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Burbank Water and Power Financial Reserves Policy

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Executive Summary

The Burbank Water and Power (BWP) Financial Reserves Policy (FRP or the Policy) is designed to set overall utility reserve levels that are reasonable and prudent for the wide range of risks that BWP faces as an electric and water utility. The FRP is designed to be in line with industry and rating agency standards. Having appropriate cash reserves will help to reduce risk while promoting long-term utility operational, financial, and rate stability. This 2023 report is an update of the Policy which was initially approved by the Burbank City Council in 2003 and updated in 2008, 2012, and 2017.

Minimum and Recommended Reserve Levels

The FRP is a forward-looking policy. It is developed to address expected risks and market conditions found in BWP's five-year financial forecasts. For both the electric and water systems, two levels of cash reserves have been developed – a minimum reserve level and a recommended reserve range.

The recommended range is a level of reserve that BWP should seek to achieve and maintain in its financial forecasting and rate-setting processes. The recommended reserves range is intended to allow BWP to balance risks, rates, rating agency guidance, market expectations, and BWP's ability to respond to a wide range of unfavorable circumstances and events. Depending on economic conditions, energy markets, water supply, social pressures, current and anticipated capital expenditures, and BWPs overall financial goals, it may make sense for BWP to target the lower or higher end of the recommended range at different points in time.

Recognizing that reserves may fluctuate significantly, a minimum reserve level has also been developed as a lower reserve boundary. The minimum reserve level is intended to provide the cash reserves necessary for operations in the short term and provide the utility time to respond to short-term risks and address them responsibly. Operating at the minimum reserve level for a sustained period of time would likely result in a credit downgrade and negatively impact the financial health of the utility. If the water or electric utility is operating at a minimum reserve level, a financial plan should be developed to bring the utility back to the recommended levels over a reasonable period.

There may also be sound reasons for exceeding recommended reserve ranges for a period of time. BWP may see changes in risk factors, changes in the economic or regulatory environment in which it is operating, or the prudency of creating a buffer or ramp for future expected rate increases. Additionally, BWP may accumulate funds in anticipation of large (and often expensive) future capital projects, or plan to use excess reserves to reduce and save on costs associated with its long-term pension liability.

All cash reserve recommendations are given in number of days cash on hand (DCOH). DCOH is an estimate of the number of days under normal operation that BWP can cover with its existing cash. DCOH is calculated by taking the sum of unrestricted cash and investments and dividing it by the utility's average operating expenses for one day. Average operating expenses are calculated by dividing the annual operating expenses, without depreciation, by 365.



Electric Recommendation

Cash reserves are a key tool electric utilities can use to help mitigate, or lessen, the potential impact of a wide variety of risks, such as interruptions in revenue sources and/or power supply, that are connected with operating an electric utility. The recommended range attempts to provide a suitable cash cushion to address operating risks while taking into consideration rating agency guidance, utility best practices, and capital needs of the electric fund.

Electric System Reserves Recommendation				
	Recommended Range	Minimum		
Electric fund reserve	160 to 240 DCOH	105 DCOH		

Water Recommendation

The recommended reserve range for water would allow BWP to maintain a financial cushion sufficient to absorb some of the impacts of its operational risks, create contingencies for unexpected changes to the capital requirements, potentially set aside funds to assist with future capital expenditures, and make available funds for strategic water purchases. The overall water reserve policy is aligned with the rating agency criteria and is in line with the policies of similar water utilities. The water fund may also use the reserve for capital planning or strategic replenishment of water purchases.

Water's minimum and recommended ranges are higher than the electric utility's primarily due to the nature of water capital spending, the scarcity of water resources, and the prudency of having cash available for strategic water purchases. Unlike electric utilities with more diverse power resources, water utility relies on very limited water supply sources. Water utility expenditures also tend to swing widely, and the recommended ranges take this into account, as well as the need to make strategic purchases when excess water is available.

Water System Reserves Recommendation				
	Recommended Range	Minimum		
Water fund reserve	200 to 300 DCOH	120 DCOH		

Electric System

Introduction

The BWP FRP is designed to identify prudent reserve levels to help mitigate risk, while promoting longterm fiscal and rate stability. This review is made with the background of a power market that has seen substantial changes in terms of overall structure and experienced periods of substantial energy price volatility since the last FRP update. The FRP is just that – a policy, and it is intended to provide guidelines that can impact budget and other decision-making. The FRP is designed to serve as a tool in promoting fiscal and rate stability; however, it is not intended to be all-inclusive in the sense that there are a variety of factors outside of the purview of the FRP that can materially impact BWP's financial stability in the future; for instance, some risks are so remote that it would not be prudent to maintain reserves for those events.

BWP maintains some flexibility to address some events through the existing Energy Cost Adjustment Charge (ECAC). The ECAC mechanism provides for administratively adjusting electric rates for changes in the power supply and fuel costs. The FRP is not intended to replace the ECAC. The ECAC is an important management tool that should be recognized in the context of setting appropriate reserves.

It should also be noted that there will always be some degree of competing objectives in developing a prudent FRP, including the funding of an appropriate level of reserves. In developing the FRP, it is recognized that there may be competitive pressures to decrease rates while simultaneously funding reserves. For instance, decreasing rates helps to maintain BWP's competitive position, while at the same time funding reserves promotes fiscal stability by helping to protect ratepayers from the impact of short-term operating risks and volatile energy market conditions. The integral component of the FRP, in concert with the Energy Risk Management Policy (ERMP), is to balance these potentially competing interests. In setting minimum and recommended reserve levels, the FRP has taken into consideration these different policy objectives and overlaid these objectives with the potential risks the utility faces to determine appropriate reserve levels while retaining the flexibility to manage the utility for the benefit of BWP's customers.

Finally, it is important to note that reserves are most effective when used with other risk mitigation tools, as discussed further below:

- BWP's Energy Risk Management Policy (ERMP)
- Budgetary Responses
- Temporary Funding

Energy Risk Management Policy

Historically, BWP has used reserves to smooth, and ramp-in rate increases and to absorb unforeseen power supply cost increases, such as sudden increases in energy prices and unplanned repairs. The ERMP provides objectives and guidelines for prudent power supply risk management in these areas: operation, price, excess asset monetization, and credit. The ERMP should be utilized in conjunction with the financial reserves policy. For example, in the event cash reserves are below recommended levels, BWP may want to consider moving to a higher energy-hedged position to reduce energy cost volatility as provided for in the ERMP.

Budgetary Responses

While many financial impacts cannot be easily absorbed in a utility's current budget (either operating or capital) due to the substantial level of fixed costs and fuel components, there are some budgetary practices that can be used to address unexpected issues. Some of these options include:



- Budget conservatively, or at least not aggressively. This approach, a conservative posture, may provide some flexibility for dealing with unexpected events if and when actual results are better than budgeted.
- Adjust spending during the fiscal year for operations. One of the first responses a utility can make to
 unexpected events and revenue shortfalls is to make adjustments to the current year's spending plan,
 such as slowing or delaying capital spending. However, since by nature electric utility budgets contain
 large amounts of fixed costs and fuel and energy costs, these types of adjustments may have very
 limited impacts.
- Hedge or fix fuel costs. The cost of power purchased on the short-term market is often an area of
 potential volatility for utility budgets. Utilities may opt for more stability of fuel costs over the potential
 for lower costs, due to the substantial uncertainties of the markets. Fuel or purchased power with fixed
 pricing reduces the exposure of BWP to one of the greater potentials for cost variation (which can be
 either bad or good).
- Budget for contingencies. One approach to planning for unknown circumstances is to set aside funds in the operating budget for emergencies or unexpected events. For example, this could take the form of an operating budget contingency.

Temporary Funding

Temporary borrowing, generally followed by either a rate adjustment and/or budget reductions, can often be applied immediately, or in subsequent fiscal years, to boost financial reserves.

There are several possibilities that can be used to provide a temporary source of funding while the utility looks for more permanent solutions. Those possibilities include:

- Borrow from the City's investment pool to the extent allowed by City policy.
- Maintain a line or letter of credit to be dedicated exclusively to the management of identified risks.

Recommendation

Reserve targets for the electric utility have been developed for a recommended range and minimum reserve level.

Electric System Reserves Recommendation				
	Recommended Range	Minimum		
Electric fund reserve	160 to 240 DCOH	105 DCOH		

For the electric utility reserve, it is recommended BWP maintain 160 to 240 days cash on hand (DCOH). Working within this range will enable BWP to fund and operate at a level that is consistent with its policy objectives of maintaining competitive, predictable, and cost-effective rates for BWP's customers. In developing the recommended reserve range, it is understood that the ultimate reserve level that will be funded and maintained is primarily a function of policy in terms of the degree to which BWP wants to have available funds in the event of risks while recognizing that all electric utilities operate within a competitive environment.



BWP should maintain adequate reserves to help mitigate major events and promote the long-term fiscal health of the utility. Examples might include unforeseen repairs, extraordinary rehabilitation, or funding insurance deductibles not covered in the event of a casualty loss. Setting aside funds could also help to cover the future replacement of an asset once it is fully depreciated.

Rationale

Risk Mitigation

Electric utilities are exposed to multiple risks, ranging from temporary business disruptions to major events, which can have negative financial and operational impacts on customers. In years when power markets have seen a substantial amount of volatility, some municipal systems have been able to mitigate the rate impact on their customers by using reserves. While both the accumulated reserve amounts, and the application of those amounts, varies widely in utilities, reserves, and stabilization funds or other designated cash accumulations, are one solution to avoid making unexpected and perhaps significant changes to rates, and providing customers with more predictable rates. One key element in using reserves as a source of rate stability and protection for unexpected budgetary issues is for funds to be replenished so that they can be available for future events. It is important to understand the nature of events that trigger the use of financial reserves and to evaluate whether any of the events are indicative of larger financial structural issues that would otherwise deteriorate the utility's long-term financial stability and require a remedy, such as a rate adjustment.

General Revenue – Related Risks

Retail Revenues

Retail revenue-related risk arises primarily from reduced demand, and it places pressure on the utility to spread fixed costs over a smaller customer load or revenue base. Situations can come from specific short-term events that come up within a fiscal year, such as milder than normal summer weather reducing electric demand. They can also be of longer duration, ranging from a year or two to a longer timeframe, such as a protracted economic slowdown which may cause customers to reduce energy demand or leave the system. Utilities may also find financial margins impacted due to the overestimation of load growth. Actions of large customers, such as scaling back company activities, facility closures, or self-generation, may decrease load, as was seen when many commercial customers paused office operations in response to COVID-19.

Net Wholesale Revenues

BWP may take advantage of wholesale or arbitrage transactions as opportunities present themselves. The intent of wholesale transactions is to monetize excess assets to benefit retail ratepayers. BWP has identified and uses guidelines from the ERMP to mitigate risks associated with wholesale transactions.

Profits in this area are unpredictable and can be affected by several external factors, such as weather (both in-state and in other states that provide power from renewable sources to the California market); availability of power from other participants in the market, including the entrance of new generation projects; transmission limitations; and pricing impacts of FERC-related issues, such as congestion pricing. Due to the unpredictability, BWP has budgeted its revenues conservatively and will continue to do so to minimize reliance on net wholesale revenues.

Other Revenues

BWP also has other sources of revenue. These other revenue streams include transmission revenues, telecom revenues, and internet revenues (through ONE Burbank). Each of these revenue streams has separate drivers and risks, but collectively help BWP manage its retail rates.



Operational Risks

Retail System

Utilities' revenues and operating budgets can be impacted by a number of other unforeseen events or circumstances in any given year, in addition to the specific revenue and power supply events discussed above. The objective of setting aside funds against general operating exposures is to provide sufficient working capital to insulate the utility and its customers from temporary and short-term events that can adversely impact BWP. For example:

- In addition to the replacement power supply impacts of unplanned outages, such outages can create a need for additional maintenance that may not be budgeted.
- New environmental regulations can impact how plants are operated, which plants are run, and the costs of fuel, chemicals, and other expenses impacting either capital or operating budgets.
- Unexpected increases in the operating budget, such as higher-than-budgeted energy prices, a large claim or judgment against BWP, unanticipated premium increases in insurance, or the cost of other events, such as the increased cost of security after 9/11, COVID-19 relief programs for customers, changes in safety protocols, or other operational changes that cannot wait.
- Short-term timing mismatch between the receipt of revenues and the payment of expenses.
- Exposure to energy price fluctuations in response to extreme weather events, including in recent years Winter Storm Uri and California summer heatwaves.
- Contractual requirement of a utility to post collateral when the mark-to-market exposure of hedges exceeds certain contractual limitations. The exposure from this perspective, if any, will also be impacted by the credit of the utility; the diversification of its counterparties, and the contract terms and requirements for posting.
- Default of a counterparty or failure to pay for energy delivered.
- Failure to deliver contracted power to another party which must be replaced with higher-priced energy.
- Decommissioning funds.

Rating Agency Criteria

Across rating agencies, liquidity and reserve levels factor into their assessment of a utility's financial health, which is a core component for each rating agency's analysis. That being said, days cash on hand, while important, is only one measure that impacts credit ratings. The reserves policy is not intended to imply that a standard must be met to achieve a certain rating; instead, it is to provide a reasoned basis for the level of reserves that BWP maintains. Standard & Poor's (S&P) and Moody's provide credit ratings for the electric utility.

Standard & Poor's

Under the S&P's Criteria for Retail Electric and Gas Utilities, published on September 27, 2018, S&P evaluates both the enterprise profile and financial profile of a utility. The enterprise profile seeks to capture the operating environment of a utility and looks at the economic fundamentals, industry risk, market position, and operational management. Meanwhile, the financial profile assesses the financial strength of the utility by looking at coverage metrics, liquidity and reserves, and debt and liabilities.

Liquidity Metrics – Total Days Liquidity



"Extremely Strong"	"Very Strong"	"Strong"	"Adequate"	"Vulnerable"	"Highly Vulnerable"
≥ 270 Days	150-270 Days	90-150 Days	45-90 Days	15-45 Days	< 15 Days

Moody's

To evaluate the creditworthiness of public power utilities that obtain at least 20% of their energy from directly owned power generation assets or from participation in joint action agencies (such as BWP), Moody's uses its criteria for U.S. Public Power Electric Utilities with Generation Ownership Exposure, published on August 14, 2019.

The key metric Moody's uses to assess liquidity is the three-year average of adjusted days liquidity on hand. Adjusted liquidity is defined as available unrestricted cash and investments plus unused capacity on eligible bank lines of credit and commercial paper programs.

Adjusted Days Liquidity on Hand (3-year average)					
Aaa Aa A Baa Ba B					
≥ 250 Days	150 – 250 Days	90 – 150 Days	30 – 90 Days	15 – 30 Days	< 15 Days

Peer Comparison

The table on the next page provides a comparison among several of BWP's peers, their current ratings, and their days cash on hand based on their fiscal year (FY) 2021 annual statements. While peer comparisons provide a reference point, it is important to recognize that there will always be significant variations in the amount of cash and liquidity of various utilities within any rating category. Liquidity is just one of multiple factors that impacts credit ratings and therefore should not be viewed as the only means of maintaining a particular rating.

18		
	2	
	1	

		Ratings		FY2021 Days
	Moody's	S&P	Fitch	Cash on Hand ¹
Burbank Electric	Aa3	AA-	-	215
Pasadena Water & Power	-	AA	AA	769
Anaheim Electric	Aa3	AA-	AA-	249
LADWP Power System	Aa2	-	AA-	287
Riverside Electric	-	AA-	AA-	349
Alameda Municipal Power	-	AA-	AA-	631
Glendale Electric	Aa3	A+	A+	530
Imperial Irrigation District	Aa3	AA-	-	178
Roseville Electric	A1	AA	AA	507
Turlock Irrigation District	A2	AA-	AA-	482
Modesto Irrigation District	A2	A+	AA-	215
Redding Electric	-	-	AA-	229
SMUD	Aa3	AA	AA	247
Silicon Valley Power	-	A+	AA-	370
Lodi Electric	A2	A-	-	171
S&P Medians ²				
AA+				265
АА				280
А				148
BBB				87
Moody's Medians ³				
Top 30 City-Owned Utilities				
Aa				243
А				290
Ваа				266
Top 50 Generation Owning				
Aaa/Aa				239
А				220
Ваа				446
Fitch Medians (Retail) ⁴				
AA+				273
AA				264
A				154
BBB				189

¹Calculated from each Utility's respective ACFR or as reported in Fitch 2022 Peer Review; not inclusive of capacity on credit facilities

²S&P Global Ratings Completes Review of U.S. Retail electric and Gas Utilities Under Revised Criteria and Updates Medians *(May 8, 2020)*

³Moody's US Public Power: Medians - Financial metrics demonstrate resilience amid COVID-related challenges (*March 17, 2022*)

⁴Fitch 2022 U.S. Public Power: Peer Review (June 13, 2022)

Water System

Introduction

When developing a financial reserve policy for the water utility, it should be noted that Burbank has characteristics that help mitigate volatility and they are important to understand when setting cash reserve levels. These characteristics include BWP's strong service area that has a large captive customer base, which for the most part are residential customers. The service area is also very mature, and the water system does not have a lot of risks associated with rapid growth, such as the increased cost pressure generated by growing water supply and infrastructure requirements. Moreover, Burbank's water supply is reliable, and it comes from local wells and purchases from the Metropolitan Water District (MWD) through existing contractual relationships.

Recycled water is also a significant local water supply resource. Recycled water is used throughout the city for public and commercial landscape irrigation, such as in parks and on school yards, and in commercial air conditioning cooling towers as well as for Magnolia Power Plant.

BWP, as well as other water utilities in California, has been subjected to significant water usage curtailments as California addresses drought conditions.

Even for a system like Burbank's, which has significant stability in its customer base, unforeseen events can occur which may impact revenues or expenses. It is important to consider the consequences of local production being impacted by equipment failure or other unforeseen events. Supply interruptions may require the purchase of more expensive make-up water, drive operating and repair, and maintenance costs higher than anticipated, or regulatory changes may impact water quality and treatment requirements.

BWP maintains some flexibility to address some events through the existing Water Cost Adjustment Charge (WCAC). The WCAC mechanism provides for administratively adjusting domestic water rates for changes in the costs of producing and purchasing water. The WCAC is an important management tool that should be recognized in the context of setting appropriate reserves.

The FRP is not intended to address significant structural changes, such as those resulting from regulatory changes affecting treatment requirements, since these types of changes are likely to take a long lead time to implement and necessitate a more permanent response, such as restructuring rates, as opposed to simply using reserves.

Furthermore, similar to the electric reserves, the water reserves should be used in tandem with other risk mitigation tools, in particular budgetary responses and temporary funding.

Budgetary Responses

While some unforeseen financial impacts cannot be easily absorbed in a water utility's current budget (either operating or capital) due to certain fixed costs, there are some budgetary practices that can be used to address resulting shortfalls. Some of these options include:

- Budget conservatively, or at least not aggressively. There is a certain built-in hedge by taking an appropriately conservative approach toward developing a budget and long-term financial plans.
- Budget for contingencies. One approach to planning for unknown circumstances is to set aside funds in the operating budget for emergencies or unexpected events. For example, this could take the form of an operating budget contingency.

Temporary Funding

In regard specifically to BWP, there are several possibilities that can be used to provide a temporary source of funding while BWP takes actions of a more permanent nature to address the financial issue(s). They include:



- Borrow from the City's investment pool to the extent allowed by City policy.
- Maintain a line or letter of credit to be dedicated exclusively to the management of identified risks.

Recommendation

As done for BWP's electric system, a recommended range and minimum reserve level for the water system are provided. Consistent with the approach for electric, the recommended reserve range is the reserve position that BWP should seek to achieve, maintain, and plan for in its financial forecasting and rate-setting processes. The recommended reserve range is designed to allow BWP to balance risks, rates, market expectations, rating agency guidance, and necessary responses to unforeseen events. Recognizing that reserves may fall below the recommended range, a minimum reserve level has also been developed as a lower reserve boundary. The minimum reserve level is intended to provide the cash reserves necessary to support operations in the short term, giving the utility time to respond to risks and address them responsibly. Operating at the minimum reserve level for a sustained period of time would likely result in a credit downgrade and negatively impact the financial health of the utility.

Water System Reserves Recommendation				
	Recommended Range	Minimum		
Water fund reserve	200 to 300 DCOH	120 DCOH		

The recommended range is from 200 to 300 days for the water fund. The recommended range provides Burbank flexibility to adjust its reserve levels depending on the economic and environmental pressures of any given year. In addition, the reserve recommendation is designed to provide BWP some flexibility to make opportunistic water purchases as they arise. BWP's reserve recommendation should be considered within the context of Burbank's other fiscal policies, the current challenges that it is facing, and its financial goals. In any given year, Burbank may have particular reasons to target either the lower or higher end of the recommended range or even exceed the recommended range for a period.

<u>Rationale</u>

Risk Mitigation

Water utilities are subject to multiple risks, and the maintenance of appropriate reserves allows BWP to prepare for larger, broader areas of risk that are not likely to be addressed by either insurance or other BWP policies.

The water system has a well-established customer base, supply governed by local production, and existing contractual relationships with the Metropolitan Water District of Southern California. The FRP is intended to provide greater timing flexibility to address unforeseen circumstances that may necessitate longer or more permanent solutions, such as drought conditions which could otherwise impact BWP's revenue or cost structure.

Maintaining a prudent level of reserves provides BWP financial buffer to manage its exposure to the following areas of risk for the water enterprise:

• **Revenue Risks** – Year-to-year variations in revenues can be particularly challenging given a certain amount of fixed costs within the system. Variations may come either from fluctuations driven by weather, natural disasters, or by mandated conservation measures.



- Supply Risks and Availability of Local Water Supply BWP may experience higher-than-expected costs if BWP cannot meet its local production requirements, due to a decrease or temporary interruption of local supply, including events related to equipment failure, regulations or water contamination.
- Other Operational Risks A variety of events and circumstances can affect a water system's
 operating budget, including increased variable costs (such as chemicals), additional maintenance costs
 for unplanned failures, and other unexpected increases in the operating budget.

Revenue – Related Risks

General Consumption/Sales Decreases

Given California's mandates to reduce per capita consumption of potable water, there have been and likely will be planned reductions in potable sales volume. The maintenance of adequate reserves is important should a larger than planned decrease in sales volume result in lower revenues than planned or budgeted. As Burbank continues to work towards its conservation goals, unexpected reductions in sales become a greater challenge, as BWP will have a smaller sales base over which to recover fixed costs. A prudent reserve level can provide some protection against short-term revenue impacts, or the ability to phase in longer-term rate adjustments, but it is not intended to be a permanent solution.

Large Customer Exposure

BWP has some risks related to the consumption of large customers. Should one or more large customers face unforeseen substantial financial events, BWP could experience some impact on water revenues. It is prudent for BWP to be sensitive to large customers as well as the concentration of the customers within a particular industry, while also maintaining healthy reserves to address any unexpected revenue impacts connected to large customers.

Water Supply – Related Risks

Availability of Local Water Supply

All utilities are subject to the risk of facilities not running as planned, including equipment failure, regulatory changes, new environmental mandates, or new challenges that could require some time before more permanent solutions are implemented. BWP needs to maintain adequate reserves to mitigate local supply disruption.

Recycled Water Supply

Recycled water has become an increasingly important component of BWP's water supply, but also comes with its own supply risks. Generally, the supply for the recycled system is from the city's wastewater plants which have little-to-no cost to the recycled water system. Should BWP experience recycled water supply disruption, the recycled water customers will receive potable water to meet their irrigation needs at significantly higher priced water for BWP.

Opportunistic Water Purchases

When MWD, or others, have excess water available, BWP can take advantage of opportunities to purchase untreated water at lower-than-normal prices through replenishment, cyclic, or other purchase programs. BWP should maintain healthy cash reserve positions to take such opportunities which may arise to purchase water at economically advantageous prices. Burbank will target the higher end of the recommended range for this purpose.

Other Operational Risks

In addition to the various potential revenue exposures or the variations discussed earlier, there are other potential financial impacts on a water utility's operating budget. These can include increased expenses



such as power and chemicals, additional maintenance costs, and other unexpected increases in the operating budget.

Rating Agency Criteria

Similar to rating agency criteria for electric utilities, liquidity and reserves factor heavily into all rating agency assessments of a water utility's financial profile, which is a key part of the overall rating assessment. BWP uses Standard & Poor's and Fitch for the rating of the water utility.

Standard & Poor's

S&P evaluates water utilities based on its U.S. Municipal Water, Sewer, And Solid Waste Utilities Methodology, published on April 14. 2022. As with S&P's Criteria for Retail Electric and Gas Utilities, the rating is based on S&P's assessment of both the utility's enterprise risk profile and financial risk profile. The enterprise profile assessment includes the same components evaluated for water utilities: economic fundamentals; industry risk; market position; and operational management. Meanwhile, the financial profile assessment includes a financial management assessment, in addition to the assessment of coverage metrics, liquidity and reserves, and debt and liabilities that are included for water utilities.

Liquidity and Reserve Metrics – Days' Liquidity					
"Extremely Strong"	- "Very Strong" "Strong" "Adequate" "Vulnerable"				
> 150 Days	150-90 Days	90-60 Days	60-30 Days	30-15 Days	< 15 Days

Fitch

Fitch's U.S. Water and Sewer Criteria, published March 18, 2021, evaluates three key rating drivers – revenue defensibility, operating risk, and financial profile, all within the context of one another; and the utility's leverage and liquidity profiles make up the issuer's financial profile for the most part. The liquidity profile is determined by coverage of full obligation (COFO) and liquidity cushion, with the utility's liquidity cushion serving as either credit neutral or risk additive. Fitch's assessment of liquidity cushion is that unless the liquidity cushion is below 90 days or unrestricted cash is below 30 days – which would be considered "weak" and risk additive – the liquidity profile is credit neutral.

Peer Comparison

The table on the next page provides a comparison among several of BWP's peers, their current ratings, and their days cash on hand based on their FY 2021 annual statements. While peer comparisons provide a reference point, it is important to recognize that there will always be significant variation in the amount of cash and liquidity of various utilities within any rating category. Liquidity is just one of multiple factors that impacts credit ratings and therefore should not be viewed as the only means of maintaining a particular rating.

		Ratings		
				FY2021 Days
	Moody's	S&P	Fitch	Cash on Hand ¹
Burbank	-	AAA	AAA	143
Pasadena Water & Power	-	AA+	AA+	331
Anaheim	-	AA+	AA+	288
LADWP Water System	Aa2	-	AA	298
Riverside	Aa2	AA+	AA+	292
Glendale Water	A1	AA-	AA-	188
Imperial Irrigation District	-	AA	-	727
Roseville	Aa2	AA	-	1776
Lodi	-	AA-	-	1246
East Bay MUD	Aaa	AAA	AA+	756
San Diego Water	Aa2	-	AA-	244
Fitch Medians (Retail) ²				
AAA				677
AA				565
A/A-				298
BBB/BB				200
S&P Medians (most recent year) ³				
AAA				640
AA				575
A				374
BBB				175
Moody's Medians ⁴				
Aaa				512
Aa				439
A				419
Ваа				417

¹Calculated from each Utility's respective ACFR or as reported in Fitch 2022 Peer Review; not inclusive of capacity on credit facilities

²Fitch 2021 U.S. Water and Sewer: Peer Review (June 9, 2021)

³U.S. Municipal Water and Sewer Sector Medians Held Strong in 2021 (*February 24, 2022*)

⁴Moody's US Water and Sewer: Medians - Rate Increases Support Stable Financial Metrics in 2019 (*May 11, 2021*)