,000
TOTAL CAPITAL COSTS	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ 400,000
REVENUE:						
Water Service Rates	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ 200,000
BPA EEI Credit	200,000	-	-	-	-	200,000
TOTAL REVENUE	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ 400,000

Capital Costs Beyond 2026: To Be Determined.

PUD No. 1 of Whatcom County
2022 Capital Improvement Budget (CIP)

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. A PLC was purchased for use at the potable plant and during 2021 staff has been working on the connection to the Wonderware system. In 2021 the District installed two flushing ports on the system that will improve flushing the system when necessary to prevent stagnant water from accumulating.

Current Budget Projected Activities

In 2022, 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.

Project Budget Estimate:

Water system Improvements identified by Capital Improvement plan \$ 100,000

Budget Estimate Total: \$ 100,000

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	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ -	\$ 100,000
TOTAL CAPITAL COSTS	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ -	\$ 100,000
REVENUE:						
Water Service Rates	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ -	\$ 100,000
TOTAL REVENUE	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ -	\$ 100,000

Capital Costs Beyond 2026: TBD

PUD No. 1 of Whatcom County
2022 Capital Improvement Budget (CIP)

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.

Current Budget Projected Activities

During 2021, the District completed its multiple year transmission structure (poles, cross arms, insulators, etc.) replacement program for replacing structures installed prior to 2000. Going into 2022, the District will move into a maintenance and monitoring mode with regard to transmission structures. Going forward, the high voltage (115 kV) electrical conductors will be evaluated not only for condition, but also the capacity to carry anticipated power flows. Ongoing continuous monitoring of the condition of the District's 115 kV system will help assure a high level of electric service reliability.

Project Budget Estimate

Engineering, Material Acquisition & Construction Work	\$ 250,000
Budget Estimate Total:	\$ 250,000

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 its 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	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000
TOTAL CAPITAL COSTS	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000
REVENUE:						
Electric Service Rates	\$ 48,750	\$ 48,750	\$ 48,750	\$ 48,750	\$ 48,750	\$ 243,750
Water System Rates	1,250	1,250	1,250	1,250	1,250	6,250
TOTAL REVENUE	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000

Capital Costs Beyond 2026: 30-40 year replacement cycles, based on depreciation and wear

PUD No. 1 of Whatcom County
2022 Capital Improvement Budget (CIP)

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.

Current Budget Projected Activities

In 2022, 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. In 2021, the District's Commission passed a Resolution adopting a policy to facilitate the purchase of used equipment, where appropriate. In 2022, the District also plans on replacing one of the Ford F250 and will consider the purchase of a hybrid or electric vehicle when possible.

Project Budget Estimate:

Used insulated bucket truck	\$ 70,000
Signage, Accessories & Safety Equipment	10,000
	\$ 80,000
 F-250 Extended Cab 4 -Wheel Electric Utility Pick-up or comparable pick-up	 \$ 39,000
Signage, Accessories & Safety Equipment	8,000
Budget Estimate Total:	\$ 47,000

Year	Description	Planned Replacement	Estimated Cost
2016	Ford F250	2026	\$ 47,000
2019	Ford F250	2029	47,000
2022	Ford F250	2032	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. The utility trucks are on a replacement schedule depending on mileage and wear. Electric or hybrid vehicles will be considered.

PROPOSED BUDGET	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 127,000	\$ -	\$ -	\$ -	\$ 47,000	\$ 174,000
TOTAL CAPITAL COSTS	\$ 127,000	\$ -	\$ -	\$ -	\$ 47,000	\$ 174,000
REVENUE:						
Electric Service Rates	\$ 127,000	\$ -	\$ -	\$ -	\$ 47,000	\$ 174,000
TOTAL REVENUE	\$ 127,000	\$ -	\$ -	\$ -	\$ 47,000	\$ 174,000

Capital Costs Beyond 2026: Replacement of vehicles will be based upon accumulated mileage and condition.

PUD No. 1 of Whatcom County
2022 Capital Improvement Budget (CIP)

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:** 2022

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 its engineering consultant have been working on permitting and the acquisition of additional equipment required for the substation. In 2021, the District completed permitting of the project; procured major substation equipment; and chose a contractor to construct the substation. Substation construction began in 2021.

Current Budget Projected Activities

With construction of the Ferndale electric substation underway, District staff anticipate completion of the project by the end of the first quarter in 2022.

Project Budget Estimate

Ferndale Substation Upgrade/Replacement

Remaining engineering Analysis, Design & Construction Services \$ 800,000

Budget Estimate Total: \$ 800,000

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	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 800,000	\$ -	\$ -	\$ -	\$ -	\$ 800,000
TOTAL CAPITAL COSTS	\$ 800,000	\$ -	\$ -	\$ -	\$ -	\$ 800,000
REVENUE:						
Industrial Water Rate Revenue	\$ 800,000	\$ -	\$ -	\$ -	\$ -	\$ 800,000
TOTAL REVENUE	\$ 800,000	\$ -	\$ -	\$ -	\$ -	\$ 800,000

Capital Costs Beyond 2026: TBD. Related to plans for improvements to Water Treatment Plant No.1.

PUD No. 1 of Whatcom County
2022 Capital Improvement Budget (CIP)

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.

Current Budget Projected Activities

For 2022, 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	2022	2023	2024	2025	2026	2022-2026 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:						
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 2026: TBD

PUD No. 1 of Whatcom County
2022 Capital Improvement Budget (CIP)

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 through 2021.

Current Budget Projected Activities

In 2022, 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 add additional cameras and key card readers for the Refinery substation in 2021 after the upgrade project is completed. Also, security devices will be installed at the new Ferndale substation supporting Water Plant 1.

Project Budget Estimate

Substation Security Improvements Design & Installation	\$	90,000
Budget Estimate Total:	\$	90,000

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	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 90,000	\$ -	\$ -	\$ -	\$ -	\$ 90,000
		-	-	-	-	-
TOTAL CAPITAL COSTS	\$ 90,000	\$ -	\$ -	\$ -	\$ -	\$ 90,000
REVENUE:						
Electric Rate Revenue	\$ 90,000	\$ -	\$ -	\$ -	\$ -	\$ 90,000
TOTAL REVENUE	\$ 90,000	\$ -	\$ -	\$ -	\$ -	\$ 90,000

Capital Costs Beyond 2026: TBD

PUD No. 1 of Whatcom County
2022 Capital Improvement Budget (CIP)

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. In 2021, the design work was initiated and major equipment for the substation was specified and put out to bid. In November 2021, Phillips 66 requested that the project be stopped. The design work by BKI will be completed. The costs to date include work and deposits on equipment on order, surveying and PUD labor.

Current Budget Projected Activities

In November 2021, Phillips 66 requested that the PUD stop the Refinery Substation project. The design work by BKI was completed with some remaining costs extending into 2022.

Project Budget Estimate

Remaining engineering and construction of substation improvements	100,000	
	Budget Estimate Total:	\$ 100,000

PROJECT JUSTIFICATION/BENEFITS:

Project on hold for now.

PROPOSED BUDGET	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ 100,000
		-	-	-	-	-
TOTAL CAPITAL COSTS	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ 100,000
REVENUE:						
Electric Rate Revenue	100,000	-				100,000
TOTAL REVENUE	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ 100,000

Capital Costs Beyond 2026: TBD

PUD No. 1 of Whatcom County

2022 Capital Improvement Budget (CIP)

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. In 2021, the District's contractor removed the sediment from the East pond at plant 2.

Current Budget Projected Activities

In 2022, the District plans to remove sediment from 2 locations 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	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 310,000	\$ 155,000	\$ 155,000	\$ 155,000	\$ 155,000	\$ 930,000
TOTAL CAPITAL COSTS	\$ 310,000	\$ 155,000	\$ 155,000	\$ 155,000	\$ 155,000	\$ 930,000
REVENUE:						
Water Service Rates	\$ 310,000	\$ 155,000	\$ 155,000	\$ 155,000	\$ 155,000	\$ 930,000
TOTAL REVENUE	\$ 310,000	\$ 155,000	\$ 155,000	\$ 155,000	\$ 155,000	\$ 930,000

Costs Beyond 2026:

Annual On-going maintenance.

PUD No. 1 of Whatcom County
2022 Capital Improvement Budget (CIP)

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:** 2022

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. 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) In 2020 the District installed a 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 was also installed; (b) SCADA equipment and communications link is be tied to the new meter vault location and removed from Intalco's potable plant; (c) Install a solar power supply at the Douglas Road vault to provide power, a generator connection will be also installed in case of emergency. 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 solar power option to be installed at the Douglas Road vault location.

Current Budget Projected Activities

In 2022, based on prior evaluation, the District plans to proceed with the installation of a UPS unit and solar generation it will also include a back-up generator connection for emergency use at the Douglas Road vault. New fiber optic cabling has been installed in existing conduit running from the new 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. The District is planning on installing the new PLC and connecting to the SCADA backbone fiber within the Douglas Road vault in 2022.

Project Budget Estimate

Engineering Services - Design & Construction	\$	20,000
Equipment and Materials		110,000
Budget Estimate Total:	\$	130,000

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	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 130,000	\$ -	\$ -	\$ -	\$ -	\$ 130,000
TOTAL CAPITAL COSTS	\$ 130,000	\$ -	\$ -	\$ -	\$ -	\$ 130,000
REVENUE:						
Water Service Rates	\$ 130,000	\$ -	\$ -	\$ -	\$ -	\$ 130,000
TOTAL REVENUE	\$ 130,000	\$ -	\$ -	\$ -	\$ -	\$ 130,000

Costs Beyond 2026: None other than continued monitoring & maintenance as required.

PUD No. 1 of Whatcom County

2022 Capital Improvement Budget (CIP)

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 - 2020, but the project was not implemented. Some site investigation for design was done in 2021.

Current Budget Projected Activities

The District plans to proceed with final engineering design and permitting of the project in 2022. 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	\$ 45,000
Materials Procurement & Construction (Competitive Bid Project)	205,000
Budget Estimate Total:	\$ 250,000

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	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ 250,000
TOTAL CAPITAL COSTS	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ 250,000
REVENUE:						
Water Service Rates	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ 250,000
TOTAL REVENUE	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ 250,000

Costs Beyond 2026: To Be Determined

PUD No. 1 of Whatcom County

2022 Capital Improvement Budget (CIP)

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.

Current Budget Projected Activities

In 2022, 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 2023.

Project Budget Estimate

Pump Rebuild & Motor Rewind Work, Including Removal & Re-Installation (1 Pump & Motor)	\$	125,000
Budget Estimate Total:	\$	125,000

PROJECT JUSTIFICATION/BENEFITS:

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

PROPOSED BUDGET	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 625,000
TOTAL CAPITAL COSTS	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 625,000
REVENUE:						
Water Service Rates	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 625,000
TOTAL REVENUE	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 625,000

Costs Beyond 2026: To Be Determined.

PUD No. 1 of Whatcom County

2022 Capital Improvement Budget (CIP)

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: Medium

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.

Current Budget Projected Activities

In 2022, 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 surplus.

PROPOSED BUDGET	2022	2023	2024	2025	2026	2022-2026 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.

PUD No. 1 of Whatcom County 2022 Capital Improvement Budget (CIP)

ELECTRIC UTILITY - 481

EXTRAORDINARY PROJECT: E-M-2

PROJECT NAME: P66 "TAR" Substation Maintenance

STATUS: New

PROJECT LOCATION: Refinery Substation

PRIORITY: High

ESTIMATED START DATE: 2022

ESTIMATED COMPLETION DATE: 2022

PROJECT DESCRIPTION/SCOPE:

Prior Years Budget Activities

During 2016, District electric staff and the District's engineering consultant initiated planning for testing and maintenance activities to occur at the Refinery substation in coordination with the Phillips 66 Refinery's Turnaround ("TAR") scheduled for the first quarter of 2017. This short term period is when equipment in the substation can be de-energized, tested, and maintained, without impacting P66 Refinery operations. The work can only be performed during this time and must be planned in advance and proceed utilizing step by step procedures, so as to not negatively impact the Refinery nor create hazards that impact the safety of staff and/or maintenance crews. This work was completed in 2017.

Current Budget Projected Activities

In 2022, the Refinery has planned another turnaround ("TAR"). Again, the District has planned to do testing and maintenance which can't be performed at any other time.

Project Budget Estimate

TAR Planning and Maintenance Activities \$ 50,000

Budget Estimate Total: \$ 50,000

PROJECT JUSTIFICATION/BENEFITS:

The TAR work activities can only be completed during the P66 Refinery's scheduled TAR. At all other times testing and maintenance must be performed while the District's Refinery substation is energized and in a manner that does not impact P66 Refinery's operations. This testing and maintenance work helps maintain and enhance reliability and safety of electric service for the Refinery.

PROPOSED BUDGET	2022	2023	2024	2025	2026	2022-2026 Total
CAPITAL COST:						
Direct Costs	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000
TOTAL CAPITAL COSTS	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000
REVENUE:						
Electric Service Rates	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000
TOTAL REVENUE	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000

Costs Beyond 2026: TBD

Industrial Water Utility**2020 Rates and Revenue**

Unit Costs		2021 Rates	% Increase	2022 Rates	
Industrial Water					
Monthly Fixed Capital Charge		\$ 9,696.87	4.00%	\$ 10,084.74	per Q/C unit
Monthly Fixed Operating Charge		\$ 13,781.24	9.00%	\$ 15,021.55	per Q/O unit
Monthly Fixed Fire Charge		\$ 1,124.78	0.00%	\$ 1,124.78	per account
Monthly Fixed Potable Charge		\$ 75.00	0.00%	\$ 75.00	per account
Consumption Charge per mg		\$ 409.97	5.39%	\$ 432.05	per MG
Irrigation (separate increase)					
Annual Fixed Charge		\$ 574.67	5.00%	\$ 603.40	per meter
Consumption Charge per mg		\$ 1,297.98	5.00%	\$ 1,362.88	per MG
OVERALL REVENUE CHANGE					5.99%

Customer	Q/C (MGD)	Q/O (MGD)	Est Usage (MG)	Monthly Fixed Charges				Annual Fixed \$	Annual Consumption	Annual Total \$	Previous Year	2021 % Increase
				Fixed Capital	Fixed Operating	Fixed Fire	Monthly Fixed					
GPT - Gateway Pacific Terminal	5.33	0.00	0.00	\$ 53,752	\$ -	\$ -	\$ 53,752	\$ 645,020	\$ -	\$ 645,020	\$ 620,212	4.00%
BP Products NA	18.27	12.60	2,200.00	184,248	189,272	-	373,520	4,482,238	950,506	5,432,744	5,111,599	6.28%
Phillips66	6.00	4.00	1,255.00	60,508	60,086	-	120,595	1,447,136	542,220	1,989,356	1,874,187	6.15%
Alcoa Intalco	2.80	0.18	31.00	28,237	2,704	-	30,941	371,294	13,393	384,687	368,291	4.45%
CHEMCO	0.02	0.01	0.02	202	150	-	352	4,223	6	4,229	3,987	6.08%
Petrogas	0.05	0.03	7.50	504	451	-	955	11,459	3,240	14,699	13,854	6.10%
PSE Whitehorn	0.29	0.04	0.28	2,925	601	-	3,525	42,305	119	42,424	40,473	4.82%
PSE Ferndale Generating Station	2.70	2.00	400.00	27,229	30,043	-	57,272	687,263	172,819	860,082	808,916	6.33%
Praxair	0.14	0.07	12.00	1,452	1,127	-	2,579	30,945	5,185	36,129	34,152	5.79%
BNSF	0.00	0.00	0.00	-	-	1,125	1,125	13,497	-	13,497	13,497	0.00%
Cornerstone Community Church	0.00	0.00	0.00	-	-	506	506	6,074	-	6,074	6,074	0.00%
Free Rain Farms	0.02	0.01	2.00	202	150	-	352	4,223	864	5,087	4,801	5.96%
Grandview	0.01	0.01	4.00	101	150	-	251	3,013	1,728	4,741	4,457	6.36%
Irrigation Totals			47.45	-	-	-	-	16,895	64,672	81,567	77,683	5.00%
Total			3,959.24					\$ 7,765,585	\$ 1,754,753	\$ 9,520,338	\$ 8,982,184	5.99%

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Industrial Water Utilitiy

2022 Other Rates and Revenue

		Rate as set by Commission	Rate Last Year
Excess Usage Fee		\$ 715.29 per af	\$ 679.01 per af
Excess Demand Fee		\$ 180,258.62 per mgd	\$ 165,374.88 per mgd
Minimum Charge for Customer Assistance		\$ 100.00	\$ 100.00
Minimum Reconnection Fee		\$ 500.00	\$ 500.00
Direct Charges:	Praxair potable	\$ 75.00	\$ 75.00

PUBLIC UTILITY DISTRICT No. 1 of *Whatcom County*
GRANDVIEW UTILITY
 2022 Service Rates & Revenue

Account	Meter #	Company	Potable Meter Equivalent (ME) Used	Monthly Fixed Potable Meter Charge	Monthly Fixed Fire Charge	Annual Fixed Charges	Estimated Potable Usage (ccf)	Estimated Non-Potable Usage (ccf)	Annual Volume Revenue	Total Annual Revenue
			Fixed Potable Meter Charge	\$	68.00	Per ME				
			Fixed Fire Charge	\$	151.00	Per connection				
			Volume Potable Charge	\$	13.08	Per ccf				
			Volume Non-Potable Charge	\$	8.50	Per ccf				
02-0001	1	Kona Usa	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	76	0	\$ 997.12	\$ 3,625.12
02-0002	2	Crystal Creek Logistics	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	31	0	\$ 402.35	\$ 3,030.35
02-0003	3	Crystal Creek Logistics	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	3	0	\$ 34.99	\$ 2,662.99
02-0004	4	Crystal Creek Logistics	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	154	0	\$ 2,011.73	\$ 4,639.73
02-0005	5	MJ Marine Exhaust	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	4	0	\$ 52.48	\$ 2,680.48
02-0006	6	Perry Pallet	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	218	0	\$ 2,851.40	\$ 5,479.40
02-0007	7	Homefire Prest Logs	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	49	0	\$ 647.25	\$ 3,275.25
02-0008	8	Montigo Del Ray	1.67	\$ 113.56	\$ 151.00	\$ 3,174.72	110	0	\$ 1,434.45	\$ 4,609.17
02-0009	9	Silvatar Forest Products	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	7	0	\$ 87.47	\$ 2,715.47
02-0009	9.5	Silvatar Forest Products	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	79	0	\$ 1,032.10	\$ 3,660.10
02-0013	13	Western Refinery Svc	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	603	443	\$ 11,652.41	\$ 14,280.41
02-0013	13.5	Western Refinery Svc	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	603	0	\$ 7,889.46	\$ 10,517.46
02-0015	15	Management Services NW	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	206	0	\$ 2,693.96	\$ 5,321.96
02-0017	17	Nuova Distribution USA	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	64	0	\$ 839.68	\$ 3,467.68
02-0018	18	Co-Pac Properties	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	63	0	\$ 822.18	\$ 3,450.18
02-0022	22	Crystal Creek Logistics	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	5	0	\$ 69.97	\$ 2,697.97
02-0023	23	LGC US Asset Holdings, LLC	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	67	0	\$ 874.66	\$ 3,502.66
02-0029	29	Seattle Manufacturing	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	128	0	\$ 1,679.35	\$ 4,307.35
02-0030	30	Macron Metal USA	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	60	0	\$ 787.20	\$ 3,415.20
02-0033	33	Healthy Pet	3.33	\$ 226.44	\$ 151.00	\$ 4,529.28	2,672	2,941	\$ 59,969.05	\$ 64,498.33
02-0035	35	Lynden Door	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	7	0	\$ 87.47	\$ 2,715.47
02-0036	36	Sustainable Solutions	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	96	0	\$ 1,259.52	\$ 3,887.52
02-0038	38	I-5 Industrial Center	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	25	0	\$ 332.37	\$ 2,960.37
02-0039	39	Allweather Wood/Trueguard	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	9	0	\$ 122.45	\$ 2,750.45
02-0040	40	Sahota, Dave	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	88	0	\$ 1,154.56	\$ 3,782.56
02-0041	41	Grandview Business Center	3.33	\$ 226.44	\$ 151.00	\$ 4,529.28	1,574	0	\$ 20,589.58	\$ 25,118.86
02-0042	42	Propack, Inc.	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	55	0	\$ 717.22	\$ 3,345.22
02-0044	44	Whisper Lake Developments	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	66	0	\$ 857.17	\$ 3,485.17
02-0045	45	Jensen Lee Properties	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	67	0	\$ 874.66	\$ 3,502.66
02-0048	48	Oxy Corp	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	56	0	\$ 734.72	\$ 3,362.72
02-0050	50	IMCO - Office	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	1,584	0	\$ 20,729.53	\$ 23,357.53
02-0051	51	IMCO - Shop	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	94	0	\$ 1,224.53	\$ 3,852.53
02-0052	52	Matia Contractors	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	96	0	\$ 1,259.52	\$ 3,887.52
02-0053	53	GV Lot 2 LLC	5.33	\$ 362.44	\$ 151.00	\$ 6,161.28	1,075	0	\$ 14,064.59	\$ 20,225.87
02-0054	54	GV Lot 2 LLC	2.30	\$ 156.40	\$ 151.00	\$ 3,688.80	231	0	\$ 3,026.34	\$ 6,715.14
02-0055	55	Border Safe Storage Solutions	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	60	0	\$ 787.20	\$ 3,415.20
02-0056	56	Infra Pacific LLC	0.00	\$ -	\$ 649.30	\$ 7,791.60	0	0	\$ -	\$ 7,791.60
02-0058	58	PES Holdings	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	9	11	\$ 215.63	\$ 2,843.63
02-0059	59	Method Homes	1.00	\$ 68.00	\$ 151.00	\$ 2,628.00	16	0	\$ 209.92	\$ 2,837.92
			48.96	\$ 3,329.28	\$ 6,387.30	\$ 116,598.96	10,410	3,395	\$ 165,076.23	\$ 281,675.19

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

PUBLIC UTILITY DISTRICT No. 1 of Whatcom County
Electric Utility
2022 District Service Rates

RESULTS	PASS-THRU	ELECTRIC	WATER	TOTAL
Revenue Requirement	\$ 9,771,408	\$ 2,160,000	\$ 78,954	\$ 12,010,362
General Service Charge/month		\$ 180,000	\$ 6,580	\$ 186,580
Previous General Service/mo		\$ 171,500	\$ 6,925	\$ 178,425
% Revenue Change		5%	-5%	5%

District Operating Expenses

Labor & Benefits	\$ 1,082,992
Purchased Power	9,179,961
O&M Expenses	144,515
Extraordinary Maintenance	50,000
Admin Expenses	469,838
Taxes	714,413

Total District Operating Expenses **\$ 11,641,720**

Debt Service

2012 LTGO Bond Debt Service (P&I)	\$ 61,783
2021 LTGO Bond Debt Service (P&I) - Refinance 2010B	130,382
2021 LTGO Bond Debt Service (P&I) - New money	338,200

Total District Debt Service **\$ 530,365**

Capital Transfer **220,000**

Less Miscellaneous Revenue **(15,485)**

Partial Year Cash Adjustment **17,504**

Increase (Decrease) of Operating Reserves **(383,742)**

Revenue Requirement **\$ 12,010,362**

Industrial Water Utility**Funding Strategies**

Revenue Requirement - Fund 403	2022	2023	2024	2025	2026
Revenues @ Existing Rates					
Rate Revenues Under Existing Rates	\$ 8,904,501	\$ 8,862,041	\$ 8,685,683	\$ 8,685,683	\$ 8,685,683
Non-Rate Revenues	419,132	428,520	429,517	433,058	437,940
Total Revenues	\$ 9,323,633	\$ 9,290,560	\$ 9,115,200	\$ 9,118,741	\$ 9,123,623
Expenses					
Cash Operating Expenses	\$ 6,793,872	\$ 5,899,682	\$ 6,213,025	\$ 6,322,524	\$ 6,612,104
Existing Debt Service	1,965,705	1,965,374	1,963,319	1,604,602	1,602,118
New Debt Service	-	1,499,810	1,499,810	2,279,711	2,279,711
Rate Funded Capital	1,250,000	750,000	1,500,000	1,300,000	2,040,000
Total Expenses	\$ 10,009,576	\$ 10,114,867	\$ 11,176,153	\$ 11,506,838	\$ 12,533,934
Net Surplus (Deficiency)	\$ (685,943)	\$ (824,306)	\$ (2,060,953)	\$ (2,388,097)	\$ (3,410,311)
Additions to Meet Coverage	-	-	-	-	-
Total Surplus (Deficiency)	\$ (685,943)	\$ (824,306)	\$ (2,060,953)	\$ (2,388,097)	\$ (3,410,311)
Annual Rate Increase	6.00%	7.50%	8.00%	8.50%	9.70%
Cumulative Rate Increase	6.00%	13.95%	23.07%	33.53%	46.48%
Rate Revenues After Rate Increase	\$ 9,394,248	\$ 10,039,584	\$ 10,623,140	\$ 11,521,983	\$ 12,628,927
Incremental Rate Revenues	\$ 489,748	\$ 1,177,544	\$ 1,937,457	\$ 2,836,300	\$ 3,943,244
Additional Taxes from Rate Increase	\$ 24,629	\$ 59,219	\$ 97,435	\$ 142,638	\$ 198,306
Net Cash Flow After Rate Increase	(220,825)	294,019	(220,931)	305,566	334,627
Coverage After Rate Increase: Revenue Bonds Only	n/a	n/a	n/a	n/a	n/a
Coverage After Rate Increase: All Debt	1.54	1.31	1.42	1.43	1.63

Fund Balances - Fund 403	2022	2023	2024	2025	2026
OPERATING FUND					
Beginning Balance	\$ 2,296,845	\$ 1,729,189	\$ 1,677,252	\$ 1,108,316	\$ 1,066,904
plus: Net Cash Flow after Rate Increase	(220,825)	294,019	(220,931)	305,566	334,627
plus: Transfers In	-	-	-	-	-
less: Transfers Out	(346,830)	(345,956)	(348,005)	(346,978)	(348,854)
Ending Balance	\$ 1,729,189	\$ 1,677,252	\$ 1,108,316	\$ 1,066,904	\$ 1,052,678
<i>Minimum Target Balance</i>	<i>\$ 933,110</i>	<i>\$ 927,263</i>	<i>\$ 978,771</i>	<i>\$ 987,491</i>	<i>\$ 1,044,373</i>
CAPITAL FUND					
Beginning Balance	\$ 3,981,241	\$ 1,495,622	\$ 20,808,121	\$ 3,194,375	\$ 4,549,435
plus: Rate Funded Capital	1,250,000	750,000	1,500,000	1,300,000	2,040,000
plus: Transfers In	65,000	65,000	65,000	65,000	65,000
less: Transfers Out	-	-	-	-	-
plus: Capital Grants / Contributions / Other Expenses	702,000	-	-	-	-
plus: GFC Revenue Towards Capital	-	-	-	-	-
plus: Net Debt Proceeds	-	25,000,000	-	13,000,000	-
plus: Interest Earnings	35,831	13,461	187,273	52,118	64,314
less: Capital Expenditures	(4,538,451)	(6,515,961)	(19,366,019)	(13,062,058)	(5,985,400)
Ending Balance	\$ 1,495,622	\$ 20,808,121	\$ 3,194,375	\$ 4,549,435	\$ 733,349
<i>Minimum Target Balance</i>	<i>\$ 871,004</i>	<i>\$ 906,735</i>	<i>\$ 1,086,584</i>	<i>\$ 727,853</i>	<i>\$ 660,979</i>
EMERGENCY RESERVE					
Beginning Balance	\$ 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
<i>Minimum Target Balance</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>
DEBT RESERVE FUNDS					
Beginning Balance	\$ 2,596,515	\$ 2,596,515	\$ 2,596,515	\$ 2,596,515	\$ 2,596,515
plus: Reserve Funding from New Debt	-	-	-	-	-
less: Use of Reserves for Debt Service	-	-	-	-	-
Ending Balance	\$ 2,596,515	\$ 2,596,515	\$ 2,596,515	\$ 2,596,515	\$ 2,596,515
<i>Minimum Target Balance</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>

Grandview Utility**Funding Strategies**

Revenue Requirement - Fund 411	2022	2023	2024	2025	2026
Revenues @ Existing Rates					
Rate Revenues Under Existing Rates	\$ 256,810	\$ 256,810	\$ 256,810	\$ 256,810	\$ 256,810
Non-Rate Revenues	610	857	714	549	594
Total Revenues	\$ 257,421	\$ 257,667	\$ 257,524	\$ 257,359	\$ 257,404
Expenses					
Cash Operating Expenses	\$ 252,364	\$ 305,048	\$ 223,048	\$ 229,834	\$ 236,962
Existing Debt Service short	-	-	-	16,921	55,349
New Debt Service	-	-	-	-	-
Rate Funded Capital	-	20,000	140,000	105,000	70,000
Total Expenses	\$ 252,364	\$ 325,048	\$ 363,048	\$ 351,755	\$ 362,311
Net Surplus (Deficiency)	\$ 5,056	\$ (67,381)	\$ (105,524)	\$ (94,396)	\$ (104,907)
Additions to Meet Coverage	-	-	-	-	-
Total Surplus (Deficiency)	\$ 5,056	\$ (67,381)	\$ (105,524)	\$ (94,396)	\$ (104,907)
Annual Rate Increase	10.00%	11.00%	12.20%	3.00%	3.00%
Cumulative Rate Increase	10.00%	22.10%	37.00%	41.11%	45.34%
Rate Revenues After Rate Increase	\$ 280,351	\$ 310,976	\$ 348,632	\$ 361,495	\$ 372,340
Incremental Rate Revenues	\$ 23,541	\$ 54,166	\$ 91,822	\$ 104,685	\$ 115,530
Additional Taxes from Rate Increase	\$ 1,184	\$ 2,724	\$ 4,618	\$ 5,265	\$ 5,810
Net Cash Flow After Rate Increase	27,414	(15,939)	(18,320)	5,025	4,813
Coverage After Rate Increase: Revenue Bonds Only	n/a	n/a	n/a	n/a	n/a
Coverage After Rate Increase: All Debt	0.18	0.03	0.77	0.83	0.86

Fund Balances - Fund 411	2022	2023	2024	2025	2026
OPERATING FUND					
Beginning Balance	\$ 47,829	\$ 75,242	\$ 59,303	\$ 40,984	\$ 46,008
plus: Net Cash Flow after Rate Increase	27,414	(15,939)	(18,320)	5,025	4,813
plus: Transfers In	-	-	-	-	-
less: Transfers Out	-	-	-	-	-
Ending Balance	\$ 75,242	\$ 59,303	\$ 40,984	\$ 46,008	\$ 50,821
<i>Minimum Target Balance</i>	<i>\$ 39,875</i>	<i>\$ 40,316</i>	<i>\$ 39,165</i>	<i>\$ 40,281</i>	<i>\$ 41,453</i>
CAPITAL FUND					
Beginning Balance	\$ 271,653	\$ 156,281	\$ 71,857	\$ 109,117	\$ 111,238
plus: Rate Funded Capital	-	20,000	140,000	105,000	70,000
less: 403-411 loan, fire connection	(65,000)	(65,000)	(65,000)	(65,000)	(65,000)
plus: GFC Revenue Towards Capital	-	-	-	-	-
plus: Net Debt Proceeds	-	-	-	-	-
plus: Interest Earnings	2,445	1,407	647	982	1,001
less: Capital Expenditures	(52,817)	(40,831)	(38,386)	(38,861)	-
Ending Balance	\$ 156,281	\$ 71,857	\$ 109,117	\$ 111,238	\$ 117,239
<i>Minimum Target Balance</i>	<i>\$ 51,025</i>	<i>\$ 52,762</i>	<i>\$ 53,338</i>	<i>\$ 53,921</i>	<i>\$ 53,944</i>
EMERGENCY RESERVE					
Beginning Balance	\$ 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
<i>Minimum Target Balance</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>
DEBT RESERVE FUNDS					
Beginning Balance	\$ -	\$ -	\$ -	\$ -	\$ -
less: Use of Reserves for Debt Service	-	-	-	-	-
Ending Balance	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Minimum Target Balance</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>

PUBLIC UTILITY DISTRICT No. 1 of Whatcom County

Electric Utility
Funding Strategies

Revenue Requirement - Fund 481	2022	2023	2024	2025	2026
Revenues @ Existing Rates					
Rate Revenues Under Existing Rates	\$ 11,800,319	\$ 12,092,793	\$ 13,113,797	\$ 13,529,159	\$ 14,511,870
Non-Rate Revenues	15,485	15,153	13,543	13,303	15,211
Total Revenues	\$ 11,815,804	\$ 12,107,945	\$ 13,127,340	\$ 13,542,462	\$ 14,527,081
Expenses					
Cash Operating Expenses	\$ 11,634,262	\$ 11,967,245	\$ 12,853,692	\$ 13,225,179	\$ 14,216,481
Existing Debt Service	530,365	530,155	532,794	468,730	471,614
New Debt Service	-	-	-	-	-
Rate Funded Capital	220,000	440,000	430,000	480,000	470,000
Total Expenses	\$ 12,384,627	\$ 12,937,401	\$ 13,816,486	\$ 14,173,909	\$ 15,158,095
Net Surplus (Deficiency)	\$ (568,823)	\$ (829,455)	\$ (689,146)	\$ (631,447)	\$ (631,014)
Additions to Meet Coverage	-	-	-	-	-
Total Surplus (Deficiency)	\$ (568,823)	\$ (829,455)	\$ (689,146)	\$ (631,447)	\$ (631,014)
Annual Rate Increase	6.00%	6.00%	7.00%	4.00%	0.00%
Cumulative Rate Increase	10.24%	16.85%	25.03%	30.04%	30.04%
Rate Revenues After Rate Increase	\$ 11,992,858	\$ 12,409,700	\$ 13,440,923	\$ 14,045,649	\$ 15,140,323
Incremental Rate Revenues	\$ 192,539	\$ 316,908	\$ 327,126	\$ 516,490	\$ 628,453
Additional Taxes from Rate Increase	\$ 7,458	\$ 12,275	\$ 12,671	\$ 20,006	\$ 24,342
Net Cash Flow After Rate Increase	(383,742)	(524,823)	(374,691)	(134,963)	(26,904)
Coverage After Rate Increase: Revenue Bonds Only	n/a	n/a	n/a	n/a	n/a
Coverage After Rate Increase: All Debt	0.73	0.87	1.13	1.79	2.00

Fund Balances - Fund 481	2022	2023	2024	2025	2026
OPERATING FUND					
Beginning Balance	\$ 1,008,769	\$ 971,858	\$ 792,990	\$ 766,305	\$ 978,319
plus: Net Cash Flow after Rate Increase	(383,742)	(524,823)	(374,691)	(134,963)	(26,904)
plus: Transfers In	346,830	345,956	348,005	346,978	348,854
less: Transfers Out	-	-	-	-	-
Ending Balance	\$ 971,858	\$ 792,990	\$ 766,305	\$ 978,319	\$ 1,300,270
Minimum Target Balance	\$ 614,858	\$ 624,109	\$ 633,785	\$ 643,905	\$ 654,488
CAPITAL FUND					
Beginning Balance	\$ 2,022,405	\$ 1,554,842	\$ 1,825,094	\$ 2,103,681	\$ 2,431,399
plus: Rate Funded Capital	220,000	440,000	430,000	480,000	470,000
plus: Transfers In	-	-	-	-	-
less: Transfers Out	-	-	-	-	-
plus: Capital Grants / Contributions / Other Expenses	-	-	-	-	-
plus: GFC Revenue Towards Capital	-	-	-	-	-
plus: Net Debt Proceeds	-	-	-	-	-
plus: Interest Earnings	18,202	13,994	16,426	24,448	27,397
less: Capital Expenditures	(705,764)	(183,742)	(167,839)	(176,730)	(126,677)
Ending Balance	\$ 1,554,842	\$ 1,825,094	\$ 2,103,681	\$ 2,431,399	\$ 2,802,119
Minimum Target Balance	\$ 360,830	\$ 363,320	\$ 365,709	\$ 368,155	\$ 368,155
EMERGENCY RESERVE					
Beginning Balance	\$ 99,000	\$ 99,000	\$ 99,000	\$ 99,000	\$ 99,000
plus: Transfers In	-	-	-	-	-
less: Transfers Out	-	-	-	-	-
Ending Balance	\$ 99,000	\$ 99,000	\$ 99,000	\$ 99,000	\$ 99,000
Minimum Target Balance	\$ -	\$ -	\$ -	\$ -	\$ -
DEBT RESERVE FUNDS					
Beginning Balance	\$ 612,767	\$ 612,767	\$ 612,767	\$ 612,767	\$ 612,767
plus: Reserve Funding from New Debt	-	-	-	-	-
less: Use of Reserves for Debt Service	-	-	-	-	-
Ending Balance	\$ 612,767	\$ 612,767	\$ 612,767	\$ 612,767	\$ 612,767
Minimum Target Balance	\$ -	\$ -	\$ -	\$ -	\$ -

PUBLIC UTILITY DISTRICT No.1 of Whatcom County
Combined Utility Funds
Cash Flow Forecast for 2022 Budget

	2021	2022	2023	2024	2025	2026
OPERATING FUND						
Beginning Balance	\$ 2,469,049	\$ 3,353,443	\$ 2,776,289	\$ 2,529,546	\$ 1,915,605	\$ 2,091,232
plus: Net Cash Flow after Rate Increase	884,394	(577,153)	(246,744)	(613,941)	175,627	312,536
less: Transfer of Surplus to Capital Fund	-	-	-	-	-	-
Ending Balance	\$ 3,353,443	\$ 2,776,289	\$ 2,529,546	\$ 1,915,605	\$ 2,091,232	\$ 2,403,768
CAPITAL FUND						
Beginning Balance	\$ 8,452,101	\$ 6,275,299	\$ 3,206,745	\$ 22,705,072	\$ 5,407,174	\$ 7,092,072
plus: Rate Funded Capital	2,030,000	1,470,000	1,210,000	2,070,000	1,885,000	2,580,000
plus: Transfer from Operating Fund	-	-	-	-	-	-
plus: Capital Grants / Contributions / Other Expenses	337	702,000	-	-	-	-
plus: GFC Revenue Towards Capital	-	-	-	-	-	-
plus: LTGO Bond Proceeds	5,500,000	-	25,000,000	-	13,000,000	-
plus: Interest Earnings	96,069	56,478	28,861	204,346	77,548	92,712
Total Funding Sources	\$ 16,078,506	\$ 8,503,777	\$ 29,445,606	\$ 24,979,418	\$ 20,369,722	\$ 9,764,785
less: Capital Expenditures	(9,803,207)	(5,297,032)	(6,740,534)	(19,572,244)	(13,277,649)	(6,112,077)
Ending Capital Fund Balance	\$ 6,275,299	\$ 3,206,745	\$ 22,705,072	\$ 5,407,174	\$ 7,092,072	\$ 3,652,708
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						
Beginning Balance	\$ 3,209,282	\$ 3,209,282	\$ 3,209,282	\$ 3,209,282	\$ 3,209,282	\$ 3,209,282
plus: Reserve Funding from New Debt	-	-	-	-	-	-
less: Use of Reserves for Debt Service	-	-	-	-	-	-
Ending Balance	\$ 3,209,282	\$ 3,209,282	\$ 3,209,282	\$ 3,209,282	\$ 3,209,282	\$ 3,209,282
LUD ASSESSMENTS FUND						
Beginning Balance	\$ 223,817	\$ 180,884	\$ 135,396	\$ 87,300	\$ 36,546	\$ -
plus: Assessments Received	124,155	118,553	112,900	107,194	101,436	96,506
less: Use of Reserves for Debt Service	(167,088)	(164,042)	(160,995)	(157,949)	(154,902)	(151,855)
Ending Balance	\$ 180,884	\$ 135,396	\$ 87,300	\$ 36,546	\$ (16,921)	\$ (55,349)

PUBLIC UTILITY DISTRICT of Whatcom County
Historical and ProForma Debt Service Coverage
From 2022 Financial Forecasts

	2021	2022	2023	2024	2025	2026
Revenue						
Water Utility Sales and Revenue	\$ 9,168,456	\$ 9,758,802	\$ 10,350,560	\$ 10,971,773	\$ 11,883,479	\$ 13,001,267
Electric Utility Sales and Revenue	11,992,447	11,992,858	12,409,700	13,440,923	14,045,649	15,140,323
Other Revenue	241,742	351,025	444,529	443,774	446,909	453,745
Total Revenues	\$ 21,402,645	\$ 22,102,685	\$ 23,204,790	\$ 24,856,469	\$ 26,376,037	\$ 28,595,334
Expenses (1)						
Operations and Maintenance	\$ 11,626,559	\$ 12,806,410	\$ 12,692,946	\$ 13,577,219	\$ 13,991,260	\$ 15,063,476
Taxes (includes taxes passed through to customer)	1,177,868	1,214,643	1,245,573	1,277,232	1,330,546	1,391,175
Administration	3,141,122	4,692,715	4,307,675	4,550,037	4,623,639	4,839,354
Non-operating Expenses	-	-	-	-	-	1
Total Expenses	\$ 15,945,548	\$ 18,713,769	\$ 18,246,194	\$ 19,404,488	\$ 19,945,445	\$ 21,294,007
Income (Loss)						
Balance Available for Debt Service	\$ 5,457,097	\$ 3,388,917	\$ 4,958,596	\$ 5,451,981	\$ 6,430,591	\$ 7,301,328
Parity Debt Service						
2016 LTGO Bonds	167,088	164,042	160,995	157,949	154,902	151,855
Less Assessment Income	(124,155)	(118,553)	(112,900)	(107,194)	(101,436)	(96,506)
Total Parity Debt Service	\$ 42,933	\$ 45,489	\$ 48,095	\$ 50,755	\$ 53,466	\$ 55,349
LTGO Debt Service						
2012 LTGO Bonds	\$ 418,488	\$ 422,538	\$ 424,998	\$ 425,580	\$ -	\$ -
2013 LTGO Bonds	451,350	452,800	451,000	448,800	451,200	448,000
2021 LTGO Bonds	1,345,447	1,238,200	1,238,400	1,237,200	1,239,600	1,240,400
New Debt	-	-	1,499,810	1,499,810	2,279,711	2,279,711
Total Existing LTGO Debt Service	\$ 2,215,284	\$ 2,113,538	\$ 3,614,208	\$ 3,611,390	\$ 3,970,511	\$ 3,968,111
Other Debt Service						
EDI Loan	\$ 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	\$ 3,154,547	\$ 1,185,558	\$ 1,251,961	\$ 1,745,504	\$ 2,362,282	\$ 3,233,535
Debt Service Coverage inc. other Water Utility Debt	2.37	1.54	1.34	1.47	1.58	1.79

(1) Excludes Depreciation, Amortization, and Interest Expense