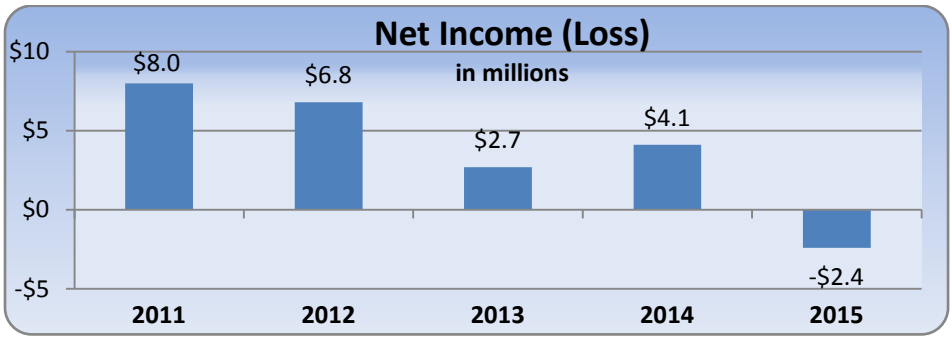
2015 Year End Summary

The District had a net loss of $2.4M in 2015, the first loss since 2010. While the District has not seen net losses very often, the District's strategic business model anticipates variability in net income over time due to significant variability in power supply costs. In the long run, the District sets rates sufficient to generate positive net income in order to cover operating expenses, power expenses, capital costs in excess of depreciation, and to make interest and principal payments on bonds.

As Chart 1 illustrates, the District's net income (or loss) varies each year. This is a direct result of variability in power expense and retail revenues which are influenced by water flow through the dams, wholesale market prices, and weather (a major driver of retail revenues). Despite the $2.4 million loss in 2015, it is important to note that over the last five years, Benton PUD's combined net income was $19.2 million.

Chart 1



To help manage through challenging years like 2015, the District maintains adequate reserves in order to handle volatility in revenues and power expense. These reserves help Benton PUD respond to emergencies, provide stable rates, and also help maintain Benton PUD's credit rating from rating agencies. The District has used excess reserves that were generated in years of strong positive net income to lower retail rates, defer future rate actions, and defer future debt issuances.

While 2015 resulted in a net loss, the District met its obligation to bondholders and internal planning requirements with a debt service coverage (DSC) ratio of 2.93 times. The DSC ratio measures the amount of net revenues that are available to make bond principal and interest payments. The DSC ratio is an important factor that is evaluated by rating agencies when assigning credit ratings (higher is better).

The District is contractually committed to its bondholders to maintain a DSC of 1.25 times. The District's financial policies require that financial plans are set to achieve a ratio of at least 2.0 times. The DSC ratio has been over 2.0 times for more than the last five years.

The following sections provide a background on two key factors affecting the 2015 net loss: net power expense and retail revenues.

Net Power Expense:

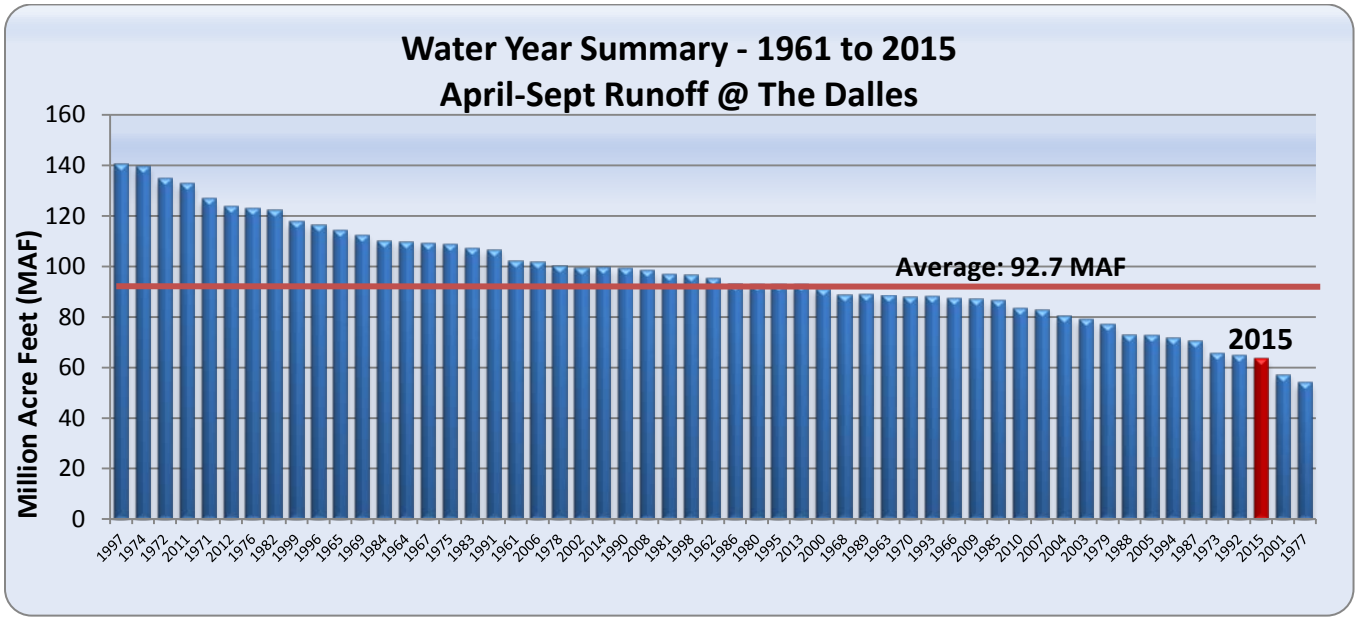
BPA Contracts

Nearly 80% of the District's power is purchased from the Bonneville Power Administration (BPA). The District is a "Slice" customer of BPA and receives a percentage (or slice) of the total Federal Power System operated by BPA, which is largely made up of hydropower. Generally, the District receives more power than is used by its retail customers and sells the excess on the wholesale market. Revenues from these "excess" sales are used to "buy down" customer rates. This is referred to as being "long on power." Hydropower output can be volatile and varies based on the amount of water that flows down the rivers. The District manages the risk associated with the high degree of variability in power costs by proactively hedging future projected needs and maintaining adequate financial reserves.

2015 Water Flow – Near Record Lows

The amount of water that flows down the rivers influences the amount of power produced by dams. This is commonly measured by the volume of water that passes through The Dalles Dam (in million acre feet or "MAF"). As Chart 2 illustrates, 2015 was the *third worst year on record* at only 68% of normal. As a result, the amount of hydropower produced by the dams was down significantly. Since the District is a Slice customer, less power was received from BPA overall for the year. To compound the problem, much of the water flow in 2015 came early in the year due to warmer temperatures in the mountains, resulting in less power available during the hot summer months. This either caused the District to purchase power from other sources to offset the lost hydro generation, or resulted in less excess power to sell on the wholesale market thereby reducing wholesale revenues.

Chart 2

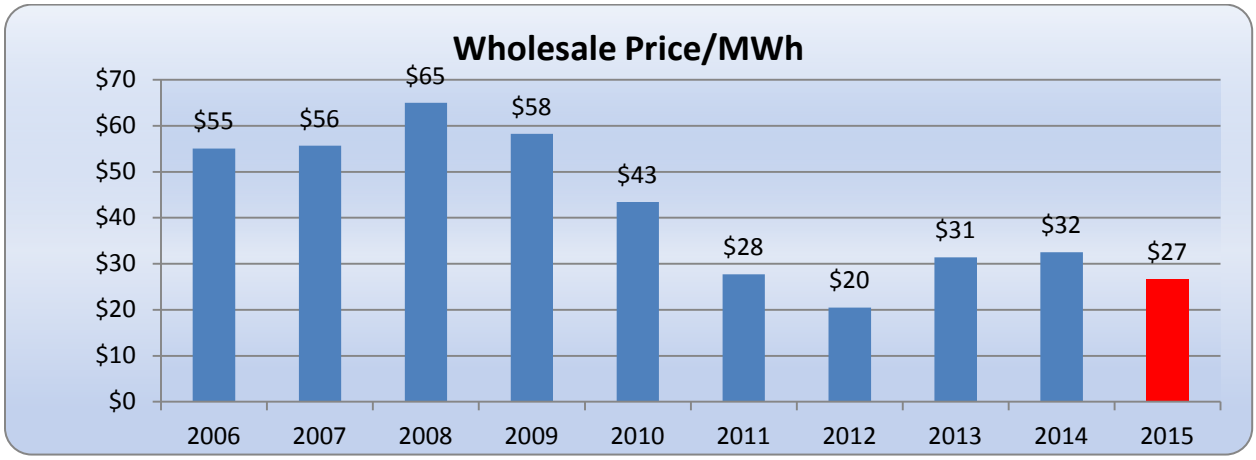


Wholesale Market Price

As mentioned earlier, the District is "long on power" and uses sales into the wholesale market to buy down retail rates. Wholesale prices have been declining since 2008/2009 as illustrated by Chart 3. The decline is largely attributable to a drop in natural gas prices, reduced demand, and an increase in power generating resources (wind).

Since the District usually sells power into the market, lower wholesale prices have resulted in lower wholesale revenues available to buy down retail rates. In 2015, the average price the District received on the wholesale market was $27/MWh compared to about $60/MWh in 2008/2009.

Chart 3



Retail Revenues:

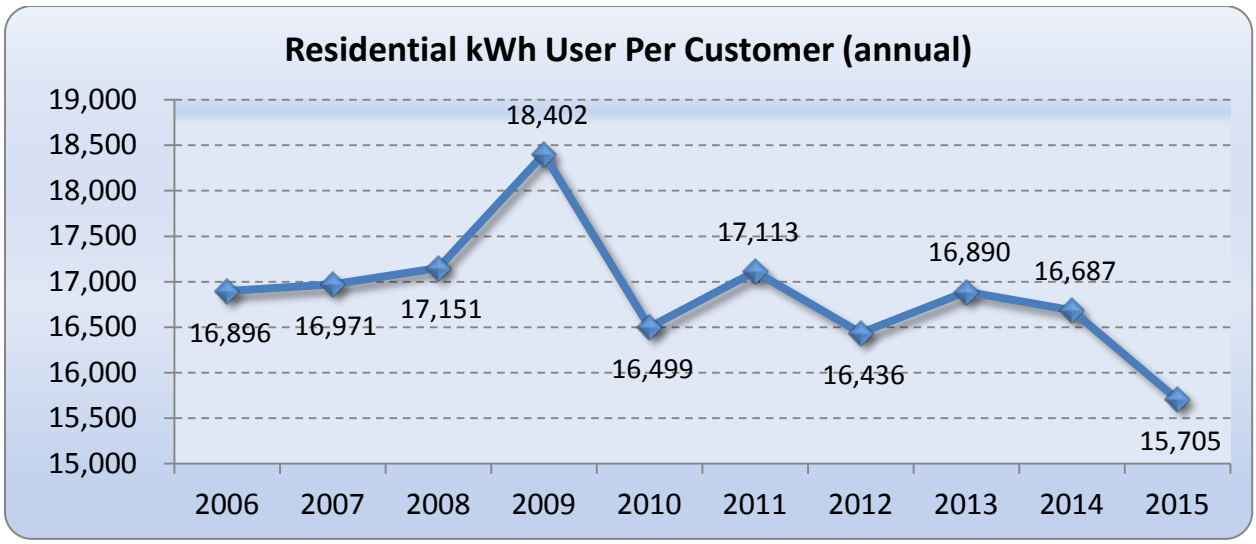
Weather has a major influence on how much power customers use. This translates into how much revenue the District collects from its customers. 2015 was the warmest year on record primarily due to warm winter months. As a result, the District's revenues were down $2 million.

One measure of how temperature affects power usage is a metric known as heating degree days[1]. During 2015, heating degree days were the lowest we've seen in over a decade at 83% of average. As a result, usage by the District's customers was the lowest in the last ten years as illustrated in Chart 4. Lower usage was a major contributor to retail revenues being $2 million less than planned.

[1] A "Degree day" is the difference between the actual average temperature for that day and 65° F. If it is warmer than 65°, "cooling" degree days will result. If it is cooler than 65°, "heating" degree days will result.

Each degree over or under 65° is considered a degree day. For example, if the average temperature on April 1 was 55° degrees, you subtract 55 from 65 to get 10 so that day had 10 heating degree days. By adding the degree days for all the days in a month, it provides a way to compare the months to see how much colder or warmer each month was. In the months with a larger number of heating degree days (or cooling degree days), customers will likely have a higher bill.

Chart 4



Summary and Financial Impacts

The District's net loss of $2.4 million was the result of two factors: High net power expense and lower retail revenues.

The District's retail revenue in 2015 was down $2M from the initial budget as a direct result of significantly warmer winter months. At the same time, the cost of providing power was $0.25M higher than the initial budget, even though less power was needed to serve retail customers. This was the result of less power received from BPA due to reduced water flow available for generation and the continuation of depressed wholesale market prices at which the District sells excess power.

The District was able to manage through 2015 by using financial reserves generated back in 2011 and 2012. Further, while 2015 resulted in a net loss, the District met its obligation to bondholders and internal planning requirements with a debt service coverage (DSC) ratio of 2.93 times.

As the District looks to the future, we would expect revenues to recover somewhat - although in 2016, January, February and March continued the trend of warmer than average temperatures resulting in much lower than planned retail revenues. 2016 is expected to be an average year relative to streamflows; however, the District anticipates that wholesale prices will remain depressed.

To review the District's 2015 annual financial report, click here.

For a more comprehensive review of District financial policies and planning, please click here.