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COST-BASED RATE STUDY

ANALYSIS AND RECOMMENDATIONS

February 27, 2023

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1. PURPOSE AND SCOPE

State law requires public agencies such as Bella Vista Water District to set rates and charges sufficient to fund operations and maintenance expenses, replacement of capital facilities and long-term debt obligations. In general, rates should be stable in their ability to provide adequate revenues to meet the District's financial, operating and regulatory requirements. To comply with these requirements, the District's Financial Policy and to achieve a balanced budget over the next several fiscal years, the District is proposing revisions to existing water rates that would take effect on March 1, 2023, and be reflected on bi-monthly billings beginning on May 1, 2023. This rate study was prepared and completed by the Provost & Pritchard Consulting Group along with District management staff.

The American Water Works Association Subcommittee on Rates and Charges recommends that the costs of providing water should be recovered from classes of customers in proportion to the cost of serving those customers. In others words, rates should be cost-based. The purpose of this rate study was to review the District's water rates to ensure that the rates are fair, equitable and, in fact, cost-based. If rates are fair, equitable and cost-based, ensuring that each customer class pays their own way based on the cost of providing the service, they will be perceived as fair and appropriate. The basic premise in establishing adequate rate structures that are equitable to different customer classes is that rates should reflect the true cost of providing water service.

Water rates should be designed to provide adequate revenue to meet the District's financial obligations including operations and maintenance, extraordinary maintenance and capital replacement, debt-service obligations and to maintain an adequate reserve. This rate study analysis determined the appropriate water rates for the various customer classes and determined the revenue requirements to meet expenses. On February 10, 1998, the Bella Vista Water District's Board of Directors adopted a financial policy to assure the financial viability of the District and to make rates equitable. The policy states, in part:

- Rates shall be fair, equitable and cost-based
- The Board of Directors shall review and adjust rates annually
- The District shall prepare a cost-based rate study at least every five years to determine rates

The last cost-based rate study was adopted by the Board of Directors on January 29th, 2018, under Resolution 18-01. The last five years have been marked by drought, additional regulatory requirements, and increased rates for raw materials, equipment, labor, and water purchased from the federal Central Valley Project (CVP). This current study was reviewed by the Board's Finance and Personnel Committee on December 14, 2022, and presented to the full Board at the regular meeting of the Board of Directors meeting on December 19, 2022.

The scope of this study includes an analysis of District expenses and revenues for the development of base (capacity), commodity (volumetric) and unitary (per account) charges as well as fire protection service rates within the District. The analysis does not include a review of Capital Improvement Fees used to expand and improve the water system and to accommodate new growth. Capital Improvement Fees were established, by zone, in conjunction with the District's 2005 Master Plan and are indexed annually by the Construction Cost Index from the Engineering News Record to reflect changes in construction costs. Additionally, this study does not evaluate or include fees and charges resulting from a customer's request

for service or actions such as development plan check fees, disconnect/reconnect fees, etc. Fee for service items are included in the District's Policy Manual as "Exhibit A", and are evaluated and revised annually.

Key Objectives

The District had a number of key objectives in developing the comprehensive water rate study, which are as follows:

- Develop the study in a manner that is generally consistent with the principles and methodologies established by the American Water Works Association (AWWA) M1 Manual, Principles of Water Rates, Fees and Charges
- Review and utilize the District's current financial/rate setting policies and practices
- Develop the District's revenue requirement analysis to provide prudent and adequate funding levels for operations and maintenance (O&M) and capital infrastructure (asset management plan)
- Develop a cost allocation methodology that equitably allocates the cost of providing water service to the District's various customer classes
- Review the District's current water rate designs/structures, and provide rate designs that are contemporary, cost-based, defensible and meet the specific rate design objectives of the District
- Develop the proposed water rates and fees to meet legal and statutory requirements (e.g. Proposition 218, etc.)
- Review active accounts and meter class equivalents (See Table 1)

2. ASSUMPTIONS

The analysis of rates requires several assumptions. Those fundamental to this study are summarized as follows:

Key Assumptions

- Use of a five-year time frame for analysis of the District's water deliveries, revenues and expenses
- Use the District's existing financial/rate policies for guidance
- Continue the Board and District's prudent financial planning and utility management

2.1 - Debt Service Assumptions

- Additional debt service is not presently anticipated during this planning period
- Debt service coverage – Utilize District's financial policies and borrowing requirements for minimum coverage requirements

2.2 - Central Valley Project Water Supply

The District has a Water Service Contract that has been converted to a Repayment Contract for both Irrigation (Agricultural) and Municipal and Industrial (Residential, Rural, Commercial and Public Institutional) water supplies for a quantity entitlement of 24,578 acre-feet annually, subject to shortage provisions. Reduced water supply allocations from the CVP have occurred in the recent past and are continuing to occur due to many factors including increased statewide demands for water resources, actions related to biological opinions for the operation of the CVP, implementation of the Endangered Species Act, State Water Board actions for basin plan amendments, Bay-Delta water quality objectives and related regulatory actions. In 2022, the District and other northern CVP Contractors received a zero

water supply allocation for both agricultural and municipal use. The CVP supply has become increasingly unreliable with more frequent and perhaps chronic shortages in the future. Therefore, it will likely remain necessary to pursue more expensive supplemental water sources in shortage years in order to augment supply. This analysis assumes water deliveries over the next five years will be similar to the past five years which includes both severe shortages and unconstrained, full-supply deliveries. In shortage years, additional expenses associated with reduced CVP supply will need to be adjusted pursuant to Supply Portfolio calculations and in accordance with the District's current Water Shortage Contingency Plan.

Rates charged by the U.S. Bureau of Reclamation (USBR) for water purchased directly from the Central Valley Project (CVP) or through the District's amended Long-Term Transfer Agreement with the Anderson-Cottonwood Irrigation District (ACID) are considered wholesale purchased water costs. USBR's ratesetting methodology for the CVP is complex and largely beyond the scope of this study with the exception of incorporating the CVP Annual Ratebooks and Schedules herewith by reference, including annual accumulating operations and maintenance (O&M) deficits. Adjustments to wholesale purchased water costs will be reviewed annually and increases or decreases directly "passed-through" to customers.

2.3 - Long-Term Water Transfer

The District entered into an agreement for the long-term purchase and transfer of USBR Project Water from the Anderson-Cottonwood Irrigation District (ACID) for 1,536 acre-feet of water annually, subject to shortage provisions. The agreement was amended in 2021 for an additional 264 acre-feet of water annually, subject to shortage provisions. The water must be purchased annually for the term of the agreement and includes USBR charges plus administrative charges paid to ACID. It is assumed that the entire quantity of water available from ACID will be purchased and delivered for M&I purposes every year and therefore all associated expenses have been allocated to the "M&I only" category. Historically in shortage years, with the exception of 2022, the amount of water available from ACID has been reduced to 75 percent of full entitlement. In 2022, the supply made available to Settlement Contractors including ACID was reduced to 18%.

2.4 - Special Assessment Revenue

Future revenues have been estimated based on the Special Assessment revenues received in FY 2021-22. Assessed (land only) valuations have increased in Shasta County over the past five years. It is believed that the FY 2021-22 revenues provide a reasonable estimate for these revenues over the term of this study.

2.5 - County Tax Pool Revenue

This revenue has been estimated based on the FY 2021-22 revenues. It is believed that FY 2021-22 revenues provide a reasonable estimate for these revenues over the term of this study.

2.6 - Staffing

The management staff is comprised of the General Manager and four supervising managers organized into four departments. Nineteen of the District's 26 employees are members of IBEW Local 1245 and participate in collective bargaining for wages and benefits. Employer pension costs are presently paid on a pay-as-you-go basis and it is anticipated that this will continue for the duration of this study. However, the District is planning on funding the existing and growing other post-employment benefits (OPEB) costs that are presently underfunded in order to reduce future liabilities. This study assumes the current staff of 26 full-time employees continuing with one additional, full-time staff member added over the term of this study.

For the fiscal years ending June 30, 2020, and 2021, the District contributed $215,985 and $215,985, respectively, to the CalPERS OPEB Plan (the Plan). As of June 30, 2022, the actuarial accrued liability for benefits was $5,617,142, and the actuarial value of the assets was $691,768, resulting in a net unfunded actuarial accrued liability of $4,925,374, and a funded status of 12%. The covered payroll (annual payroll of active employees covered by the plan) was $1,800,233, and the ratio of the actuarial accrued liability to the covered payroll was 273.60%. The projection of future benefits for an ongoing plan involves estimates of the value of reported amounts and assumptions about the probability of occurrence of future events far into the future. Amounts determined regarding the funded status of a plan and the employer's annual required contributions are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. (OPEB Actuarial by Milliman as of June 30, 2022)

2.7 - Extraordinary Operations, Maintenance and Replacement (EOMR)

In order to address aging infrastructure and implement asset management and replacement principles, the District has planned for major maintenance and replacement projects using a 20-year planning horizon to develop an average annualized expense for the general categories "facilities," "pipelines," "vehicles and equipment." This has allowed the District to plan and accomplish large projects with reduced volatility to the annual routine operations and maintenance budget. It is anticipated that some years will require borrowing from contingency reserves or financing whenever the cumulative expenses exceed the fund balance. These projections are based on present value expense projections and do not include an inflation factor, expenses for financing or forgone interest earnings (See Tables 2a, 2b and 2c).

2.8 - Charges for Special Services

Charges for items such as fire hydrants, backflow devices and their installation are directly charged to the customers requesting special services at rates to fully recover the District's expenses. Such charges are reviewed annually by the Board of Directors and are not included in this rate study.

3. METHODOLOGY

This rate study is generally based on the "commodity-demand method" described in the American Water Works Association "Principles of Water Rates, Fees, and Charges–- M1 Manual of Water Supply Practices." The analysis utilizes the averages for the prior five years of revenues and expenses. All expenses are grouped into Major Expense Categories (see Table 3). Booster pump station power expenses are aggregated and excluded from the general expense allocation as they are offset entirely utilizing non-operating revenues. All water treatment expenses are aggregated and excluded from the expense allocation and allocated separately through a water treatment expense allocation (see Table 4). Similarly, all expenses for the District's wells are aggregated and excluded from the expense allocation and allocated separately through a well expense allocation (see Table 5). All remaining expenses are allocated to one of the following three customer categories allocation: "All", "Ag" or "M&I". The majority of costs are allocated to "All". Specific costs attributable to only one customer class are assigned accordingly. For example, costs for Irrigation water purchased from the USBR are assigned to the Agricultural customer class only. Similarly, costs for M&I water are assigned to the M&I customer classes only. Water treatment costs are assigned primarily to M&I users with Agricultural customers being charged in

proportion to the benefit received for the treatment of water used for domestic purposes (approximately 670 gallons per day or 3/4 of an acre-foot per year).

Expenses are further assigned to one of three allocation methods: volume, capacity, and unitary (per account). Expenses allocated to volume include most operating expenses such as the operation of the District's water sources, water treatment facilities, pumping stations, and water distribution facilities. Capacity allocated expenses include most of the District's maintenance expenses including the cost to maintain all of the District's facilities, pipelines, water services, meters, vehicles, tools, and equipment. Most of the District's administrative costs including billing, customer service, regulatory compliance, and safety programs are assigned on a unitary or per-account basis. The resulting revenue requirement must be derived from rates.

The resulting Volume expense totals are divided by the projected amount of water delivered to determine the cost per unit of water. Capacity expenses are divided by the total number of meter class equivalents (MCE) units to determine the cost per MCE. Unitary expenses are divided by the number of accounts to determine the per account cost.

Charges for fire protection services are designed to recover the District's costs for reading the meter, billing, maintenance of the service and providing the water delivery capacity required for the fire service. Recognizing that these services are normally used infrequently, the base rate for Fire Service Meters is set at 85% of the bimonthly "Capacity Component" of the base rate for an M&I meter class of a similar capacity.

4. EXPENSES

4.1 - Water Supply

The District obtains the vast majority of its water supply through a Water Service Contract with the USBR, Contract No. 14-06-200-85IA-LTRI from the Cow Creek Unit of the Trinity River Division of the CVP for up to 24,578 acre-feet of Irrigation and M&I Water annually, subject to shortage provisions. A long-term transfer of CVP Project Water from ACID augments the District's M&I water supply. District groundwater wells provide another source of water supply. Surface water is purchased from the CVP in accordance with the ratesetting policies established by the USBR.

4.2 - O&M Deficits

Annually, USBR performs an accounting to determine each contractor's net financial position for the fiscal year recently ended. This process accounts for each contractors recorded water revenues against costs and applicable interest allocated to the contractor based on their respective water deliveries. The outcome of the annual accounting process is the contractors final Net Results of Operations for the year recently ended. These annual accountings provide financial information necessary to determine the contractor repayment status, which is then used in calculating water rates for the forthcoming water year. In the event that actual expenses exceed projections, or if actual water deliveries are less than projected, interest-bearing O&M deficits may result. In general, deficits are likely in shortage years since less water is delivered throughout the CVP service area.

4.3 - M&I Rate Stabilization Fund

M&I customer class rates include a $0.07 per HCF charge to fund an M&I Rate Stabilization Fund to address annual O&M deficits and to stabilize rates. It is anticipated that funds to be collected along with the funds currently in the M&I Rate Stabilization Fund will be adequate to address likely O&M deficits that may occur during the term of this study. As determined by the Board of Directors annually, this placement may be reduced or suspended.

4.4 - Irrigation Deficit Reserve

The 2017 Rate Study recommended the establishment of a rate component to proactively address anticipated O&M deficits for Irrigation Water by creating an Irrigation Deficit Reserve. Deficits can be expected to occur in shortage years and must be systematically paid down to avoid compounding interest and increased rates in the future. As a result, a rate component of $10.00 per acre-foot of Agricultural Water will be charged to fund payment of future deficits.

4.5 - Expense Categories

The District's routine operations and maintenance expenses are based on averaged annual expenses that include non-shortage years with full supplies in addition to drought years that included severe shortages. Additionally, expenses for extraordinary operations, maintenance, and replacement (EOMR) items, projected over a 20-year planning horizon, have been added on an averaged, annualized basis. Expense categories in the general expense allocation include:

- Source of Supply – Operation and Maintenance (O&M)
- Pumping – O&M
- Transmission & Distribution – O&M
- Cross Connection
- Customer Service
- Water Conservation
- Administration
- General Plant
- Safety
- Transportation & Shop
- Transfers and Annual Reserve Placements

With the exception of power, treatment and well expense allocations, as previously discussed, expenses were allocated based on one of the following three methods:

- Volume ($/volume unit)
- Capacity = Meter Class Equivalents ($/MCE)
- Accounts/Unitary ($/account)

The Volumetric allocation is based on a five-year average water deliveries for each customer class.

4.6 - Meter Class Equivalents

The Capacity allocation is based on the potential demand that a metered service can place on the District's water system and is expressed in Meter Class Equivalent (MCE) units. The potential demand that a meter can place on the system is proportional to the maximum intermittent flow that the meter can deliver which is proportional to the cross-sectional area of the meter for meters of the same design. However, a careful review of maintenance costs associated with the repair and replacement costs of water system components such as meters, pipelines, and pumping facilities showed that the maintenance costs are generally proportional to the diameter of the meter or pipeline rather than the cross-sectional area. Therefore, for the allocation of capacity charges a factor of the Meter Class to the 0.45 power was used to calculate the Meter Class Equivalents. Calculation of the capacity charges is arrived at by utilizing the number of meters and MCE thereof. The MCE factors are based on the meter class, with a Class 30 meter being equal to 1.0 MCE. (See Table 6).

4.7 – Unitary Expenses

Unitary expenses are allocated on a per account basis independent of the customer class. The total costs borne by any single customer class would be based on the percentage of the number of customers in each rate class. For example, 5,941 M&I accounts out of 6,126 total accounts represent 97.0% of the total accounts.

4.8 - Power for Pumping

All water deliveries within the District are pumped at least once and some locations require two additional pumped lifts resulting in ten separate pressure zones. Pumping power expenses have been aggregated and are not included with the general expense allocation. Pumping power expenses are entirely offset with non-operating revenues for the term of this analysis.

4.9 - Treatment Cost Allocation

District water treatment related expenses were historically allocated exclusively to the M&I customer classes since the benefits of domestic water were not considered to be directly benefiting the Agricultural customer class. However, in recognition that most of today's Agricultural customers also receive water service for their primary residence and indeed benefit from the provision of domestic water, it was determined appropriate to allocate a portion of water treatment expenses based on the following assumptions:

- The average household (i.e., non-irrigation) treated water demand = 670 gpd per household
- Approximate number of households = 6,328
- Water sales = 2,176 AF of Irrigation and 6,557 AF of M&I
- Irrigation accounts should contribute to treatment costs on the first 670 gpd of water deliveries. The approximate number of Irrigation accounts is 144

The resultant Water Treatment expense allocation follows:

- The average annual household treated water demand = 670 x 365 = 164,250 gallons = 0.75 acre-feet
- The total annual treated water demand for Irrigation accounts = 144 x 0.75 = 108 acre-feet
- The total annual treated water demand for all customers = 6,288 acre-feet

- Based on total treatment costs of approximately $710,010 and 6,396 acre-feet of treated water deliveries, the cost per acre-foot = $111.01
- Including the cost for 0.75 acre-feet of M&I and the credit for 0.75 acre-feet of Irrigation water brings the annual cost to $117.97 for 0.75 A.F. or $19.66 bimonthly per Irrigation account
- The total treatment cost paid by the approximately 144 Irrigation accounts = 144 x $19.66 x 6 = $16,986.
- The Irrigation share of treatment expenses = 108 AF÷ / 6,396 AF = 1.69%
- The M&I share of treatment expenses = 100.00% - 1.69% = 98.31%
- Irrigation properties that are solely dedicated to commercial agriculture purposes with no residence or domestic water use whatsoever will receive a "non-domestic use (NDU) credit" of $19.66 bimonthly (the cost of the 0.75 AF of treated M&I water that is included in the Ag base rate).

5. REVENUES

Revenue sources include non-operating revenues comprised of the District's Special Assessment, a share of the County tax pool, interest earned, miscellaneous revenue and operating revenues comprised of water rates (i.e. base rates and commodity charges).

5.1 - Special Assessment

Special Assessment revenue is generated by an Ad Valorem property assessment based solely on the value of land (not on any improvements made to the property). Pursuant to Section 37203 of the California Water Code, upon a vote of the District's property owners, allows the District to compel Shasta County to levy and collect this assessment on all lands within the District sufficient to raise monies to provide for the following purposes:

- Purchase Water
- Operate and Maintain the District
- Maintain a Contingency Reserve

The Special Assessment is not subject to Proposition 13 restrictions and as stated above is based solely on the value of land only and not improvements. This assessment is reflected on each individual property owner's biannual tax statement from the County of Shasta and is shown as "BVWD Land Only". The Special Assessment revenues were estimated using the Shasta County Assessor rolls and subsequently allocated to "All" users on a volumetric, capacity and per-account basis for all customer classes.

5.2 - County Tax Pool and Teeter Fund

County tax pool monies are based on an apportionment factor and come from the 1% county-wide property tax. This apportionment factor comes from the Revenue and Taxation Code Section 95-99, which established a permanent formula for determining property tax revenue to be received by local agencies and schools. The county tax pool monies are not restricted and, therefore, can be utilized for any authorized purpose. In the study, a portion of these tax pool dollars were allocated first to offset power costs, pay down a portion of the District's OPEB liability, pay a portion of the District's UAL, and to fund a portion of the District's semiannual Safe Drinking Water State Revolving Loan payments. The remainder; combined with the Special Assessment revenues, was used to offset a portion of the volumetric, capacity and per account charges.

5.3 - Rates

District water rates are comprised of the following components:

1. Base Rates - comprised of the following expense allocations
   - Charges that are related to the Number of Accounts
   - Charges that are related to the Meter Capacity
   - Baseline domestic use charge for Irrigation Accounts ($19.66/bimonthly)

2. Usage (Volume/Consumption) Rates
   Charges related to the volume of water used, measured in HFC's (Hundred Cubic Feet) for M&I customers or Acre-Feet (AF) for Irrigation customers.

3. Fire Service Rates

4. Water Treatment Improvement Project Debt Service

5. Other Charges (where applicable) include:
   - Backflow (Cross Connection) testing charge
   - Drought Penalty Charges (only when necessary)

After consideration of options to offset expenses with non-operating revenues, it was determined to be preferable and equitable that remaining non-operating revenues should be allocated toward expense categories in the following proportion: 5% Volume, 70% Capacity and 25% Number of Accounts.

6. CONCLUSIONS, RECOMMENDATIONS, IMPLEMENTATION

Utilizing the methodology and figures described above, the current and resultant commodity and base rates after offsetting expenses as well as the projected rates for the subsequent four years for all M&I Customer Classes are reflected in (Table 7a). Similarly, the current and resultant commodity and base rates for all Agricultural Customers as well as the projected rates for the subsequent four years are shown in (Table 7b). The proposed bimonthly rates for private fire protection systems are shown in (Table 7c). The projected increases are only a projection of annual adjustments described as described below in section 6.3 - Annual Rate Adjustments.

6.1 - Proposition 218 and Water Rate Setting

Proposition 218 is also known as the Right to Vote on Taxes Act. Proposition 218 places both procedural and substantive limitations on property-related fees or charges, including water utility rates. Procedurally, a government-owned utility, such as the District, must adopt rates through a public hearing process and give voters/customers the opportunity to formally protest. Under Proposition 218, utility rates must be set so that revenues do not exceed the funds required to provide the service, and the fee or charge imposed on any ratepayer must not exceed the proportional cost of the service attributable to that ratepayer. The development of this study is intended to meet the legal and technical requirements of Proposition 218.

6.2 - Pass-Through of Wholesale Water Purchases

It is preferable to adjust rates in small, regularly scheduled increments to reflect the cost of service rather than substantial but less frequent adjustments. The wholesale cost of water purchased from USBR includes the following cost components, which are revised annually based on CVP ratesetting policies. (Storage, Conveyance, Direct Pumping, etc.). Additional charges include the Restoration Fund and Trinity River PUD charges. The District also has a long-term transfer (LTT) agreement with the Anderson-Cottonwood Irrigation District that supplements its CVP M&I supplies. The cost for the ACID LTT water is based on CVP rates plus an administrative fee that is paid to ACID. It is recommended that all wholesale water rate increases or decreases be passed through to commodity water rates for both Irrigation and M&I customer classes on a volumetric basis.

6.3 - Annual Rate Adjustments

The District must anticipate increasing expenses and therefore, rates should be adjusted annually, based on the Consumer Price Index (CPI-U) plus up to 2% as a contingency for higher increases in energy, chemical, and other District expenses. This would be the maximum that the rates could increase each year. Annually, the District's Board of Directors will review the increase in operating expenses and determine whether or not to reduce the amount of the annual increase. The projected future rates shown in Tables 7a, 7b and 7c are based on annual increases of 6%.

6.4 - Water Supply Portfolio

The District's Water Supply Portfolio consists of water from the following sources:

- Central Valley Project (CVP) Water Service Contract water allocations
- Anderson-Cottonwood Irrigation District Long-Term Transfers (ACID-LTT)
- Groundwater produced by the District's five wells
- Water Transfers from other entities (including other Shasta County water agencies and the McConnell Foundation) if available

Due to variability in water supply availability, it is recommended that rates also be adjusted annually based on the "water supply portfolio" that is available to the District. Each year the quantities of water supplied from each of these sources (times their respective unit prices) will be used to calculate the annual water supply portfolio costs. The M&I water supply portfolio used for this Rate Study is shown in (Table 8). During shortage years, when CVP and ACID-LTT are reduced, rates will be determined on the basis of the weighted average of the quantities and costs of the available supplies. Any overall increases in supply portfolio costs will be passed through to M&I commodity rates on a volumetric basis.

6.5 - O&M Deficits

The District purchases most of its water from the CVP, when available. Each year the USBR projects the water use and determines the wholesale rates to the District. After the end of the federal fiscal year, the accounts are reconciled and each contractor is assigned either a surplus or a deficit for both Irrigation and M&I. Deficits occur as a result of USBR overestimating revenue, underestimating expenses, or both. Deficits are due and payable in 30 days, or they accrue interest. All accumulated deficits and interest must be paid by the year 2030. Separate reserves should be maintained for Irrigation and M&I to address annual deficits. Presently, the M&I rate stabilization reserve, along with the annual placements included in this study, should be adequate to address anticipated O&M deficits for M&I water deliveries for the term of this study. In order to address the accumulated USBR O&M Deficit for Irrigation water, it is

recommended that the 2023 rate for Agricultural water include $10.00 per acre-foot for current or past accumulated, interest-bearing O&M Deficit for Irrigation Water.

6.6 - WTP Debt Service

As a result of the promulgation of the Interim Enhanced Surface Water Treatment Rule in December 1998 and a Particle Removal Demonstration Study (conducted in 2001-2002), the District was required to construct improvements to its facilities at the Wintu Pump Station and Water Treatment Plant. Based on the results of that study, the Department of Health Services (DHS) determined that the existing inline, high-rate filtration process should be converted into a direct filtration facility through operational and physical improvements to the treatment process. The District entered into a low-interest rate loan under the Safe Drinking Water State Revolving Fund which was provided to assist the District in meeting the safe drinking water standards for our domestic water supply. In order to repay the loan, a bimonthly fee of $14.00 was created and charged to each account, which amount is then transferred monthly to a restricted bank account. The anticipated growth in the number of new customers that were used to establish the $14.00 bimonthly charge has not happened as anticipated, and therefore, a shortfall has occurred. In hindsight, the established initial rate should have been set higher. In order to maintain the required minimum reserve in the restricted account, an annual placement of approximately $110,387 will be required and will be paid from monies received from the County Tax Pool and Miscellaneous revenues.

6.7 - Extraordinary Operations Maintenance and Replacement (EOMR) Adjustments and Placements

The amounts of the annual placements into each of the three EOMR reserve funds (Facilities, Vehicles and Pipelines) need to be adjusted annually, using the consumer price index (CPI-U) for “facilities,” the 12-month increase in the Engineering News Record – Construction Cost Index ENR-CCI) for “pipelines” and the current California Statewide Contracts for Fleet Vehicles for “vehicles and equipment.”

6.8 - Other Post Employment Benefit (OPEB) Placement

The District has established a Retiree Healthcare Plan under the CalPERS Public Employees' Medical and Hospital Care Act (PEMHCA) and participates in a multiple-employer defined benefit retiree healthcare plan. The Plan provides healthcare insurance for eligible employees and their eligible family members through the District's group health insurance plan, which covers both active and retired members. In order to reduce the growth in the unfunded liability for OPEB expenses, an annual placement of approximately $215,985 will be made from monies received from the County Tax Pool and Miscellaneous revenues. The placement amount may be adjusted annually in accordance with the actuarial valuation.

6.9 - Employee CalPERS Pension Unfunded Actuarial Liability (UAL) Placement

The CalPERS unfunded accrued liability (UAL) is the amortized dollar amount needed to fund past service credit earned (or accrued) for members who are currently receiving benefits, active members, and members entitled to deferred benefits as of the valuation date. In order to reduce the growth in the unfunded liability, there will be an annual placement of approximately $219,000.00. The placement amount may be adjusted annually in accordance with the actuarial study prepared by the actuarial valuation.

6.10 - Capital Improvements Fund Placement

This fund was established to deposit capital improvement fees charged for new connections for use towards the construction and improvements of District facilities primarily to develop additional capacity in order to serve new growth and development as evaluated and established by the District’s Master Plan.

However, some identified improvements are necessary to benefit existing customers and are unrelated to new growth and development but are needed for improved water quality, capacity and regulatory compliance purposes. The placement of $200,000.00 will be made annually to the Capital Improvements Fund.

6.11 - Rate Study Term

It is recommended that this cost-based study be reviewed annually and comprehensively in three – five years depending on continuing supply chain issues, inflation and potential volatility in expenses in addition to considerable uncertainty related to CVP water supply. A revised successor rate study will need to be completed within a maximum of five years to comply with ratesetting and wholesale supply pass-through requirements.

7. TABLES

Table 1

Active Accounts and Meter Class Equivalents

M&I Meters		Class 30 Equivalents	Total Class 30 Equivalents
Class	Active		
20	593	0.82	484.18
30	3,160	1.00	3,160.00
50	1,247	1.29	1,609.87
100	533	1.83	973.12
160	523	2.31	1,207.82
200	14	2.58	36.15
300	20	3.16	63.25
450	35	3.87	135.55
900	23	5.48	125.98
1200	7	6.32	44.27
1500	0	7.07	0.00
2000	12	8.16	97.98
2500	3	9.13	27.39
3300	0	10.49	0.00
4500	14	12.25	171.46
6000	0	14.14	0.00
Totals =	6,184		8,137.02

AG Meters		Class 30 Equivalents	Total Class 30 Equivalents
Class	Active		
20	0	0.82	0.00
30	0	1.00	0.00
50	4	1.29	5.16
100	32	1.83	58.42
160	64	2.31	147.80
200	3	2.58	7.75
300	14	3.16	44.27
450	6	3.87	23.24
900	5	5.48	27.39
1200	4	6.32	25.30
1500	0	7.07	0.00
2000	3	8.16	24.49
2500	3	9.13	27.39
3300	3	10.49	31.46
4500	3	12.25	36.74
6000	0	14.14	0.00
Totals =	144		459.42

Agricultural Class 30 Equivalents =	459.42	5.3%
M&I Meter Class 30 Equivalents =	8,137.02	94.7%
Total Class 30 Equivalents =	8,596.43	

Table 2a
Extraordinary Operations, Maintenance and Replacement 20-Year Projection - Facilities

Bella Vista Water District

Extraordinary Operation, Maintenance & Replacement

20 Year Replacement Cost Projection

DESCRIPTION	Useful Life (yrs)	Year 0 FY 2022 2023	Year 1 FY 2023 2024	Year 2 FY 2024 2025	Year 3 FY 2025 2026	Year 4 FY 2026 2027	Year 5 FY 2027 2028	Year 6 FY 2028 2029	Year 7 FY 2029 2030	Year 8 FY 2030 2031	Year 9 FY 2031 2032	Year 10 FY 2032 2033	Year 11 FY 2033 2034	Year 12 FY 2034 2035	Year 13 FY 2035 2036	Year 14 FY 2036 2037	Year 15 FY 2037 2038	Year 16 FY 2038 2039	Year 17 FY 2039 2040	Year 18 FY 2040 2041	Year 19 FY 2041 2042	Year 20 FY 2042 2043
DISTRICT		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Telemetry Upgrade (Incl. programming) /3	15	-	-	-	-	-	-	-	-	-	-	36,053	-	-	-	-	-	-	-	-	-	-
SCADA Upgrade /3	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	205,103	-	-	-	-	-	-
Solar System 690 kw - Reg Station (PG&E) /3	30	-	-	-	-	-	-	-	-	-	-	-	-	842,191	-	-	-	-	-	-	-	
CS/UB Software Upgrade (Harris Impressa)	15	-	-	-	-	-	80,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STORAGE/TANKS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Surge Tank - R&R exterior coatings	20	-	-	-	-	-	-	-	-	-	-	-	-	-	293,250	-	-	-	-	-	-	-
4 MG Tank - R&R interior & exterior coating	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,596,826	-	-	-	-	-	-
OOT Tank - R&R interior & exterior coating	20	-	-	-	-	-	-	-	-	-	350,925	-	-	-	-	-	-	-	-	-	-	-
Cow Creek 2 R&R interior & exterior coating	20	-	-	-	-	-	279,091	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Regulating Station & Tank rehabilitation	50	-	-	-	259,072	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WINTU PUMP STATION		-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wintu PS - SN B7560 Motor overhaul (15 years)		-	-	-	-	-	-	-		-	55,347	-	-	-	-	-	-	-	-	-	-	-
Wintu PS - Unit 1 pump overhaul (30 years)		-	-	-	-	-	-	-	-	-	-	-	102,451	-	-	-	-	-	-	-	-	-
Wintu PS - SN B7561 Motor overhaul (15 years)		-	-	-		-	55,347	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wintu PS - Unit 2 pump overhaul (30 years)		-	-	-	-	-	-	-		-	95,386	-	-	-	-	-	-	-	-	-	-	-
Wintu PS - SN B7562 Motor overhaul (15 years)		-	-	-	-	-		-	55,347	-	-	-	-	-	-	-	-	-	-	-	-	-
Wintu PS - Unit 3 pump overhaul (30 years)		-	-	-	-	-	-	-	-	-	-	-	-	-	102,451	-	-	-	-	-	-	-
Wintu PS - Spare Unit pump overhaul (30 years)		-	-	-	-	-	-	-	-	-	-	95,386	-	-	-	-	-	-	-	-	-	-
Wintu PS - SN B7563 motor overhaul (30 yrs)		-	-	-	-	55,347	-	-	-	-	-	-	-	-	-	55,347	-	-	-	-	-	-
Wintu PS - Primary 60KV Transformer	50	-	-	-	312,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wintu PS - Spare 60KV Transformer	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wintu PS - VFD's Unit 4	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	162,265	-	-	-
Wintu PS - VFD's Unit 5	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	162,265	
Wintu PS - Unit 4 600 HP motor overhaul (8 yrs)		-	-	-	22,374	-	-	-	-	-	-	-	22,374	-	-	-	-	-	-	-	22,374	-
Wintu PS - Unit 4 600 HP pump overhaul (16 years)		-	-	-	63,590	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wintu PS - Unit 5 600 HP Motor overhaul (8 years)		-	-	22,374	-	-	-	-	-	-	-	22,374	-	-	-	-	-	-	-	22,374	-	-
Wintu PS - Unit 5 600 HP pump overhaul (16 years)		-	-	63,590	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wintu PS - Motor Control Center	20	-	-		-	-	-	133,069	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wintu PS - 2200 kw Diesel Generator	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	592,557	-	-	-	-	-	-
Wintu PS - HVAC Units	20	-	-	-	-	396,750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WATER TREATMENT PLANT		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Add Anthracite to top of filters	10	-	61,235	-	-	-	-	-	-	-	-	-	61,235	-	-	-	-	-	-	-	-	-
Electric Valve Actuator Replacements	20	43,700	43,700	43,700	43,700	43,700	43,700	43,700	43,700	43,700	43,700	43,700	43,700	43,700	43,700	43,700	43,700	43,700	43,700	43,700	43,700	38,000
Inspect & Rehab one filter incl. replacing media	20	-	-	-	-	-	-	-	-	87,142	-	-	-	-	-	-	-	-	-	-	-	-
Rehab filters 1-5 and replace all media /3	20	-	-	-	-	-	-	-	-	-	-	157,210	-	-	-	-	-	-	-	-	-	-
Rehab filters 6-10 and replace all media /3	20	-	-	-	-	-	-	-	-	-	157,210	-	-	-	-	-	-	-	-	-	-	-
Rehab filters 11-16 and replace all media /3	20	-	-	-	-	-	-	-	-		-	-	183,706	-	-	-	-	-	-	-	-	-
Solar System 127 kW - WTP (REU) /3	30	-	-	-	-	-	-	-	-	267,375	-	-	-	-	-	-	-	-	-	-	-	-
Filter Recoating - Exterior All	20	-	-	-	-	143,750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Filter Recoating - Interior -11-16	20	-	-	-	-	-	-	-	-	-	-	-	143,750	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WELLS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Well #1 Rehab	20	-	-	122,206	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Well #2 Rehab	20	-	-	-	-	-	122,206	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Well #3 Rehab	20	-	-	-	-	-	-	-	172,500	-	-	-	-	-	-	-	-	-	-	-	-	-
Well #4 Rehab	20	-	-	-	-	-	-	-	-	-	122,206	-	-	-	-	-	-	-	-	-	-	-
Well #6 Rehab	20	-	-	-	-	-	-	-	-	-	-	-	122,206	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BOOSTER PUMP STATIONS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cow Creek 1 PS - 150 kw Propane Generator /3	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29,502	-	-	-
Regulating Station - 50 kw Propane Generator /3	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14,950	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Buildings		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Distribution Storage Bldg	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Distribution Mechanic's Shop	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Treatment Plant	50																					
Main Office/Boardroom Bldg	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Replace 4 (1998) Office HVAC Units	20	-	-	-	-	62,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals - Projected Expenditures		$43,700	$104,935	$251,871	$700,737	$701,647	$580,344	$176,769	$271,547	$398,217	$824,773	$354,722	$679,422	$885,891	$439,401	$2,493,532	$43,700	$43,700	$250,417	$66,074	$228,339	$38,000
Annual Budget Placement per Rate Study		$272,281	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758
Annual surplus or (deficit)		$228,581	$274,822	$127,887	($320,979)	($321,890)	($200,587)	$202,989	$108,210	($18,460)	($445,016)	$25,036	($299,665)	($506,134)	($59,644)	($2,113,775)	$336,058	$336,058	$129,341	$313,683	$151,418	$341,758
Fiscal Year Beginning Balance		$1,710,309	$1,938,890	$2,213,712	$2,341,599	$2,020,619	$1,698,730	$1,498,143	$1,701,132	$1,809,342	$1,790,882	$1,345,866	$1,370,902	$1,071,237	$565,104	$505,460	$(1,608,315)	$(1,272,257)	$(936,200)	$(806,859)	$(493,176)	$(341,758)
Annual Budget Placement per Rate Study		$272,281	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758	$379,758
Actual/Projected Expenditures for the FY		($43,700)	($104,935)	($251,871)	($700,737)	($701,647)	($580,344)	($176,769)	($271,547)	($398,217)	($824,773)	($354,722)	($679,422)	($885,891)	($439,401)	($2,493,532)	($43,700)	($43,700)	($250,417)	($66,074)	($228,339)	($38,000)
Fiscal Year Ending Balance [Cumulative surplus or (deficit)]		$1,938,890	$2,213,712	$2,341,599	$2,020,619	$1,698,730	$1,498,143	$1,701,132	$1,809,342	$1,790,882	$1,345,866	$1,370,902	$1,071,237	$565,104	$505,460	($1,608,315)	($1,272,257)	($936,200)	($806,859)	($493,176)	($341,758)	($0)

Notes:
1. Treatement Superintendent/Engineer/GM to update annually
2. Capitalized improvements or replacements >/= $25,000
3. For useful life over 20 years, program 50% of replacement cost @ 50% of useful life
4. Indexed to 2022 Actual Costs - Annually index by the CPI-U

Table 2b

Extraordinary Operations, Maintenance and Replacement 20-Year Projection - Pipelines

Bella Vista Water District

Extraordinary Operation, Maintenance & Replacement

20 Year Replacement Cost Projection

DESCRIPTION	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
DISTRIBUTION SYSTEM		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lateral 2.9S - Replace 18" pipe xing Stillwater Creek @ Old Alturas & Old Oregon Trail		-	-	-	-	246,784	246,784	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Replace 250 lf 8" PVC Strawn Drive		-	-	-	50,176	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Easy Street 4,440 lf 8" PVC		-	-	816,960	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Replace Moody Crk Rd WM 1,700 lf 8" PVC	312,800		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Replace Olympia main 1,500 lf of 8" PVC		-	-	-	-	-	-	-	276,000	-	-	-	-	-	-	-	-	-	-	-	-
Tarcy Way 1,200 lf 8" PVC		-	220,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sara Dr. 1,600 lf 8" PVC		294,400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
East of Sara 1,100 lf 8" PVC		-	-	-	-	-	-	202,400	-	-	-	-	-	-	-	-	-	-	-	-	-
Pipeline Condition Assessment/Replacement Study		-	-	-	-	-	-	110,592	-	-	-	-	-	-	-	-	-	-	-	-	-
Estimated Annual Replacement/Rehab /5			-	-	35,840	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
Totals - Projected Expenditures	$312,800	$294,400	$220,800	$816,960	$86,016	$646,784	$646,784	$712,992	$676,000	$400,000	$400,000	$400,000	$400,000	$400,000	$400,000	$400,000	$400,000	$400,000	$400,000	$0	$400,000
Annual Budget Placement per Rate Study	$313,133	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184
Annual surplus or (deficit)	$333	$83,784	$157,384	($438,776)	$292,168	($268,600)	($268,600)	($334,808)	($297,816)	($21,816)	($21,816)	($21,816)	($21,816)	($21,816)	($21,816)	($21,816)	($21,816)	($21,816)	($21,816)	$378,184	($21,816)
Fiscal Year Beginning Balance	$936,729	$937,062	$1,020,846	$1,178,230	$739,454	$1,031,622	$763,022	$494,422	$159,614	($138,202)	($160,018)	($181,834)	($203,650)	($225,466)	($247,282)	($269,098)	($290,914)	($312,730)	($334,546)	($356,362)	$21,822
Annual Budget Placement per Rate Study	$313,133	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184	$378,184
Actual/Projected Expenditures for the FY	($312,800)	($294,400)	($220,800)	($816,960)	($86,016)	($646,784)	($646,784)	($712,992)	($676,000)	($400,000)	($400,000)	($400,000)	($400,000)	($400,000)	($400,000)	($400,000)	($400,000)	($400,000)	($400,000)	$0	($400,000)
Fiscal Year Ending Balance [Cumulative surplus or (deficit)]	$937,062	$1,020,846	$1,178,230	$739,454	$1,031,622	$763,022	$494,422	$159,614	($138,202)	($160,018)	($181,834)	($203,650)	($225,466)	($247,282)	($269,098)	($290,914)	($312,730)	($334,546)	($356,362)	$21,822	$6

Notes: District Engineer to index to current (Last Update 4/21/2022)

1. Capitalized improvements or replacements >/= $25,000
2. Costs include 15% for Design and Services During Construction and 15% Contingency
3. Indexed by PACE Engineering Projects Summary
4. Estimated Yearly Replacement Based on 2,500 LF of 8-inch piping on annual basis

Table 2c
Extraordinary Operations, Maintenance and Replacement 20-Year Projection - Vehicles and Equipment

Bella Vista Water District
Extraordinary Operation, Maintenance & Replacement
20 Year Replacement Cost Projection

VEHICLE/ EQUIPMENT		Year	Condition	Year 0	Year 1	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 20
				FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY
				2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Description	Type			2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Nissan Quest Van	Minivan	2002	G		35,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chevy Impala	Car	2014	G	-	-	-	-	-	-	40,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toyota Tacoma 4x4	Small PU	2020	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50,000	-	-	-	-
Chevy Pickup 4x4	Small PU	2006	G	-	-	-	-	-	35,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chevy Colorado	Small PU	2016	G	-	-	-	35,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35,000	-	-
Chevy Colorado	Small PU	2018	G	-	-	-	-	35,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35,000	
Chevy Colorado	Small PU	2005	G	-	-	-	-	-	35,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toyota Tacoma	Small PU	2019	G	-	-	-	-	-	-	-	-	-	-	-	40,000	-	-	-	-	-	-	-	-	-
GMC 1 Ton - Flatbed	Service Trk	2009	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Chevy Colorado	Small PU	2017	G	-	-	-	-	-	-	-	-	-	35,000	-	-	-	-	-	-	-	-	-	-	
3/4 Chevy Silverado	Full Size PU	2015	G	-	-	-	-	55,000	-	-	-		-	-	-	-	-	-	-	-	-	-	55,000	
Chevy Pickup	Small PU	2009	G	-	35,000	-	-	-	-	-	-	-	-	-	-	-	-	35,000	-	-	-	-	-	-
3/4 Ton Slverado Utility Truck	Full Size PU	2020	G	-	-	-	-	-	-	-	-	-	-	-	-	-	60,000	-	-	-	-	-	-	-
Chevy Colorado	Small PU	2010	G	-	-	-	35,000	-	-	-	-	-	-	-	-	-		-	-	-	-	35,000	-	-
¾ Ton Utility truck (WTP)	Full Size PU	2009	G	-	-	-	-	-	-	-	45,000	-	-	-	-	-		-	-	-	-	-	-	-
¾ Ton Utility truck (Dist.)	Full Size PU	2013	F	-	-	50,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45,000	-	-	-
Chevy Pickup 4x4	Small PU	2005	G	-	-	-	-	-	40,000	-	-		-	-	-	-	-	-	-	-	-	-	-	-
3/4 Ton Slverado Utility Truck	Full Size PU	2020	G	-	-	-	-	-	-	-	-	-	-	-	-	-		60,000	-	-	-	-	-	-
Chevy Colorado	Small PU	2019	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40,000	-	-	-	-	-
Chevy Colorado (totaled 9/2022) Ins. Paid $17,605	Small PU	2016	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toyota Tacoma (replace 416)	Small PU	2022	N	32,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chevy Dump Truck	Dump Trk	1994	G	-	-	-	140,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sterling Dump Truck	Dump Trk	2005	G	-	-	-	-	-	-	-	175,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Case Backhoe 580K "yard hoe"	Backhoe	1990	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Case Backhoe 580M (est 30-year life)	Backhoe	2003	G	-	-	-	-	-	-	-	-	-	-	-	115,000	-	-	-	-	-	-	-	-	-
Case Backhoe 580SN (est 30-year life) /3	Backhoe	2018	G	-	-	-	-	-	-	-	-	-	-	57,500	-	-	-	-	-	-	-	-	-	-
Towmaster Trailer	Trailer	2005	G	-	-	-	-	-	-	-	-	30,000	-	-	-	-	-	-	-	-	-	-	-	-
Load Trailer	Trailer	1998	G	-		30,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vac Excavator Trailer (old)	Trailer	2000	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vac Excavator Trailer (new)	Trailer	2022	N	90,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Valve exerciser, vac & hydrlc pump	Trailer	2013-14	G	-	-	-	-	-	-	-	-	-	-	-	-	90,000	-	-	-	-	-	-	-	-
CAT XQ225 Portable Generator 225KW	Generator	1997	G	-	-	-	-	-	-	150,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hipower HRJW 325 T4F Portable Generator 325KW /3	Generator	2021	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75,000	
				$122,000	$70,000	$80,000	$210,000	$90,000	$110,000	$190,000	$220,000	$30,000	$35,000	$57,500	$155,000	$90,000	$60,000	$95,000	$40,000	$50,000	$45,000	$70,000	$165,000	$0
				$56,628	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720
				($65,372)	($4,280)	($14,280)	($144,280)	($24,280)	($44,280)	($124,280)	($154,280)	$35,720	$30,720	$8,220	($89,280)	($24,280)	$5,720	($29,280)	$25,720	$15,720	$20,720	($4,280)	($99,280)	$65,720
				$613,472	$548,100	$543,820	$529,540	$385,260	$360,980	$316,700	$192,420	$38,140	$73,860	$104,580	$112,800	$23,520	($760)	$4,960	($24,320)	$1,400	$17,120	$37,840	$33,560	($65,720)
				$56,628	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720	$65,720
				($122,000)	($70,000)	($80,000)	($210,000)	($90,000)	($110,000)	($190,000)	($220,000)	($30,000)	($35,000)	($57,500)	($155,000)	($90,000)	($60,000)	($95,000)	($40,000)	($50,000)	($45,000)	($70,000)	($165,000)	$0
				$548,100	$543,820	$529,540	$385,260	$360,980	$316,700	$192,420	$38,140	$73,860	$104,580	$112,800	$23,520	($760)	$4,960	($24,320)	$1,400	$17,120	$37,840	$33,560	($65,720)	$0

Notes:
1 Distribution Superintendent/Mechanic to update annually to current year value (USD)
2 Replacements with value >/= $25,000
3 For useful life over 20 years, program 50% of replacement cost @ 50% of useful life
4 Replace when condition is unsafe, below "fair" condition, 200,000 miles or >20-years
5 Update or index annually (last updated 9/2022 by Daniel Krames and Floyd Woolam)

Table 3
Major Expense Categories

Line #	Description	Allocation Among User Classes			Allocation Method				
		All	Ag Only	M&I Only	Volume	Capacity	# of Accounts	Water Treatment	Wells
25	Labor Costs - SoS (nic Wells) - Subtotal	X			X				
26	Purchased water (USBR) IRR		X		X				
29	Purchased water (USBR) M&I			X	X				
44	Other Water Costs - M&I			X	X				
61	Source of Supply - Operations	X			X				
76	Maintenance Costs (Wintu)	X				X			
83	68 Pumping - Operating Costs	X			X				
98	69 Pumping - Maint.	X				X			
140	74 Trans. & Distribution - Operations	X			X				
154	75 Trans. & Distribut'n - Maintenance	X				X			
166	77 Cross-Connection	X					X		
175	79 Customer Service	X					X		
187	81 Water Conservation	X			X				
221	83 Administration	X					X		
228	85 General Plant	X				X			
254	87 Safety	X					X		
266	89 Transportation & Shop	X				X			
271	EOMR Placement - Facilities	X				X			
272	EOMR Placement - Vehicles	X				X			
273	EOMR Placement - Pipelines	X				X			
288	T & D (Capital Projects)	X				X			
24a	65 Source of Supply (Wells) Labor	(Included in Well Costs)							X
39a	65 Operations Costs (Wells)	(Included in Well Costs)							X
121	71 & 72 Treatment Costs - Subtotal	(Included in Water Treatment Costs)						X	
85	68 Pumping - Power Costs	Offset with Non-Operating Revenues							
273a	OPEB Funding	Offset with Non-Operating Revenues							
273b	UAL Funding	Offset with Non-Operating Revenues							
273c	SDWSRF Loan Placement	Offset with Non-Operating Revenues							
288	Capital Improvement Fund Placement	X				X			
296	2007 SDWSRF Loan - Wintu & WTP	Partially Funded by $14.00 Bimonthly WT Charge							

Table 4
Water Treatment Expense Allocation

Description	COA	5-Year Average (adjusted)
Supervision & Labor (W.T. Plant)	1.71.00.50100	$233,902
Payroll Taxes & Benefits	1.71.00.50200	$113,168
Purchased Power	1.71.00.51300	$10,774
Alarms	1.71.35.51800	$4,001
Chemicals	1.71.35.51900	$94,290
Fees & Licenses	1.71.35.52500	$40,020
Tools & Equip. (W.T.)	1.71.35.54000	$0
Professional Services	1.71.35.57600	$6,251
Lab Services & Supplies	1.71.54.52200	$31,165
Tools and Equipment	1.71.54.54000	$5,029
Mailing Costs	1.71.54.55800	$173
Education & Training	1.71.54.56700	$2,292
Dues & Subscriptions	1.71.54.57300	$0
Other Services & Expenses	1.71.54.58200	$0
Supervision & Labor (W.T. Maint.)	1.72.00.50100	$77,967
Payroll Taxes & Benefits	1.72.00.50200	$37,723
Materials and Supplies (W.T. Maint.)	1.72.35.53100	$21,962
Tools & Equip. (W.T.)	1.72.35.54000	$19,982
Prof. Services (W.T.)	1.72.35.57600	$1,252
Equipment Rental	1.72.54.53700	$0
Disposal	1.72.54.55200	$10,059
Total		**$710,010**

Assumptions:

1. Water Sales from Surface Water (M&I) = 6,288 Acre-feet
2. The number of Ag accounts = 144
3. Average AG household treated water (i.e., non-irrigation) demand = 670 gallons per day per household
4. Ag accounts pay water treatment costs only and M&I water costs on the first 670 gpd of water that they use
4. The avg. annual household treated water demand for ag residences = 670 x 365 = 244,550 = 0.75 AF per household
5. The total annual treated water demand for Ag accts = 144 x 0.75 AF = 108.0 Acre-feet
6. Total quantity of water being used for M&I purposes = 6,288 AF + 108.0 AF = 6,396 Acre-feet

Treatment Cost per AF =	$	111.01	(Note: this does not include the raw M&I water costs)
Adjusted for 8% Losses =	$	120.66	per AF
M&I Raw Water Cost per AF =	$	113.54	(Includes adjustment for water losses)
Total Treated Water Cost per AF =	$	234.20	(Includes adjustment for water losses)
Total Treated Water Cost per HCF =	$	0.54	(Includes adjustment for water losses)

Table 5
Well Expense Allocation

Description	COA	5-Year Average (adjusted)
Supervision & Labor (Wells)	1.65.10.50100	$62,374
Payroll Taxes & Benefits (Wells)	1.65.10.50200	$30,178
Purchased Power (Wells)	1.65.00.51300	$167,298
Alarms & Other Utilities (Wells)	1.65.00.51800	$12,916
Chemicals (Wells)	1.65.00.51900	$30,560
Disposal (Wells)	1.65.00.55200	$2,940
Fees & Licenses (Wells)	1.66.00.52500	$0
Maintenance (Wells)	1.66.00.53100	$4,182
Equipment Rental	1.66.00.53700	$989
Tools & Equipment (Wells)	1.66.00.54000	$14,604
Professional Services (Wells)	1.66.00.57600	$0
Total		**$326,042**

Well Production (5-year Average) 1,036 Acre-feet

	Total Cost	Quantity, AF	$/AF	$/HCF
Cost per AF =	$326,042	1,036	$ 314.71	$ 0.72
Adjusted for Losses =			$ 342.08	$ 0.79

Table 6
Meter Class Equivalents

Meter Size vs Meter Class		
Size	Type	Class
5/8"	Disc	20
3/4"	Disc	30
1"	Disc	50
1 1/2"	Disc	100
2"	Disc	160
2"	Compound	200
2"	Turbine or Mag	300
3"	Compound	450
3"	Turbine	450
3"	Mag	900
4"	Compound	900
4"	Turbine	1200
4"	Mag	1500
6"	Compound	2000
6"	Turbine	2500
6"	Mag	3300
8"	Compound	4500
8"	Turbine	4500
8"	Mag	6000

Class 30 Meter Equivalents			
Class	Size	Meter Class$^{0.45}$	Class 30 Equivalents
20	5/8	3.9	0.83
30	3/4	4.6	1.00
50	1	5.8	1.26
100	1 1/2	7.9	1.72
160	2	9.8	2.12
200	2	10.9	2.35
300	2	13.0	2.82
450	3	15.6	3.38
900	3	21.4	4.62
1200	4	24.3	5.26
1500	4	26.9	5.81
2000	6	30.6	6.62
2500	6	33.8	7.32
3300	6	38.3	8.29
4500	8	44.0	9.53
6000	8	50.1	10.85

Table 7a
Proposed/Projected M&I Rates

Current Rate	Proposed Water Usage Charges ($/HCF)				
	2023	2024	2025	2026	2027
$0.69	$0.71	$0.75	$0.80	$0.85	$0.90

Meter Class	Current Rate	Proposed Bimonthly Base Rates				
		2023	2024	2025	2026	2027
20	$47.01	$46.97	$49.79	$52.78	$55.94	$59.30
30	$50.38	$50.24	$53.25	$56.45	$59.84	$63.43
50	$55.60	$55.42	$58.75	$62.27	$66.01	$69.97
100	$64.90	$64.94	$68.84	$72.97	$77.34	$81.99
160	$73.09	$73.54	$77.95	$82.63	$87.59	$92.84
200	$77.63	$78.40	$83.10	$88.09	$93.38	$98.98
300	$87.14	$88.73	$94.05	$99.70	$105.68	$112.02
450	$98.53	$101.38	$107.46	$113.91	$120.75	$127.99
900	$123.56	$129.93	$137.73	$145.99	$154.75	$164.03
1200	$136.47	$145.01	$153.71	$162.93	$172.71	$183.07
1500	$147.69	$158.30	$167.80	$177.87	$188.54	$199.85
2000	$163.93	$177.77	$188.44	$199.74	$211.73	$224.43
2500	$178.07	$194.93	$206.63	$219.02	$232.16	$246.09
3300	$197.75	$219.12	$232.27	$246.20	$260.98	$276.63
4500	$222.85	$250.44	$265.47	$281.39	$298.28	$316.17
6000	$249.47	$284.16	$301.21	$319.28	$338.44	$358.75

Table 7b
Proposed/Projected Ag Rates

Current Rate	Proposed Water Usage Charges ($/AF)				
	2023	2024	2025	2026	2027
$104.66	$107.02	$113.44	$120.25	$127.46	$135.11

Meter Class	Current Rate	Proposed Bimonthly Base Rates				
		2023	2024	2025	2026	2027
50	$76.42	$77.36	$82.00	$86.92	$92.14	$97.67
100	$85.74	$87.82	$93.09	$98.67	$104.60	$110.87
160	$93.92	$97.28	$103.12	$109.30	$115.86	$122.81
200	$98.46	$102.62	$108.78	$115.30	$122.22	$129.56
300	$107.95	$113.97	$120.81	$128.06	$135.74	$143.88
450	$119.35	$127.87	$135.54	$143.67	$152.30	$161.43
900	$144.38	$159.26	$168.82	$178.94	$189.68	$201.06
1200	$157.29	$175.84	$186.39	$197.57	$209.43	$221.99
1500	$168.52	$190.44	$201.87	$213.98	$226.82	$240.43
2000	$184.76	$211.84	$224.55	$238.02	$252.30	$267.44
2500	$198.89	$230.70	$244.54	$259.21	$274.77	$291.25
3300	$218.57	$257.29	$272.73	$289.09	$306.44	$324.82
4500	$243.67	$291.72	$309.22	$327.78	$347.44	$368.29
6000	$270.30	$328.78	$348.51	$369.42	$391.58	$415.08

Table 7c
Proposed/Projected Fire Service Rates

Size of Fire Service Line	Current Rate	Proposed Bimonthly Fire Service Rates				
		2023	2024	2025	2026	2027
2	$30.09	$27.62	$29.28	$31.03	$32.90	$34.87
3	$42.92	$39.06	$41.40	$43.89	$46.52	$49.31
4	$57.77	$58.60	$62.12	$65.84	$69.79	$73.98
6	$79.43	$82.87	$87.84	$93.11	$98.70	$104.62
8	$99.89	$106.98	$113.40	$120.20	$127.41	$135.06
10	$125.17	$138.11	$146.40	$155.18	$164.49	$174.36

Table 8
M&I Water Supply Portfolio

M&I Water Unit Costs			
M&I Water Costs - 2022	Cost	Quantity	Cost x Quantity
Project Water	$83.85	5,485	$459,917
ACID Long-Term Transfer	$188.16	1,350	$254,016
Other Transfers	$250.00	0	$0
Water Losses		-547	
Net Deliveries (Metered Usage)		6,288	
		Total Cost =	$713,933
		Average Surface Water Unit Cost =	$113.54
		Surface Water Treatment Cost per AF =	$120.66
		Treated Surface Water Average Unit Cost =	**$234.20**

M&I Well Water Unit Costs			
	Cost	Quantity	Cost x Quantity
Well Water	$314.71	410	$129,032
Water Losses		-33	
Net Deliveries (Metered Usage)		377	
		Average Well Water Unit Cost =	**$342.08**

M&I Water Portfolio Costs

	Acre-feet	**Costs per AF**	**Cost Including Treatment**
Well Water[1]	377	$342.08	$129,032
Treated Surface Water[1]	6,288	$234.20	$1,472,687
M&I Water Sales[2] - Totals	6,665		$1,601,719
	Average Unit Cost =	**$240.30**	

[1] Net after lossses

[2] Includes treated surface water included in the Ag Base Rate

8. APPENDICES

A. Notice Concerning Proposed Water Rate Increase and Public Hearing

BELLA VISTA WATER DISTRICT

11368 E. STILLWATER WAY • REDDING, CALIFORNIA 96003-9510
TELEPHONE (530) 241-1085 • FAX (530) 241-8354

NOTICE CONCERNING PROPOSED WATER RATE ADJUSTMENTS AND PUBLIC HEARING

Date: February 27, 2023
Location: Shasta College, Room 1632, 11555 Old Oregon Trail, Redding, CA 96003
Time: 5:30 PM

NOTICE IS HEREBY GIVEN that on February 27, 2023, at 5:30 pm., or as soon thereafter as the business of the District permits, a public hearing will be held at Shasta College, 11555 Old Oregon Trail, Room 1632, Redding, California 96003 to consider proposed adjustments in the District's water rates and charges. If approved by the Board of Directors, the proposed rate increases will be effective for the billing commencing on or after March 1, 2023.

PUBLIC HEARING AND PROTEST PROCEEDINGS

Pursuant to State law, protests may be provided by any District customer, or owner of property subject to the proposed rate changes, against any or all of the proposed rate changes described in this Notice. Written protests may be submitted in person to the Board of Directors at the Public Hearing. Written notices may also be submitted by mail or delivered in person to Bella Vista Water District 11368 E. Stillwater Way, Redding, CA 96003. **Written protests must be received before the close of the public hearing on February 27, 2023.** Each written protest must clearly identify the property or account (by assessor's parcel number or street address), reference the proposed water rate increases, and must include the signatures of the property owner or customer, as applicable. Due to the inability to verify the authenticity of each individual protest, protests received by telephone, electronic mail (e-mail), or via social media sites, including, but not limited to, Facebook or Twitter or through the District's website or oral comments on the proposed rate increase referenced herein shall **NOT** be accepted. Oral comments made at the public hearing will qualify as formal protests of the proposed rate increases only if accompanied by a written protest form setting forth the required information (as set forth above). If written protests are submitted by a majority of the affected property owners or customers, the proposed increase(s) will not be imposed.

WHY IS THE DISTRICT PROPOSING RATE INCREASES?

Bella Vista Water District is subject to the California Water Code and Proposition 218 and therefore is required by law to charge its customers only what is necessary to provide water services. The District is dedicated to keeping rates low by maintaining lean staffing levels and using financial reserves when necessary. However, like other utilities the costs involved to purchase, pump, treat, and deliver water; comply with regulatory requirements, and revised drinking water standards as well as maintaining and replacing water system infrastructure, continue to rise.

The District is proposing rate adjustments due to increasing costs of operating, maintaining and replacing the District's public water system; increasing costs of purchasing, treating and delivering safe and reliable water. The District's cost to provide water service includes: (1) operations and maintenance; (2) repair and rehabilitation of the water system; and (3) purchased water supply expenses. Water supply expenses are based on the District's main suppliers of water: the Central Valley Project (Converted Repayment Contract), the Anderson-Cottonwood Irrigation District (long-term transfer agreement), and operating costs for the District's groundwater wells. Additionally, the statewide drought and mandatory water use restrictions have altered customer water demands.

For the past several months, the District has engaged in an extensive analysis of its water costs, revenues and rates. The consulting firm of Provost and Pritchard along with staff conducted a lengthy analysis to determine the true cost of water service and their corresponding impacts to customers. This analysis identified a number of key drivers that resulted in the proposed rates. The District is proposing water rate and charge adjustments because:

1. The existing rates are based on a rate study that was performed in 2017. The new rates reflect District expense and revenue experienced over the most recent five years and in some cases on specific quantities rather than historical, as we are being faced with unseen inflationary factors.

2. Changes to existing rates and charges are needed to cover the water system's fixed costs which do not vary with water sales.

3. Major components of the District's water system are now more than 50 years old and approaching the end of their original design life. Proposed rates fund the extraordinary operations, maintenance and replacement (EOMR) program to rehabilitate and replace aging infrastructure required to maintain service reliability and water quality.

4. The higher rates fund prudent contingency reserves to avoid large rate increases.

5. The District's wholesale water costs continue to rise.

EXPLANATION OF PROPOSED WATER RATE INCREASE

The District is proposing an increase in the total revenue it receives from customers through its water service charges and rates over the next five years. The Cost of Service Rate Study is available on the District's website including how to calculate your bimonthly water bill utilizing the proposed water rates.

The total revenue increase per year results in the rate increases shown in the enclosed tables. The District's water rate structure has three components: (1) the bimonthly service charge, (2) the consumption rate, and (3) the Water Treatment Fee which repays a portion of the required debt service. The following tables show both the proposed service charge and consumption rates for the next five fiscal years. The rates were developed using the cost of service principles as set forth in the American Water Works Association M1 Manual - Principles of Water Rates, Fees, and Charges.

The proposed rates are set forth on the Tables enclosed herewith.

PROPOSED WATER RATES

1. Rates for M&I Water customers (Residential, Commercial, Rural and Public/Institutional Service)

a. Water Usage Charges (for all M&I Customer Classifications) per 100 cubic feet (HCF):

Current Rate	Proposed Water Usage Charges ($/HCF)				
	2023	2024	2025	2026	2027
$0.69	$0.71	$0.75	$0.80	$0.85	$0.90

b. Bimonthly Base Rates:

Meter Class	Current Rate	Proposed Bimonthly Base Rates				
		2023	2024	2025	2026	2027
20	$47.01	$46.97	$49.79	$52.78	$55.94	$59.30
30	$50.38	$50.24	$53.25	$56.45	$59.84	$63.43
50	$55.60	$55.42	$58.75	$62.27	$66.01	$69.97
100	$64.90	$64.94	$68.84	$72.97	$77.34	$81.99
160	$73.09	$73.54	$77.95	$82.63	$87.59	$92.84
200	$77.63	$78.40	$83.10	$88.09	$93.38	$98.98
300	$87.14	$88.73	$94.05	$99.70	$105.68	$112.02
450	$98.53	$101.38	$107.46	$113.91	$120.75	$127.99
900	$123.56	$129.93	$137.73	$145.99	$154.75	$164.03
1200	$136.47	$145.01	$153.71	$162.93	$172.71	$183.07
1500	$147.69	$158.30	$167.80	$177.87	$188.54	$199.85
2000	$163.93	$177.77	$188.44	$199.74	$211.73	$224.43
2500	$178.07	$194.93	$206.63	$219.02	$232.16	$246.09
3300	$197.75	$219.12	$232.27	$246.20	$260.98	$276.63
4500	$222.85	$250.44	$265.47	$281.39	$298.28	$316.17
6000	$249.47	$284.16	$301.21	$319.28	$338.44	$358.75

2. Rates for Irrigation Water Customers (Agriculture Service)

a. Water Usage Charges (for all Agricultural Customers) per Acre-Foot (AF):

Current Rate	Proposed Water Usage Charges ($/AF)				
	2023	2024	2025	2026	2027
$104.66	$107.02	$113.44	$120.25	$127.46	$135.11

b. Bimonthly Base Rates:

Meter Class	Current Rate	Proposed Bimonthly Base Rates				
		2023	2024	2025	2026	2027
50	$76.42	$77.36	$82.00	$86.92	$92.14	$97.67
100	$85.74	$87.82	$93.09	$98.67	$104.60	$110.87
160	$93.92	$97.28	$103.12	$109.30	$115.86	$122.81
200	$98.46	$102.62	$108.78	$115.30	$122.22	$129.56
300	$107.95	$113.97	$120.81	$128.06	$135.74	$143.88
450	$119.35	$127.87	$135.54	$143.67	$152.30	$161.43
900	$144.38	$159.26	$168.82	$178.94	$189.68	$201.06
1200	$157.29	$175.84	$186.39	$197.57	$209.43	$221.99
1500	$168.52	$190.44	$201.87	$213.98	$226.82	$240.43
2000	$184.76	$211.84	$224.55	$238.02	$252.30	$267.44
2500	$198.89	$230.70	$244.54	$259.21	$274.77	$291.25
3300	$218.57	$257.29	$272.73	$289.09	$306.44	$324.82
4500	$243.67	$291.72	$309.22	$327.78	$347.44	$368.29
6000	$270.30	$328.78	$348.51	$369.42	$391.58	$415.08

c. The agricultural base rates on the preceding page include the costs for the purchase and treatment of 0.75 acre-foot of M&I water per year. Agricultural accounts that have no domestic use (NDU) will receive a $19.66 "NDU Credit" bimonthly to offset the inclusion of these costs in their base rate.

3. PRIVATE FIRE PROTECTION SYSTEMS – Bimonthly Charge

Size of Fire Service Line	Current Rate	Proposed Bimonthly Fire Service Rates				
		2023	2024	2025	2026	2027
2	$30.09	$27.62	$29.28	$31.03	$32.90	$34.87
3	$42.92	$39.06	$41.40	$43.89	$46.52	$49.31
4	$57.77	$58.60	$62.12	$65.84	$69.79	$73.98
6	$79.43	$82.87	$87.84	$93.11	$98.70	$104.62
8	$99.89	$106.98	$113.40	$120.20	$127.41	$135.06
10	$125.17	$138.11	$146.40	$155.18	$164.49	$174.36

4. WATER TREATMENT PLANT IMPROVEMENT LOAN REPAYMENT – The charge per account will remain at $14.00 bimonthly for all customers.

5. ANNUAL ADJUSTMENTS TO WATER RATES

a. Annually, upon receipt of notice from the U.S. Bureau of Reclamation (USBR) and Anderson-Cottonwood Irrigation District (ACID) regarding the rates and charges that they will charge Bella Vista Water District under their respective contracts for water deliveries starting on March 1 of each year, the usage charges shall be adjusted by an amount equal to the increase or decrease in the wholesale water costs. The water usage charges shown above reflect an annual increase of 6.0%; however, the actual rate will also pass through the annual changes (increases and decreases) in the wholesale water charges under the District's contracts with USBR and ACID.

b. Annually, upon notice from the U.S. Bureau of Reclamation (USBR) and Anderson-Cottonwood Irrigation District (ACID) regarding the water supply allocation that is available under their respective contracts pursuant to supply shortage provisions, the District will compare the standard water supply portfolio costs compared to the current years' supply portfolio costs. Resulting increases or decreases in overall supply portfolio costs will be passed through with an increase or decrease to the water rate.

c. On or after March 1st annually, the Base Rates, Usage Charges (excluding wholesale water costs), and Fire Service Charges shall be adjusted by the 12-month increase or decrease in the Consumer Price Index – All Urban Consumers (CPI-U) U.S. city average for the preceding December plus up to 2%. Over the past 5 years, the 12-month increase in the CPI-U has ranged between 0.1 and 9.1 percent and has averaged 3.6 percent. The above tables of proposed base rates and fire service rates show what the base rates will be at an annual adjustment of 6.0%. Note: the actual rates may be higher or lower than the listed rates depending on the annual change in the CPI-U and the additional adjustment of up to 2.0%.

d. The proposed usage rates for M&I water service for 2023 through 2028 include $0.07 per HCF for placement in the District's M&I Rate Stabilization fund to help offset the need for rate increases due to reduced water supplies during water shortage years.

e. The proposed usage rates for Agriculture water service for 2023 through 2028 include $10.00 per acre-foot (AF) to pay towards accumulated USBR O&M Deficit for Irrigation water, as well as any USBR O&M Deficits incurred during the 2018 through 2022 water years.

f. These rates will be reviewed annually by the District's Board of Directors and may be reduced or increased from the rates shown based on the cost factors and adjustments described above.

Note: There is a 120 day statute of limitations for challenging any new, increased or extended fee or charge. The 120 day period begins on the effective date of the fee or charge or on the final passage or adoption of the fee or charge, whichever is later.

9. GLOSSARY

Terms	Descriptions
AF	acre-foot (1 AF = 43,560 CF or 435.6 HCF)
AG	Agricultural
AWWA	American Water Works Association
CalPERS	California Public Employees Retirement System
CII	Commercial / Industrial / Institutional
CIP	Capital Improvement Projects
COS	Cost of Service
CPI	Consumer Price Index
CVP	Central Valley Project (federal)
CY	Calendar Year
District	Bella Vista Water District
ENR CCI	Engineering News-Record Construction Cost Index
EOMR	Extraordinary Operations Maintenance and Replacement (20-year forward projection)
FY	Fiscal Year (July 1 – June 30)
GPM	Gallons per minute
GPCD	Gallons per capita per day
HCF	Hundred cubic feet (1 HCF = 100 cf)
M&I	Municipal and Industrial
MC	Meter Class (maximum safe operating capacity of the meter, expressed in gpm)
MCE	Meter Capacity Equivalents (The MCE factors are based on the meter class, with a Class 30 meter being equal to 1.0 MCE)
O&M	Operations and Maintenance
OPEB	Other Post Employment Benefits
USBR	U.S. Bureau of Reclamation

10. REFERENCES

Central Valley Project (CVP) Ratesetting Process Overview, U.S. Bureau of Reclamation, January 4, 2023 https://www.usbr.gov/mp/cvpwaterrates/rate-process/overview.html

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https://www.waterboards.ca.gov/drought/pricing/docs/csda_guide_proposition_218.pdf

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