Benton PUD
Financial Information
May 2021

- **Financial Policies**
  - Why are financial policies important?
    - Residential Rate Comparisons

- **Credit Ratings**
  - Why are credit ratings important?
    - Rating Agencies Credit Ratings

- **Cash & Investment Reserves**
  - Why are cash & investment reserves important?
  - How does power cost volatility affect cash & investment reserves?
  - What is the right level of cash & investment reserves for a utility?
    - Unrestricted Reserves (in millions)
  - How do Benton PUD reserves compare to other utilities?
    - Days Cash on Hand

- **Debt**
  - What is the right level of debt?
    - Historical/Projected Debt Ratio Compared to Benchmark
  - How does Benton PUD debt compare to other utilities?
    - Debt Per Customer
  - How does debt affect Benton PUD’s obligations to bondholders?

- **Customer Per Employee**
  - Actual Annual Average For Years 2005-2020

- **Benton PUD Rates**
  - Residential Average Monthly Bill Comparison - 2003
  - Residential Average Monthly Bill Comparison - 2021

*For questions related to any information contained in this document contact Keith Mercer at [mercerk@bentonpud.org](mailto:mercerk@bentonpud.org).*
Financial Policies

Financial policies help a utility demonstrate fiscal stewardship by providing boundaries and guidelines to operate within. They establish both minimum and planning reserve level (liquidity) targets, parameters for debt, and various other guidelines, including risk management, investments, insurance, and the planning process. Financial policies help promote consistency from year to year which is especially important in times of fiscal stress. Having sound financial policies is considered a utility best practice and is important to the rating agencies that assign credit ratings.

Why are financial policies important?

Over the long run, sound financial policies help rates remain low. Back in 2003, Benton PUD’s rates were higher than most benchmark utilities. After developing a comprehensive set of financial policies and planning to those policies, Benton PUD’s rates, or average monthly bills, have gradually come down in relation to other utilities in the region.

Benton PUD’s average bills for residential customers have been below the median of benchmark utilities since 2005. This is also true for customers in other rate classes. The chart below shows comparative average monthly residential bills based on 1,350 kWh usage. Those utilities marked “EIA” are subject to the Energy Independence Act which requires utilities to spend more money on conservation and renewables, placing pressure on retail rates.

Residential Rate Comparisons

Source: Calculated by Benton PUD staff using data from other utilities’ websites.
Note: Douglas, Chelan and Grant PUDs are shown separately on the chart as all three of these PUDs own their own dams.

The average residential bill for Benton PUD has been at or below the median since 2005.
Credit Ratings

Credit ratings are used by stakeholders to evaluate the credit worthiness of a utility. Stakeholders include bondholders, power counterparties and banks.

Why are credit ratings important?

Higher credit ratings imply a utility is well-run, has a strong financial condition, and is better able to navigate through volatile or adverse conditions. Lower credit ratings lead to higher borrowing costs, limited access to capital markets and less flexible contract terms with power counterparties. The chart below shows credit rating grades for the three major rating agencies - Moody's, Standard & Poor's (S&P), and Fitch Ratings. The median credit rating for public power utilities is "A+".

Rating Agencies Credit Ratings

<table>
<thead>
<tr>
<th>Moody's</th>
<th>S &amp; P</th>
<th>Fitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aaa</td>
<td>AAA</td>
<td>AAA</td>
</tr>
<tr>
<td>Aa1</td>
<td>AA+</td>
<td>AA+</td>
</tr>
<tr>
<td>Aa2</td>
<td>AA</td>
<td>AA</td>
</tr>
<tr>
<td>Aa3</td>
<td>AA-</td>
<td>AA</td>
</tr>
<tr>
<td>A1</td>
<td>A+</td>
<td>A+</td>
</tr>
<tr>
<td>A2</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>A3</td>
<td>A-</td>
<td>A-</td>
</tr>
<tr>
<td>Baa1</td>
<td>BBB+</td>
<td>BBB+</td>
</tr>
<tr>
<td>Baa2</td>
<td>BBB</td>
<td>BBB</td>
</tr>
<tr>
<td>Baa3</td>
<td>BBB-</td>
<td>BBB-</td>
</tr>
<tr>
<td>Ba1</td>
<td>BB+</td>
<td>BB+</td>
</tr>
<tr>
<td>Ba2</td>
<td>BB</td>
<td>BB</td>
</tr>
<tr>
<td>Ba3</td>
<td>BB-</td>
<td>BB-</td>
</tr>
<tr>
<td>B1</td>
<td>B+</td>
<td>B+</td>
</tr>
<tr>
<td>B2</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>B3</td>
<td>B-</td>
<td>B-</td>
</tr>
</tbody>
</table>

Benton PUD’s rating has consistently been A or higher since 2007.
Cash & Investment Reserves

Why are cash & investment reserves important?
Cash and investment reserves are important tools for being able to respond to risks and emergency events, manage operating needs, fund capital projects for community growth, and provide a reliable power supply to customers under potentially volatile hydro/price market conditions. Reserves are also used as a shock-absorber in the event of a sudden change in power costs. Reserves are drawn down at times to mitigate the need for sudden rate increases. Reserve levels are also monitored by rating agencies and levels that are too low could result in lower credit ratings.

Utilities provide an essential service. As such, utilities must ensure that they can effectively respond to many unplanned events including significant weather events, earthquakes, sudden changes in the market that impact the cost of power, or other events that impact utility operations.

How does power cost volatility affect cash & investment reserves?
Benton PUD receives most of its power from the Bonneville Power Administration (BPA). The rates charged by BPA are highly dependent on having significant snowpack in the mountains to generate sufficient hydroelectric power for the region. To the degree that this snowpack does not materialize in sufficient amounts, power costs can vary widely. For example, in 2015 the water flow through The Dalles Dam was 68% of the 55 year average (warmest year on record), while in 2017 it was 137% of average, in 2018 it was 119% of average, in 2019 it was 90% of average, and in 2020 it was 102% of average. Snowpack and streamflows have a significant impact on the amount of energy produced from the river. Power needed to serve load in excess of the amount received from BPA must be purchased by the District. Wholesale prices can be unpredictable and vary greatly.

Net power costs are the single largest expenditure by Benton PUD representing about 55% of the District’s 2021 budget. A sudden change in wholesale power costs (the cost Benton PUD pays for power) can result in a significant financial impact to Benton PUD and its customers.
Back in the early 2000’s, Benton PUD and its customers were impacted when the West Coast Energy Crisis caused the wholesale power market to skyrocket with power trading at never-before-seen levels. 2001 was one of the worst water years on record forcing BPA and other utilities to purchase expensive power on the wholesale market. In a short amount of time, from 2000 to 2002, Benton PUD saw a 91% increase in power expense.

Between 2000 and 2003, the average residential bill increased 64% while at the same time Benton PUD’s debt increased and reserve levels dropped.

As a more recent example of volatility in the Northwest, unseasonably cold weather and regional supply constraints on natural gas in March 2019 caused wholesale power prices to rise to levels of about $900/MWh and natural gas prices to approximately $160/MMBtu. Typical power prices are about $25/MWh and natural gas prices are about $3 - $4/MMBtu. While this event only lasted a couple of days it serves as an example of how volatile power markets can be.

Strong reserves can be an important tool in being able to mitigate the financial effects of sustained changes in wholesale power prices both for Benton PUD and its customers.

What is the right level of cash & investment reserves for a utility?
Benton PUD’s financial policies do not precisely define what level of reserves should be maintained and planned to for the future; however, they do define the minimum operating reserve level and provide guidance on factors to consider in establishing targeted reserve levels.

As mentioned earlier, reserves help Benton PUD respond to emergencies, provide stable rates, as well as maintain Benton PUD’s credit rating. When reserves are higher than needed, Benton PUD has used excess reserves to lower retail rates, defer future rate actions, or defer future debt issuances.

One common metric to measure reserves is Days Cash on Hand (DCOH) which calculates the number of days a utility can cover its operating expenses. This measure has been developed by rating agencies to compare utilities of different sizes. Benton PUD has defined the minimum operating reserve level as 90 DCOH.
Currently, Benton PUD sets long term plans to keep reserves between 108 and 132 DCOH, or about 4 months of reserves. Based on the 2021 budget, this equates to about $47.6 million.

Why this level of reserves?

- First, the standard “rule of thumb” is that most businesses will operate smoothly if they have enough cash on hand to cover three to six months of average operating cash outflows.
- Second, we compare our reserves to other PUDs in the state (see chart on page 7). The median for these utilities is 154.

While our DCOH target is lower than the PUD benchmark, the District also maintains a $10 million line of credit to secure power counterparty contracts. This line of credit may also be used for other purposes. As such, it helps mitigate the need for higher reserve levels to match the benchmarks. Lines of credit are considered by some rating agencies in the District’s overall liquidity evaluation.

In 2020, the District took advantage of historically low interest rates and issued $20 million in bonds to finance capital expenditures, which contributed to the nearly $19 million increase in reserves between 2019 and 2020. The 2020 bond issue will help the District achieve its robust capital plan which includes developing a 21st Century Power Grid while maintaining the District’s system and accommodating growth. Looking ahead, using the May 2021 forecast, it is estimated Benton PUD’s reserve level will be about $54.4 million or 130 DCOH by the end of the year (see chart below). Reserves above the targeted range will help to lower and/or forego rate increases in future years.

**Unrestricted Reserves (DCOH / $ millions)**

![Chart showing unrestricted reserves from 2010 to 2021 (May forecast) with sources: Benton PUD staff recommended range (108-132), $15 million Bond issue, $20 million Bond issue.]

*Source: Calculated by Benton PUD staff*
How do Benton PUD reserves compare to other utilities?

In addition to comparing reserve levels with rating agency medians, Benton PUD benchmarks with other utilities to ensure its reserve levels are comparable with utilities that have a similar business structure.

The following chart compares DCOH of Benton PUD to other Washington PUDs based on a survey published in 2020 using 2019 data (latest information available). Benton PUD’s reserves increased to 162 DCOH at the end of 2020 primarily due to the 2020 bond issuance.

**Days Cash on Hand (DCOH)**

*Source: 2020 WPUDA Source Book*
Debt

It takes a tremendous amount of capital system infrastructure to distribute energy to our customers. Utility systems are designed and constructed to serve customers over a long number of years. Ideally, the customer who benefits from a capital asset pays for it through electric rates. This concept is known as ratepayer equity.

In order to accomplish ratepayer equity, most utilities finance long-lived assets by issuing tax-exempt bonds. This enables the cost of the asset to be recovered through retail rates over the life of the capital asset. If a utility’s debt level is too low, it may indicate that today’s ratepayer is paying for capital assets that will benefit future ratepayers. If a utility’s debt level is too high, it may indicate just the opposite, that today’s ratepayer may not be paying enough for the capital assets that are serving them.

What is the right level of debt?

Having the right amount of debt is a sound financial business practice and provides equity to our ratepayers. Benton PUD’s financial policies set a ceiling on the amount of debt that Benton PUD can have outstanding by maintaining the debt ratio at 38% or less. Benton PUD had $63.3 million in outstanding bonds at the end of 2020 with a debt ratio of 30%.

Historical Debt Ratio Compared To Benchmark

Source: Fitch Ratings, U.S. Public Power Peer Review – July 2019

Benton PUD is below the median debt level for similarly rated utilities. This lower debt level provides future flexibility.
How does Benton PUD debt compare to other utilities?

The following graph compares debt per customer of Benton PUD to other Washington PUDs based on a survey published in 2020 using 2019 data (latest information available). Benton PUD is well below the median and average of Washington PUDs. In 2020, the District took advantage of historically low interest rates and issued $20 million in bonds. The District calculates the 2020 bond issue will increase their debt per customer from $908 in 2019 to $1,136 in 2020.

Debt per Customer

Source: 2020 WPUDA Source Book

Benton PUD’s debt per customer of $908 is below the median of $1,341, indicating we have used debt responsibly.
How does debt affect Benton PUD’s obligations to bondholders?

Bonds are issued with covenants (contractual commitments) that provide assurance to the bondholders that future revenue streams will enable the issuer to pay interest and principal back to the buyer in future years. One of the most important requirements in bond covenants is maintaining a ratio called debt service coverage (DSC). This covenant requires that Benton PUD has net revenues (revenues less most expenses) that are at least 1.25 times the amount of debt service payments made in that year. For example, if the total amount of payments made to bondholders in a year is $6 million, then the net revenues must equal $7.5 million (1.25 x $6 million) or more. If this ratio is not maintained at 1.25 times or higher, Benton PUD would be considered to have violated its contractual commitment to bondholders, and the bonds would be considered in default and may be due immediately.

Because maintaining the DSC ratio is so critical, Benton PUD’s financial policies require Benton PUD plan to achieve a ratio of at least 2.0 times. By establishing financial plans to achieve a ratio of at least 2.0 times, we provide a cushion in case our financial projections do not perform according to plan. Rating agencies also look at historical and future planned DSC ratios as they assign credit ratings. A higher DSC ratio contributes to a better credit rating which leads to reduced borrowing costs.

**Actual Annual DSC Ratio for Years 2010-2020**

The debt service coverage for Benton PUD in 2020 was 3.48 times, well above the planning target of 2.0 times.

*Source: Benton PUD 2020 Comprehensive Annual Financial Report*
Customers per Employee

Maintaining the financial health of Benton PUD is crucial and Benton PUD continues to strive to maximize value provided to customers. This can be done through benchmarking other metrics, such as the number of customers per employee. This metric measures the efficiency of staffing levels compared against a growing customer base. A higher ratio indicates Benton PUD is able to serve more customers with fewer employees. The following chart shows that since 2005, the number of customers has increased, while the number of employees has decreased, resulting in a 30.3% increase in the number of customers served per employee. This has been possible largely through the use of technology making Benton PUD operations more efficient.

Actual Annual Average for Years 2005-2020

Note: American Public Power Association definition of a customer.
Actual results will typically be lower than budget due to attrition throughout the year.
Benton PUD Rates

Over the years Benton PUD has dedicated itself to improving its rates while maintaining its financial condition. The chart below shows how its average bills compared to other utilities back in 2003.

Residential Average Monthly Bill Comparison – 2003

Since that time, Benton PUD has been able to drive down its rates and increase its financial stability with conservative financial policies. Benton PUD average bills are now considerably lower than the average and the median.

Residential Average Monthly Bill Comparison – 2021

Source: Calculated by Benton PUD staff using data from other utilities’ websites.
Note: Douglas, Chelan and Grant PUDs are shown separately on the chart as all three of these PUDs own their own dams.