



2022 BUDGET

TABLE OF CONTENTS

CEO/General Manager’s Message 1

ELECTRIC SYSTEM.....5

Exhibit 1 - Operating and Other Revenue.....11

Exhibit 2 - Purchased Power 12

Exhibit 3 - Operating and Maintenance Expenses – By Division..... 13

Exhibit 4 - Operating and Maintenance – By Cost Element14

Exhibit 5 - Capital Expenditures..... 15

GENERATION SYSTEM..... 17

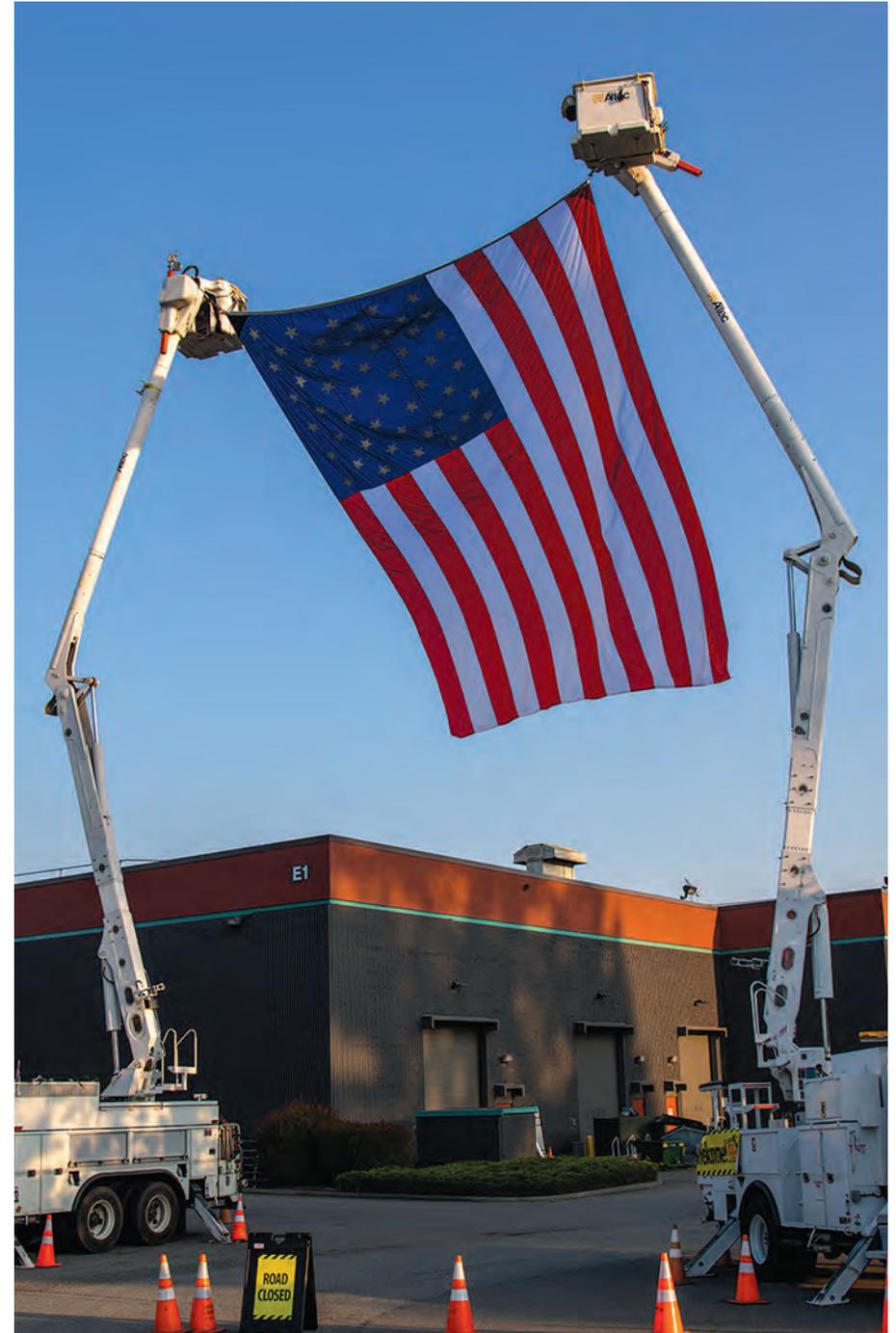
Exhibit 6 – Generation System.....19

WATER SYSTEM..... 21

Exhibit 7 - Operating and Other Revenue..... 23

Exhibit 8 - Operating Expenses 24

Exhibit 9 - Capital Expenditures..... 25



RESOLUTION NO. 6037

A RESOLUTION Adopting the 2022 Budget for Public Utility District No. 1 of Snohomish County, Washington

Resolution No. 6037
Exhibit A
Page 1 of 1

WHEREAS, a proposed budget for Public Utility District No. 1 of Snohomish County, Washington (the "District"), was filed by the Commission of the District in accordance with the requirements of applicable law; and

WHEREAS, after having given prior notice to the public in accordance with the requirements of applicable law, the Commission held public hearings to take testimony on issues relating to spending levels under consideration for the year 2022; and

WHEREAS, Resolution 5853 Modifying the Electric System's Financial Reserve Policy provides that cash reserves and funds are presented in the annual budget and that the staff discuss with the Board proposed modifications of funds; and

WHEREAS, after having considered staff's estimates of income for 2022 and estimates of expenditures, capital construction requirements, and projected use of reserve funds, and having considered the public testimony of those customers submitting and offering testimony, the Commission has concluded that the 2022 District budget summarized in Exhibit "A" hereto is fairly structured to meet the needs of the District and its customers.

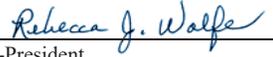
NOW, THEREFORE, BE IT RESOLVED by the Commission of Public Utility District No. 1 of Snohomish County, Washington, as follows:

- The 2022 budget and the Fund transfers for Public Utility District No. 1 of Snohomish County, as summarized in the attached Exhibit "A," is hereby adopted.

PASSED AND APPROVED this 7th day of December, 2021.



President



Vice-President



Secretary

Snohomish County PUD 2022 Budget

(\$000's)	Electric	Generation	Water
Operating Revenues			
Energy/Water Retail Sales	\$ 624,652	\$ 27,131	\$ 13,135
Energy/Water Wholesale Sales	45,931	-	496
Other Operating Revenues	36,622	-	379
Total Operating Revenues	\$ 707,205	\$ 27,131	\$ 14,010
Operating Expenses			
Purchased Power/Water	\$ 325,237	\$ -	\$ 3,352
Operations & Maintenance	246,781	10,044	7,327
Taxes	38,901	98	712
Depreciation (non-cash)	59,433	6,067	3,334
Total Operating Expenses	\$ 670,352	\$ 16,208	\$ 14,725
Net Operating Income	\$ 36,852	\$ 10,923	\$ (715)
Non-Operating Income (Expense)			
Interest Income & Other	\$ 6,740	\$ 709	\$ 91
Interest Charges	(17,608)	(4,497)	(366)
Contributions	32,867	50	5,149
Total Non-Operating Income (Expense)	\$ 22,000	\$ (3,738)	\$ 4,875
Net Income	\$ 58,852	\$ 7,185	\$ 4,160
Other Sources and (Uses) of Funds			
Capital Expenditures	\$ (159,383)	\$ (4,784)	\$ (13,420)
Debt Service Principal	(11,550)	(8,467)	(1,828)
Loan Repayments and Other	7,440	-	3,567
Reserve Use: Revenue Fund	38,025	-	2,365
Reserve Use: Project/Bond Construction Funds	77,600	-	1,822
Total Other Sources (Uses)	\$ (47,868)	\$ (13,252)	\$ (7,494)

2022 BUDGET

The 2022 Budget for Snohomish County PUD reflects the efforts of leaders, project leads, planners, and staff from across the organization. It is driven by our values and represents a prudent strategy of reliability, modernization, and infrastructure investment in the future, while continuing to balance the challenges brought forward by the COVID-19 pandemic. With the 2022 Budget, the PUD continues to focus on investing in the quality of its people, its commitment to its customers, preparing for the needs of the future, and responsible cost and fiscal management.



John Haarlow
CEO/General Manager

2022 BUDGET KEY FEATURES

The 2022 Budget and expenditure plan provides funding to develop, maintain, and enhance the PUD's Electric, Generation, and Water systems and continue to provide excellent service and enhance reliability to our customers while pursuing cost-effective conservation.

The 2022 operating budget for the Electric System is \$670.3 million, an increase of \$9.7 million from 2021. The expenditure plan also includes \$159.4 million in capital expenditures; the majority of those expenditures are for system reliability improvements and upgrades across the PUD's territory and investment in the Connect Up project, a multi-year project to modernize the PUD's meters and network infrastructure.

The 2022 operating budget for the Generation System is \$16.2 million, comparable to 2021. The expenditure plan also includes \$4.8 million in capital expenditures for construction and improvements, primarily at the Jackson Hydroelectric Project.

The Water System's 2022 operating budget is approximately \$14.7 million, roughly \$1.2 million higher than the 2021 operating budget. The expenditure plan for the Water System also includes \$13.4 million in capital improvements, the majority of which are for Warm Beach upgrades and main replacement projects.

The following highlights some of the major components of the 2022 Electric System operating budget and capital expenditures:

- ✓ **Rate adjustments** – The PUD plans to implement small rate increases over the next several years, starting with a 2.1% general rate adjustment in 2022. This strategy, and the 2022 rate adjustment in particular, is subject to public hearing and Board of Commissioners approval.
- ✓ **Bond issue** – The 2022 Budget includes a \$60 million bond issue to help fund capital projects in addition to use of \$40 million of proceeds from the 2021 Revenue Bonds.
- ✓ **Retail power consumption** – Retail loads, primarily from residential customers, are expected to increase approximately 2% in 2022 compared to the 2021 Budget.
- ✓ **Full-Time Equivalent (FTE) employees** – The 2022 Budget reflects a small increase in FTEs, necessary to maintain excellent customer service, response times and to support new projects and initiatives.
- ✓ **New connections** – The estimate for 2022 Budget new premise connections is 4,135, an increase from the 2021 Budget.
- ✓ **Wholesale market power sales** – Sales are expected to increase \$10.8 million from 2021 levels, a reflection of higher expected market prices.
- ✓ **System reliability investments** – The 2022 capital plan includes several major projects aimed at increasing reliability for customers – these include miscellaneous line improvement projects and the Sky Valley 115 kV Switching Station as well as continuation of the wood pole and underground cable replacement programs.

- ✓ **Community Support Program** – The 2022 Budget includes funding to continue this program to help customers who have been financially impacted by the COVID-19 pandemic.
- ✓ **Connect Up Program** – Includes \$34.5 million for the beginning of a multi-year project to modernize the PUD’s meters and network infrastructure.
- ✓ **North County Community Office** – Includes \$14 million for the design and initial construction of a new community office located in Arlington and related site work.
- ✓ **Energy Services programs** – The PUD continues investment in energy-efficiency and related programs with \$14.2 million in planned expenditures. These expenditures are reported as part of Operating and Maintenance costs.

COST MANAGEMENT IN THE 2022 BUDGET

Snohomish County and Camano Island continue to experience population growth, aging power distribution infrastructure, increasing industry demands and initiatives, and other inflationary factors, leading to pressure on the PUD budgets and rates. In order to address this pressure, and reduce our rate pressures, the Responsible Cost and Fiscal Management portion of the PUD’s Strategic Priorities features cost management as an important component, and this is reflected in the budget development process. The 2022 Budget was prepared using target-based budgeting principles, and staff are continually challenged to review their expenditures and processes to ensure that the cost management opportunities are evaluated. Several cost-savings categories are evaluated and tracked:

- *Continuous improvement opportunities*
- *Actively bidding contracts and reviewing material pricing*
- *Utilizing internal talent rather than contractors*
- *Utilizing new or alternative technology*
- *Reevaluating absences and capturing attrition*
- *Suspending or restructuring under-utilized contracts and services*
- *Actively pursuing grants or other financial opportunities*

COMPLIANCE WITH COMMISSION POLICY

Pursuant to Commission Policy, specifically EL-4 that defines the executive policies for financial planning and budgeting, the 2022 Budget complies with the following:

- Includes a credible projection of revenues and expenditures;
- Maintains cash reserves at levels consistent with Commission policy established in Resolutions 5853, 5854 and 5855;
- Provides for 2022 Electric System debt service coverage greater than the Commission’s 1.75x minimum target; and
- Planned use of bond proceeds does not exceed the Commission’s target of 40% of non-generation electric system capital.

CASH RESERVES

The PUD maintains reserve accounts categorized as follows:

- **Operating Reserve**, which represents approximately 120 days of non-power budgeted expenses in order to provide adequate working capital during unforeseen events such as natural disasters, pandemics, economic downturns, customer loss, and revenue interruption. The Operating Reserve currently exceeds minimum levels.
- **Contingency Reserve**, which hedges against risks associated with wholesale market exposure resulting from power supply portfolio imbalances created by such elements as weather, contract purchase/product variability, fuel prices, load variances or resource failure. This reserve also provides for self-insured retentions and insurance carrier deductibles. These reserve funds are expected to remain intact during 2022.
- **Project Reserve**, which represents funds expected to be used for capital and other projects. These funds are generally the proceeds of bond issues. The PUD will have bond construction funds available at the end of 2021 and plans to issue additional debt in 2022 of \$60 million to help fund capital projects.
- **Benefit Reserves**, which are being accrued over time to fund the actuarial cost of post-employment benefit obligations. The 2022 Budget provides \$2 million to be added to this reserve.
- **Sinking Reserves**, which are utilized to set aside funds on a monthly basis for annual debt service and privilege tax payments.
- **Bond Debt Service Reserves**, which are held pursuant to bond covenants for future debt payments.

STRATEGIC PRIORITIES REVAMP – STRATEGY 2040

The PUD is currently underway on a project to revamp its Strategic Plan. In 2022, the PUD will be working with internal and external stakeholders to help develop a long-term vision and strategy for the PUD, which will be tied closely with the budget development process.

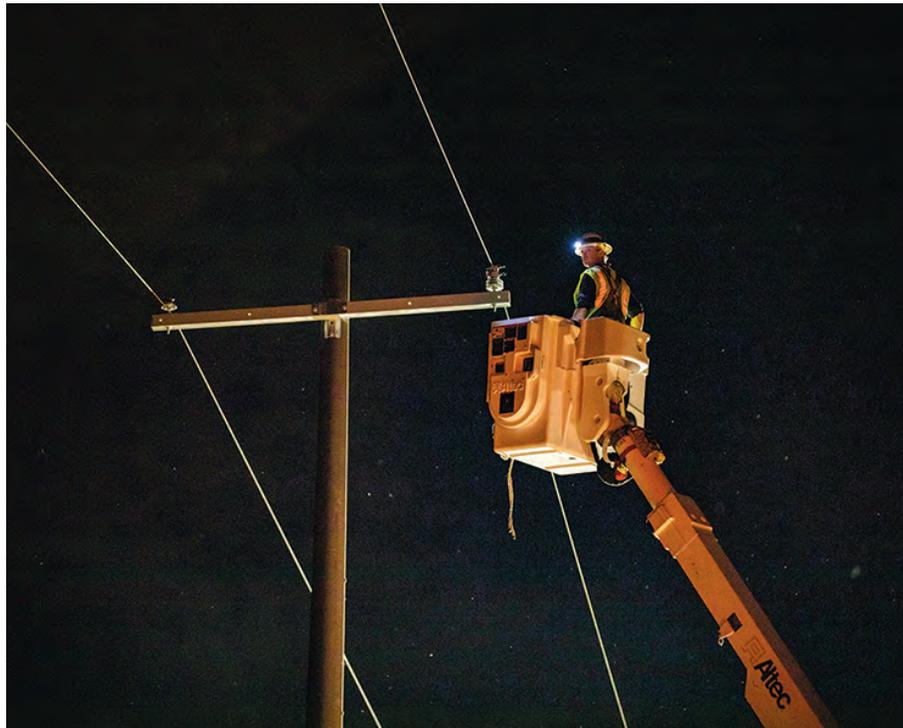






2022 BUDGET

The Electric System operates primarily to provide electrical service to approximately 368,000 customers representing a population of approximately 840,000 people and a variety of commercial and industrial business. The Electric System purchases the majority of the electrical energy it sells to customers from the Bonneville Power Administration (BPA). The Electric System consists of the PUD's transmission lines, substations, distribution lines, transformers, meters, and general plant. It also includes customer service, engineering and design, energy-efficiency services, and administrative functions that support the construction, operations and maintenance of the transmission and distribution system.



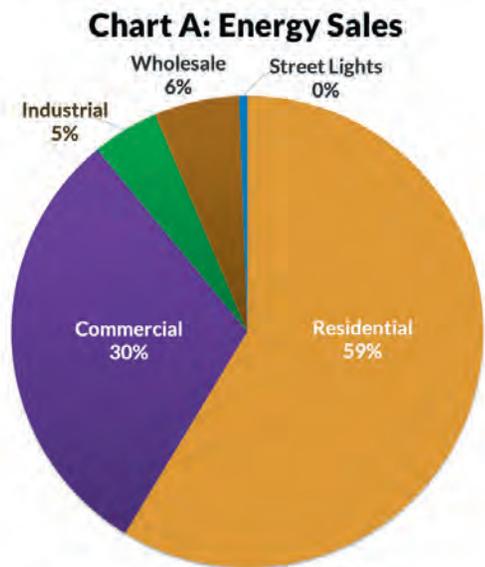
Schedule 1 shows the 2022 Budget compared to the 2021 Budget.

Schedule 1 ELECTRIC SYSTEM COMPARATIVE FINANCIAL DATA (\$000's)		
	2021 Budget	2022 Budget
Operating Revenues		
Energy Retail Sales	\$594,940	\$624,652
Energy Wholesale Sales	35,125	45,931
Other Operating Revenues	29,537	36,622
Total Operating Revenues	\$659,602	\$707,205
Operating Expenses		
Purchased Power	\$322,332	\$325,237
Operations & Maintenance	245,832	246,781
Taxes	36,236	38,901
Depreciation Expense	56,221	59,433
Total Operating Expenses	\$660,620	\$670,351
Net Operating Income	\$(1,018)	\$36,853
Other Income & Expense	9,934	6,740
Interest Charges	(14,550)	(17,608)
Contributions	24,247	32,867
Net Income	\$18,613	\$58,853
Cash Adjustments to Net Income		
Capital Expenditures	\$(100,507)	\$(159,383)
Debt Service Principal	(11,323)	(11,550)
Depreciation	56,221	59,433
Other/Cash Adjustments	10,876	7,440
Estimated Use of Reserves and Bond Proceeds	\$(26,120)	\$(45,208)

Operating Revenues

Retail energy sales included in the 2022 Budget are sales within the PUD's service territory to residential, commercial and industrial customers and are projected to be \$29.7 million higher in the 2022 Budget due to expectations of higher customer consumption.

Sales to retail customers represent 94% of the Electric System's total energy sales revenue. Chart A highlights the major components of our energy sales.



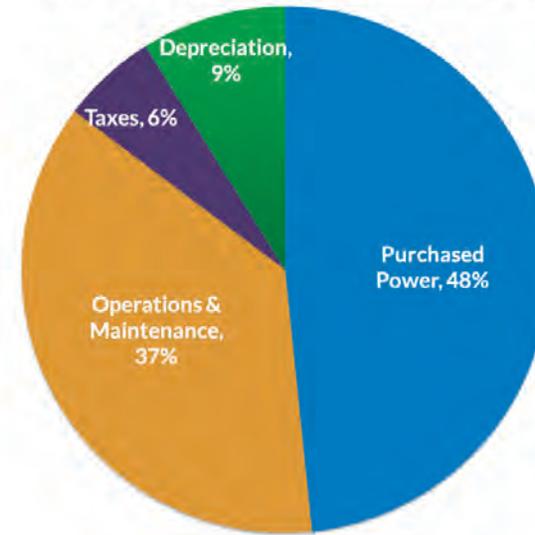
Wholesale Energy Sales Revenues are \$45.9 million in the 2022 Budget, \$10.8 million higher than the 2021 Budget. This increase reflects the current higher forward price forecast.

Other Operating Revenues are \$36.6 million in the 2022 Budget, a \$7 million increase from 2021 levels. These revenues include sales of the PUD's transmission capacity, BPA energy-efficiency program reimbursements, customer fees and other revenues.

Operating Expenditures

The 2022 Budget for operating expenditures is \$9.7 million higher than the 2021 Budget. Chart B highlights the major components of the 2022 operating expenditures.

Chart B: Operating Expenditures



PURCHASED POWER

The 2022 Purchased Power budget reflects a strategy for the power supply that focuses on securing stable, reliable power at predictable prices while keeping risk within acceptable levels.

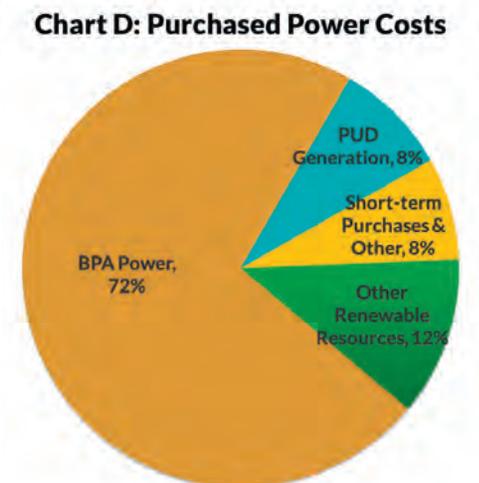
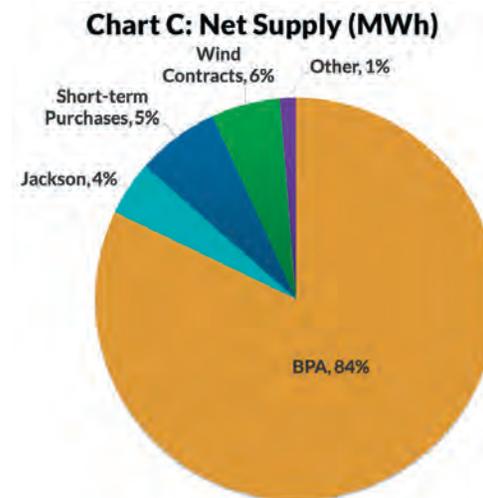
Purchased Power costs of \$325.2 million are \$2.9 million higher than the 2021 Budget. This increase is primarily the result of higher projected short-term market purchase costs due to increases in projected purchase volume and prices. These costs are more than offset by increased wholesale power market sales.

- ▶ **Bonneville Power Administration (BPA)** – The 2022 Budget reflects a long-term power purchase agreement effective October 1, 2012, through September 30, 2028, for the purchase of up to 811 aMW through the Block and Slice products. The BPA power contract represents 82.7% of the PUD's 2022 forecast power purchases.

- Block Product** – 44% of the PUD’s energy contract with BPA comes from the Block product. The Block product provides the PUD with power in flat monthly amounts that total 3 million MWh over calendar year 2022. The amount of energy the PUD receives each month is based on the PUD’s historical monthly load shape. In 2022, the total annual cost of the Block product is forecasted at \$105.3 million.
- Slice Product** – 56% of the PUD’s energy contract with BPA comes from the Slice product. The Slice product is delivered in variable amounts that reflect the actual output of the Federal Base Power System, which can vary from year to year based on regional hydro conditions. The 2022 Budget estimates receiving 3.9 million MWh from BPA’s Slice product at a cost of \$130.4 million.
- Jackson Hydroelectric Project** – The Electric System is expected to purchase 372,989 MWh of power from the Jackson Hydroelectric Project, a component of the PUD’s Generation System, at a cost of \$13.5 million in the 2022 Budget. This represents 4% of the Electric System’s anticipated 2022 power resources.
- Small Hydroelectric Projects** – The Generation System owns four small hydroelectric projects: the Woods Creek Project and the Youngs Creek Project in Snohomish County and the Calligan Creek Project and the Hancock Creek Project in King County. The 2022 Generation System budget includes \$6.3 million in purchased power expenditures related to these projects.
- Short-term Market Purchases** – The 2022 Budget includes 498,940 MWh, estimated to cost \$19 million, for short-term market purchases anticipated to satisfy the PUD’s retail loads in excess of its firm resources to manage short-term load and resource variations. These costs are offset by wholesale power market sales.
- Renewable Energy Credits (RECs)** – In the 2022 Budget, the PUD anticipates it may need to purchase small quantities of RECs to supplement the PUD’s existing renewables portfolio and most cost-effectively meet the target increase of 15% renewables in 2022. The 2022 Budget includes \$270,000 for forecasted REC purchases.
- Renewable Power Purchases** – In addition to the PUD’s owned resources, the utility has acquired eligible renewable resources through long-term power

supply contracts. These include the White Creek Wind Agreement, the Wheat Field Wind Agreement, the Hay Canyon Wind Agreements, the Packwood Agreement, the Small Renewable Generation Agreement, and the Hampton Lumber Mill – Darrington, WA Agreement. The PUD has also recognized the contributions of solar generation from its new Community Solar project in Arlington and the RECs associated with the PUD’s long-term Bonneville power contract. The 2022 Budget forecasts a total of 511,789 MWh from these contracts at a forecast total cost of \$38.6 million.

Chart C illustrates the PUD’s Purchased Power included in the 2022 Budget in terms of MWh purchased, while Chart D indicates the relative cost of the different power resources. Market purchases made for load/resource balancing are included.



OPERATING AND MAINTENANCE (O&M) EXPENDITURES

Operating and maintenance expenditures in the 2022 Budget are \$246.8 million, \$948,000 higher than the 2021 Budget, and account for 37% of total PUD operating expenditures. Operating and Maintenance expenditures include energy-efficiency programs and Transmission and Ancillary Services. Exhibit 3 (page 13) provides detail for O&M expenditures by division, and Exhibit 4 (page 14) provides detail for O&M expenditures by cost element.

O&M expenditures include the following areas:

- operating and maintaining the Electric System to provide reliable service to our customers. This effort includes the regular maintenance of lines and stations, response to customer outages, and tree trimming efforts;
- providing effective customer service through the call center, local offices, account control and front-line operations, as well as executive account attention and effective communications;
- maintaining an effective program that ensures the safety of employees in the performance of their duties;
- providing the internal support needed to serve our customers effectively in areas such as human resources and safety, finance and accounting, material procurement and management, and information technology;
- providing maintenance and upkeep of our facilities, vehicles, and equipment;
- ensuring compliance with environmental and other government regulations;
- supporting the policy-making, regulatory and management oversight functions; and maintaining an effective energy-efficiency program.

Operating and Maintenance expenditures also include Transmission and Ancillary Services forecasted at \$62.7 million, which is \$2.8 million higher than 2021 Budget levels due to anticipated BPA rate changes.

ENERGY SERVICES PROGRAMS

PUD programs are designed so that all customers (residential, commercial, and industrial) have an opportunity to become more energy efficient and have access to the newest energy technologies. The 2022 Budget includes continued enhancements to the energy services program portfolio designed to improve customer experience and meet the PUD's growing capacity needs.

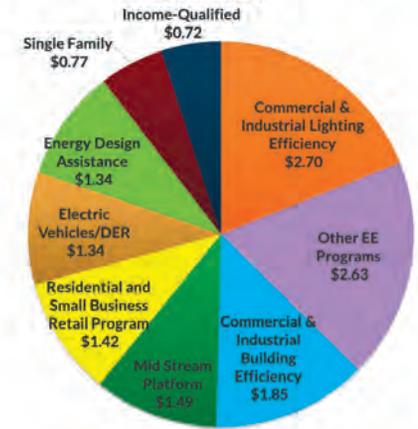
The PUD has allocated an overall Energy Services budget of \$19.4 million, which includes \$14.2 million in energy-efficiency program incentives and rebates. Revenue sources related to energy-efficiency through BPA Energy Efficiency Incentives (EEI) and conservation loan repayments will recover approximately \$7 million.

The PUD continues to acquire all cost-effective and achievable energy-efficiency resources in adherence with state legislation. The energy conservation targets established for the 2020-22 biennium are consistent with Washington State Energy Independence Act requirements and satisfy the PUD's compliance obligations. Beyond compliance alone, the PUD uses data driven insights to refine and offer a suite of programs to meet the variety of needs of customers in our service territory.

Energy-efficiency programs for the 2022 Budget include the following items:

- Retail discounts on electric hybrid water heaters, smart thermostats, LEDs for hard-to-reach markets and other high-efficiency appliances and electronics. Additionally leveraging midstream programs to ensure efficiency incentives reach all applicable PUD customers and continue to transform the market technology;
- Weatherization for income-qualified residential customers, provided in partnership with local agencies, as well as an energy-savings kits for all income-qualified assistance program participants;
- Incentives for residential insulation, high-efficiency windows, efficient heat pumps (air source, ground source, and ductless);
- Rebates for energy-efficient commercial lighting, networked or advanced lighting controls, kitchen equipment, HVAC, and other end-uses;

Chart E: Energy Services Programs (\$ Millions)



- Builder incentives for efficiency upgrades that exceed the levels set by building code in residential new construction, single family, multifamily, and manufactured homes;
- Strategic energy management and coaching relationships with large commercial and industrial customers to identify process, behavioral, and capital energy savings projects;
- Custom incentives to businesses for installing a wide variety of energy-efficient technologies at commercial and industrial customer sites;
- Energy design assistance for commercial building new construction projects, including enhanced rebates for demand-response-ready buildings, income-qualified occupancy, or electric-only design; and
- Expanding our reach with small and medium businesses by leveraging regional partnerships to provide enhanced value.

The 2022 Budget also includes resources for the following items:

- Advancing innovative program development and design;
- Leveraging data to inform more sophisticated strategic planning and target market segments for energy-efficiency resource acquisition;
- Supporting a shift toward capacity benefits as a program outcome;
- Delivering an expanded electric vehicle program that provides for research, rebates, and incentives to customers in all segments;
- Working across departments to deliver several Distributed Energy Resources (DER) pilots to learn more about capacity and rate benefits;
- Partnering with outside agencies to co-fund projects by applying for, and managing strategic grants for new technology;
- Enhancing outreach and education to more closely couple energy efficiency with the PUD's income-qualified customer assistance programs;
- Trade ally network training and development, supporting new jobs in the community and providing incentives for the administration of our programs;
- Measurement, evaluation, and continual improvement of program performance;
- Providing information and promotion of programs via traditional channels, at events and home shows, and directly in customers' homes;
- Market research at the local level as well as leveraging regional research efforts; and
- Technology demonstration and evaluation projects conducted in Snohomish County with support from EPRI, BPA, NEEA, and local community partners.

TAXES AND DEPRECIATION

Budgeted taxes of \$39 million are \$2.7 million higher than 2021 reflecting higher retail sales. Taxes include a 3.873% state excise tax and a 2.14% county privilege tax.

Estimated depreciation expenditures of \$59.4 million are \$3.2 million higher than 2021. Depreciation is an estimate of the reduced value of the PUD's fixed assets and are part of operating expenditures in the 2022 Budget.

CAPITAL EXPENDITURES

The 2022 Budget includes costs related to expansion, upgrades and maintenance of the Electric System infrastructure, including funding for depreciated cable replacement, distribution system line improvements, and state-requested relocation work. In addition, capital expenditures include the costs for the Connect Up Program, telecommunications infrastructure, information systems applications and hardware, work on existing facilities, development of new facilities, and purchases of vehicles and equipment.

The major capital projects included in the 2022 expenditure plan are presented in the table below and Exhibit 5 on page 15 highlights the capital projects by major category in the 2022 Budget.

→ Capital Asset Programs

The existing electric system facilities must be routinely refurbished and/or replaced to provide a reliable, cost-effective and safe system. This program provides for facility relocations, replacement of malfunctioning or deteriorated plant and improving operational efficiency. Each of the programs included in this category consists of specific improvement projects that are continuous and ongoing over a number of years. The 2022 expenditure plan is \$28.1 million for this program.

→ Customer and Reimbursable Work

The Customer and Reimbursable work portion of the capital expenditure plan funds the PUD's response to customer requests for new electrical service, upgrades to existing services and other services including street and area lighting, as well as new equipment such as transformers and meters. The 2022 Budget includes \$32 million in funding for this program, the majority of which is reimbursable.

→ New Facilities and Upgrades

The Facilities Department expenditure plan for capital expenditures is related to design, construction, upgrade and replacement of PUD facilities. The 2022 expen-

diture plan includes \$17.3 million, which includes \$14 million related to design and initial construction work for the new North County community office, warehouse, and ancillary spaces.

→ **Major Capital Expansion Projects**

The steady growth and changing load patterns of residential, industrial and commercial customers continue to require new facilities and property as well as increase peak load demands. The purpose of this program is to provide increased electric system capacity by constructing new facilities and large specific system expansions, such as new substations and new lines. These projects generally extend over a number of years. The 2022 expenditure plan for this program is \$17.2 million.

→ **Vehicles and Equipment**

The replacement of aged vehicles and equipment reaching the end of their useful lives is necessary to ensure safe operation, reliable service and optimal efficiency. Vehicle and equipment replacements are planned by Transportation Services with the intent to remove them from service before extensive maintenance costs and downtime are realized. New technology is continually being investigated to reduce environmental impact and improve workforce efficiency. The 2022 expenditure plan includes \$9.9 million for new and replacement vehicles and equipment.

→ **Major Capital Upgrade Projects**

A reliable, cost-effective and safe electric system network requires that facilities be upgraded to provide anticipated levels of service. The upgrades to the existing facilities are prompted by localized load growth, land-use changes and infrastructure expansions. This category consists of large specific system upgrades, such as substation upgrades or line reconductoring. The expenditure plan for this program in the 2022 Budget is \$6.7 million.

→ **Other Capital Outlay**

This program funds anticipated but as yet unidentified work, such as emergency line expansions and replacements and substation improvements. This category consists of small system improvements that experience indicates are necessary each year. This program's expenditure plan for the 2022 Budget is \$1.1 million.

→ **Information Technology Upgrades**

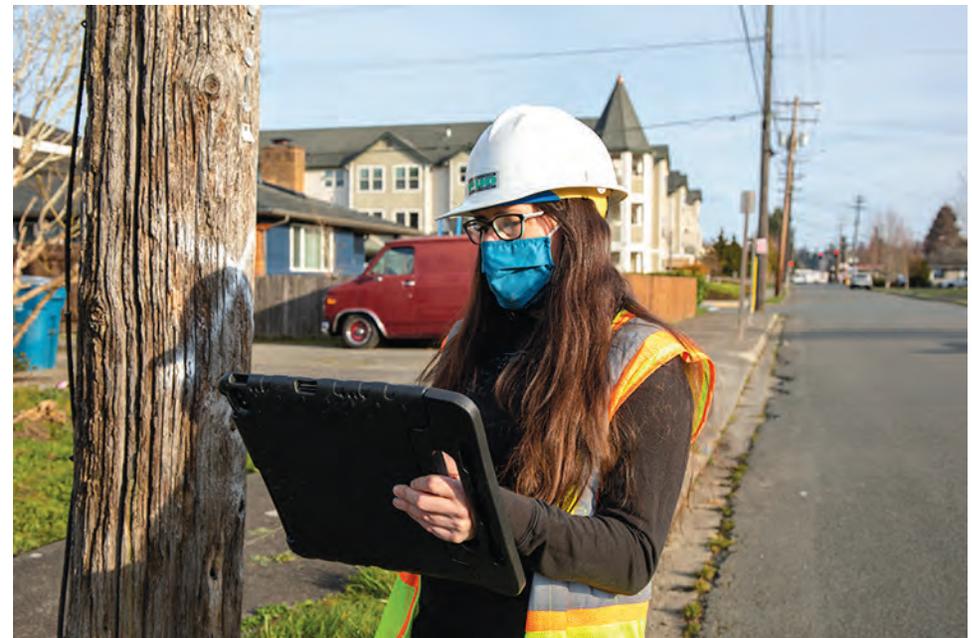
The Information Technology Services capital expenditure plan supports the technology infrastructure (such as servers, network, applications, and telecommunications) that provides the basic framework for the PUD's computer and com-

munications systems. The 2022 expenditure plan includes \$1.4 million in funding for new software and business capabilities, replacement of aging infrastructure and equipment, system software application improvements and telecommunications.

→ **Other Capital Expenditures**

Other categories of capital expenditures include funding to modernize our telecommunications system, emergency work and construction, and other smaller projects.

Significant 2022 Electric System Capital Projects/Programs (\$000's)	
Connect Up	\$34,508
North County Community Office	14,038
Sky Valley 115kV Switching Station	10,970
Wood Pole Program	6,995
Cable Replacement Program	5,492
Miscellaneous Line Improvements	4,187
Stanwood to Camano 115kV Line	4,107



**Electric System
Operating Revenues**

<u>Operating Revenues</u>	2020	2021 Budget		2022 Budget	
	Results	MWh	Amount	MWh	Amount
Residential	\$ 379,218,950	3,474,466	\$ 354,773,228	3,652,711	\$ 388,377,451
Commercial	196,879,543	2,305,771	204,990,867	2,253,673	204,297,384
Industrial	32,971,623	438,510	30,690,561	428,478	30,268,668
Street Lights	3,909,892	27,000	3,613,565	27,000	3,708,693
Total Retail Energy Sales	612,980,008	6,245,747	594,068,222	6,361,863	626,652,196
Total Wholesale Energy Sales	\$ 38,783,036	1,787,636	\$ 37,394,025	1,764,853	\$ 45,930,923
Total Energy Sales	\$ 651,763,044	8,033,383	\$ 631,462,247	8,126,716	\$ 672,583,119
 <u>Other Operating Revenues</u>					
Transmission Sales	\$ 13,422,376		\$ 9,274,000		\$ 10,012,000
Miscellaneous Operating Expense Reimbursements	1,958,672		1,649,441		1,682,430
Surplus REC and Emission Sales	158,010		1,600,000		200,000
BPA ECA Reimbursement	6,799,644		5,800,000		7,000,000
Residential Exchange Credit	2,646,490		2,402,496		7,664,000
Miscellaneous Service Charge Revenue	2,601,821.14		6,442,592		6,417,837
Rents from Electric Property	4,500,741		3,580,095		3,645,238
Total Other Operating Revenues	\$ 32,087,754		\$ 30,748,625		\$ 36,621,505
Total Operating Revenues	\$ 683,850,798		\$ 662,210,871		\$ 709,204,624

2022 Budget

Electric System
Purchased Power

Exhibit 2

	Total 2020 MWh's	2020 Results	Total 2021 MWh's	2021 Budget	Total 2022 MWh's	2022 Budget
BPA Block	2,986,843	\$ 105,653,360	2,989,906	\$ 104,568,342	3,087,577	\$ 105,310,976
BPA Slice/Slice True-up	4,130,675	124,556,317	4,101,440	129,204,227	3,881,587	130,369,632
BPA Financial Reserves and Policy Funding	-	-	-	1,869,351	-	-
BPA Lookback Credit/REP Customer Refund	-	32,181	-	-	-	-
Total BPA Power Costs	7,117,518	\$ 230,241,858	7,091,346	\$ 235,641,920	6,969,164	\$ 235,680,608
Jackson Hydro	486,417	8,583,553	374,240	11,720,182	372,989	13,518,487
Generation System - Other Debt Service	-	7,228,910	-	6,736,332	-	7,228,409
Youngs Creek Hydro	20,820	1,973,032	17,169	1,941,153	17,114	2,046,910
Woods Creek Hydro	1,065	274,716	1,278	159,636	1,273	284,724
Hancock Creek Hyrdo	21,620	2,399,116	27,382	1,982,408	27,308	1,987,189
Calligan Creek Hydro	19,264	2,100,643	24,658	1,792,648	24,598	1,970,917
Biofuel	-	496,278	-	1,025,400	-	302,800
Total Generation System	549,186	\$ 23,056,247	444,727	\$ 25,357,759	443,282	\$ 27,339,435
Packwood	16,914	616,594	17,094	576,741	17,045	690,208
Qualco	569	44,701	2,662	177,461	5,033	333,444
Hampton Lumber Mills	16,337	993,802	17,587	975,320	17,587	821,626
Wind Power Contracts	524,196	40,601,936	466,643	35,895,053	472,124	36,729,147
Total Other Renewable Power Sources	558,016	\$ 42,257,034	503,986	\$ 37,624,575	511,789	\$ 38,574,424
Market/Short Term Purchases	484,270	12,906,453	416,377	15,333,005	498,940	18,958,697
Small Power Producer	282	15,830	239	11,831	238	11,789
Other Non-Power Services	-	98,058	-	450,895	-	433,384
Renewable Energy Credits (REC) Purchases	-	0	-	265,540	-	270,000
Power Resource Management	-	3,555,711	-	4,030,344	-	3,968,228
Total Purchased Power	8,709,272	\$ 312,131,191	8,456,675	\$ 318,715,868	8,423,413	\$ 325,236,566

Electric System
Operating Maintenance Expenses - By Division

Operating & Maintenance - by Division	2020 Results	2021 Budget	2022 Budget
Distribution & Engineering Services	\$ 62,881,138	\$ 69,711,927	\$ 76,017,242
Transmission and Ancillary Services	61,053,680	59,916,917	62,719,501
Customer and Energy Services	28,356,271	34,901,845	34,765,122
Information Technology Services	31,944,616	32,274,978	30,134,670
Finance	17,730,625	20,743,952	22,604,636
Facilities, Security and Safety	10,101,483	11,692,539	12,784,539
Human Resources	8,728,654	10,403,035	11,257,198
Administration	6,378,951	7,721,183	3,343,821
Corporate Communications	5,325,235	5,707,171	6,725,935
Legal Services	4,856,561	5,390,974	5,492,751
Power, Rates & Transmission Management	1,274,768	1,623,780	1,475,992
Other Costs/Credits	375,171	(12,962,011)	(20,540,717)
Total Operating & Maintenance Expenses by Division	\$ 239,007,153	\$ 247,126,289	\$ 246,780,691

Electric System
Operating Maintenance - By Cost Element

Operating & Maintenance by Cost Element	2020 Results	2021 Budget	2022 Budget
Labor	\$ 83,601,419	\$ 74,568,848	\$ 78,909,093
Transmission and Ancillary Services	61,053,680	59,916,917	60,958,142
Contracts and Services	42,134,717	51,762,831	52,319,699
Overheads	38,583,195	31,102,722	25,567,628
Materials, Equip and Supplies	8,968,783	9,876,216	7,313,996
Employee and Retiree Benefits	(12,869,253)	5,746,686	5,746,686
Bad Debt Expense	9,315,311	4,971,454	5,402,739
Insurance and Claims	2,673,707	2,661,640	3,106,594
Other Miscellaneous Expense	2,663,847	2,382,580	2,960,871
Rents and Utilities	2,084,307	2,291,551	2,262,235
Travel and Training	522,505	1,666,344	2,055,158
Land, Property and Easements	274,935	178,500	177,850
Total Operating & Maintenance by Cost Element	\$ 239,007,153	\$ 247,126,289	\$ 246,780,691

Electric System
Capital Expenditures

Capital Projects by Major Category	2020 Results	2021 Budget	2022 Budget
Asset Programs	\$ 35,776,967	\$ 35,939,931	\$ 28,179,745
Customer & Reimbursable Work	27,859,993	28,137,258	32,043,451
New Facilities and Upgrades	7,832,228	12,557,985	17,294,810
Expansion Projects	16,139,768	10,016,023	17,199,647
Vehicles and Equipment	465,498	4,044,041	9,855,608
Connect Up Programs	376,981	3,009,456	34,508,039
Other Distribution Capital	1,634,042	3,279,730	4,650,078
Emergency Work and Construction	8,028,421	2,835,000	5,000,000
Upgrade Projects	2,119,382	2,050,678	6,744,729
Outlay Programs	938,798	1,546,494	1,123,962
Information Technology Upgrades	1,067,590	1,195,783	1,387,318
Renewable/Microgrid Development	-	510,695	1,395,550
Total Capital Programs	\$ 102,239,668	\$ 105,123,073	\$ 159,382,938





2022 BUDGET

The Generation System is financed and accounted for as a system separate from the Electric System.

The Generation System consists of the Jackson Hydroelectric Project (an operating generating facility with a nameplate capacity of 111.8 MW located on the Sultan River), the Youngs Creek Hydroelectric Project (a 7.5 MW project located near Sultan) the Woods Creek Hydroelectric Project (a 650 KW project also located near Sultan), and the Hancock Creek and Calligan Creek Projects (both 6 MW projects located in King County).

The Electric System has covenanted to purchase all power and energy available from the Generation System, and the net cash expenditures of the Generation System are treated as a component of the Electric System's Purchased Power. The Generation System is charged for administrative functions provided by the Electric System that support its operations.



Schedule 2 is a summary comparing the 2022 Budget for the Generation System with the 2021 Budget.

Schedule 2 GENERATION SYSTEM COMPARATIVE FINANCIAL DATA (\$000's)		
	2021 Budget	2022 Budget
Operating Revenues		
Energy Sales	\$26,514	\$27,131
Total Operating Revenues	\$26,514	\$27,131
Operating Expenses		
Operating & Maintenance Expenses	\$9,852	\$10,044
Taxes	98	98
Depreciation	5,948	6,067
Total Operating Expenses	\$15,898	\$16,208
Net Operating Income	\$10,616	\$10,923
Other Income & Expense	\$1,627	\$709
Interest Charges	(4,947)	(4,497)
Contributions	50	50
Net Income	\$7,347	\$7,185
Cash Adjustments to Net Income		
Capital Expenditures	\$(5,165)	\$(4,784)
Debt Service Principal	(8,130)	(8,467)
Depreciation	5,948	6,067
Estimated Use of Reserves and Bond Proceeds	\$0	\$0

Operating Revenues

The majority of the Generation System's costs, and the MWh generated, are passed on to the Electric System via energy sales (recorded as a purchased power by the Electric System). Energy Sales are almost identical to the 2021 Budget.

Operating Expenditures

Operating and Maintenance expenditures in the 2022 Budget are at similar levels to 2021.

Estimated Depreciation expenditures of \$6.1 million reflect the current depreciation schedules on assets for 2022. Depreciation is an estimate of the reduced value of the Generation System's fixed assets.

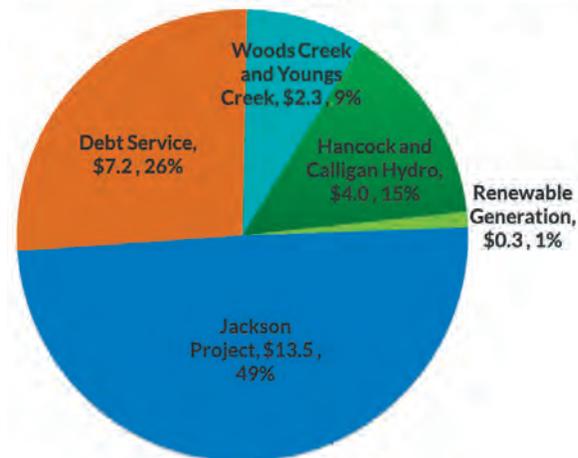
Cash Adjustments to Net Income

Capital Expenditures in the 2022 Budget are \$4.8 million, \$1.2 million lower than the 2021 Budget. Capital expenditures include \$3.6 million related to capital maintenance for the Jackson Hydroelectric Project.

Debt Service Principal is higher in the 2022 Budget compared to 2021, reflecting current debt service payment schedules. There are no planned reserve transfers in the 2022 Budget.

Chart F illustrates the relative percentages of Generation System costs transferred to the Electric System as a component of purchased power.

Chart F: Generation System Expenditures (\$ Millions)



Generation System Net Energy Sales	2020 Results	2021 Budget	2022 Budget
Jackson Hydro	\$ 8,583,553	\$ 13,171,221	\$ 13,518,487
Generation System - Other	7,228,910	5,950,559	7,228,409
Youngs Creek Hydro	1,973,032	2,014,280	2,046,910
Woods Creek Hydro	274,716	607,044	284,724
Hancock Creek Hydro	2,399,116	2,048,404	1,987,189
Calligan Creek Hydro	2,100,643	1,800,017	1,970,917
Biofuel	496,278	2,057,784	302,800
Total Generation System Net Energy Sales	\$ 23,056,247	\$ 27,649,307	\$ 27,339,435

Generation System O&M by Cost Element	2020 Results	2021 Budget	2022 Budget
Labor	\$ 2,702,181	\$ 3,546,834	\$ 3,252,462
Contracts and Services	1,550,931	1,815,570	2,244,794
Overheads	1,744,393	2,181,229	1,907,672
Materials, Equip and Supplies	532,736	1,684,810	1,588,965
Insurance and Claims	451,658	509,975	563,717
Other Miscellaneous Expense	39,935	49,915	50,474
Rents and Utilities	240,588	288,928	391,845
Travel and Training	9,226	52,316	32,316
Land, Property and Easements	5,181	7,750	7,750
Total Generation System O&M by Cost Element	\$ 7,276,827	\$ 10,137,327	\$ 10,039,995

Generation System Capital Expenditures	2020 Results	2021 Budget	2022 Budget
Jackson Hydro	\$ 2,021,267	\$ 3,502,820	\$ 4,072,412
Youngs Creek Hydro	60,819	190,700	222,200
Woods Creek Hydro	69,501	513,542	186,904
Hancock Creek Hydro	23,720	-	-
Calligan Creek Hydro	3,896	-	-
Biofuel	-	1,807,784	302,800
Total Generation System Capital Expenditures	\$ 2,179,203	\$ 6,014,846	\$ 4,784,316



2022 BUDGET

The Water System is financed and accounted for separate from the Electric and Generation Systems. It operates primarily to provide water service to approximately 22,854 customers in central Snohomish County. The Water System purchases the majority of the water it sells to customers from the City of Everett. The assets of the system include transmission mains, pump stations, distribution mains and services, supply wells, reservoirs, treatment facilities, meters, maintenance facilities, and equipment. The Water System is charged for administrative functions provided by the Electric System.

ASSUMPTIONS

The 2022 Budget is based on the following assumptions:

Water Purchases

The majority of the water sold by the PUD is purchased from the City of Everett. The City of Everett wholesale water rates are expected to increase 1.4% in 2022, which is reflected in the budget for purchased water costs.

Full-time Equivalent Employees (FTE)

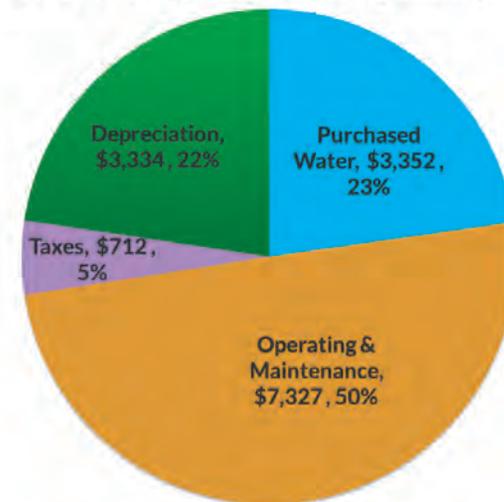
The 2022 Budget includes the addition of five new FTEs who are required as part of the Connect Up project. (Employee figures do not include services provided by the Electric System including accounting and finance, real estate, employee resources, vehicle and equipment maintenance, information technology services, telecommunications, legal, contracts, facilities, and customer service functions.)

Asset Acquisition

In 2018, the Water System completed the acquisition of the assets of the Warm Beach Water System, which serves about 600 customers. The 2022 Budget includes continued funding for capital and other improvements of the Warm Beach Water System. The 2022 Budget also includes funding from loans and grants from the Drinking Water State Revolving Fund (DWSRF) to help offset some of the acquisition and costs.



Chart G: Water System Expenditures



Schedule 3 is a summary comparing the 2022 Budget for the Water System with the 2021 Budget.

Schedule 3 WATER SYSTEM COMPARATIVE FINANCIAL DATA (\$000's)		
	<u>2021 Budget</u>	<u>2022 Budget</u>
Operating Revenues		
Water Retail Sales	\$12,539	\$13,135
Water Wholesale Sales	486	496
Other Operating Revenues	371	379
Total Operating Revenues	\$13,396	\$14,010
Operating Expenses (\$000's)		
Purchased Water	\$3,083	\$3,352
Operating & Maintenance	6,645	7,327
Taxes	684	712
Depreciation	3,085	3,334
Total Operating Expenses	\$13,497	\$14,725
Net Operating Income	\$(101)	\$(715)
Other Income & Expense	291	91
Interest Charges	(676)	(366)
Contributions	5,269	5,149
Net Income	\$4,783	\$4,160
Cash Adjustments to Net Income		
Capital Expenditures	\$(10,967)	\$(13,420)
Debt Service Principal	(1,809)	(1,828)
Depreciation	3,085	3,334
Loans and Other	4,618	3,567
Estimated Use of Reserves and Bond Proceeds	\$(290)	\$(4,187)

Operating Revenues

Water Retail Sales are estimated at \$13.1 million. Other Operating Revenues include \$379,000 in property rental and other miscellaneous fees. The 2022 Budget includes a potential 2.75% rate increase, needed to help offset the wholesale water increase from the City of Everett and other cost pressures.

Operating Expenditures

Purchased Water costs are budgeted at \$3.3 million, an increase of \$269,000 from 2021 levels. Water purchases needed from the City of Everett include the impact of a projected 1.4% wholesale water rate increase, and planned shutdown of the Lake Stevens well. Water purchases are offset partially by production from the PUD's Lake Stevens well water treatment facility. Chart G reflects the relative amount of the expenditure categories in the Water System.

Operating and Maintenance expenditures for the 2022 Budget are higher than 2021 budgeted levels primarily due to increased costs of shared services, approximately \$681,000.

Estimated depreciation of \$3.3 million is roughly equivalent to 2021. Depreciation is an estimate of the reduced value of the PUD's fixed assets.

Cash Adjustments to Net Income

The 2022 Budget provides approximately \$13.4 million for Capital Expenditures as well as construction projects and features several significant water main replacements as well as funding to bring the Warm Beach system into alignment with PUD service standards. The table below lists the significant Capital Expenditures included in the 2022 Budget.

Significant 2022 Water System Construction Projects/Programs (\$000's)	
Water AMI Conversion	\$2,822
Warm Beach Water Treatment Plant Improvements	1,394
Warm Beach - Clarence Ave Main Replacement	1,388
44th Street NE Main Extension	1,015
123rd Ave SE Main Replacement	794
139th Ave NE Main Extension	764

**Water System
Operating and Other Revenue**

Operating Revenues

	2020 Budget	2021 Budget	2022 Budget
<u>Water Retail Sales</u>			
Sale of Water - Retail SF & MF (includes Surcharge)	\$ 11,709,490	\$ 11,912,850	\$ 12,472,665
Low Income / Senior Discounts		(120,200)	(120,200)
Sale of Water - Commercial	733,592	746,348	782,210
Total Water Retail Sales	12,443,082	12,538,999	13,134,675
Sale of Water - City of Granite Falls Wholesale	264,679	269,974	275,374
Sale of Water - City of Arlington Wholesale	95,974	97,892	99,850
Sale of Water - Other (Snohomish & Goldbar)	116,000	118,320	120,686
Total Wholesale Water Sales	476,653	486,186	495,910
Total Water Sales	12,919,735	13,025,185	13,630,585
<u>Other Operating Revenues</u>			
Lake Roesiger Septic Tank Pumping Revenue	14,141	14,353	14,640
Property Rental	235,413	240,827	246,366
Miscellaneous Receipts & Engineering Fees/Other	113,579	115,851	118,168
Total Other Revenues	363,133	371,031	379,174
Total Operating Revenues	13,282,868	13,396,216	14,009,760
<u>Other Revenue</u>			
Misc. Non Operating Income	3,179,576	\$ 4,618,092	\$ 3,567,037
Investment Income	162,846	246,639	46,775
Assessments for LUDS Interest	44,000	44,000	44,000
Subtotal - Interest Income and Other	\$ 3,386,422	\$ 4,908,732	\$ 3,657,812
Contributions			
General Facilities Charges	\$ 2,121,527	\$ 2,229,519	\$ 2,092,855
New Service Connections	352,763	359,818	367,014
Distribution Service Charges	470,433	479,842	489,439
Non-Cash Contributions/Donated Plant	1,500,000	2,200,000	2,200,000
Subtotal - Contributions	\$ 4,444,723	\$ 5,269,179	\$ 5,149,308

Water System
Operating Expenses

Operating Expenses

	2020 Results	2021 Budget	2022 Budget
Operating & Maintenance			
Labor - Straight-time	\$ 2,510,422	\$ 2,810,743	\$ 3,387,441
Labor - Overtime	130,000	115,000	120,000
Travel and Education	22,400	22,400	22,400
Property and Liability Insurance	170,602	185,891	211,559
Rents and Utilities	357,000	366,000	366,578
Postage	27,600	30,000	30,000
Dues, Memberships & Subscriptions	7,500	7,500	8,850
Public and Small Works Contracts	30,000	30,000	30,000
Professional Services Contracts	538,500	312,000	258,000
Other Contracted Services	949,988	1,538,494	1,273,859
Materials, Equipment & Supplies	343,875	215,040	572,153
Uncollectible Expense	61,632	63,296	131,347
Coded Stock Material	60,000	60,000	109,599
Land, Property and Easements	50,000	50,000	30,000
Overheads	1,498,355	1,814,852	1,973,809
A&G Credit	(834,834)	(976,081)	(1,198,989)
Total Operating & Maintenance by Cost Element	\$ 5,923,040	\$ 6,645,135	\$ 7,326,606
Purchased Water	3,240,372	3,082,811	3,351,579
Taxes	671,761	684,297	712,156
Depreciation	3,024,443	3,084,932	3,334,448
Total Operating Expense	\$ 12,859,616	\$ 13,497,174	\$ 14,724,789

Project Description	2022 Budget
CIP #315 - Water AMI Conversion	2,822,000
Donated Plant	2,200,000
CIP #310 - Warm Beach Water Treatment Plant Improvements	1,394,000
CIP #54 - Warm Beach - Clarence Ave Main Replacement	1,388,000
CIP #4 - 44th St NE Main Extension	1,015,000
CIP #25 - 123rd Ave SE Main Replacement	794,000
CIP #3 - 139th Ave NE Main Extension	764,000
CIP #301 - Vehicles and Equipment	468,000
CIP #308 - Water System SCADA PLC Upgrade	461,000
CIP #312 - Lake Stevens Treatment Corrosion Control Optimization	456,000
CIP #309 - Warm Beach Water Meter Replacement	435,000
CIP #32 - 57th Pl SE Main Replacement	318,000
Design & Crew Inspection for Donated Plant	300,000
CIP #305 - New Services	274,000
CIP #98 - Forced Right of Way Relocations / Replacements	100,000
CIP #57 - Warm Beach Misc Improvements (10 Hydrants)	94,000
CIP #300 - Misc. Meter Replacement Program	65,000
CIP #202 - Kayak Reservoir 2	43,000
CIP #302 - Power Operated Equipment	30,000
Total Water System - Regular Capital Expenditures	\$13,421,000



